



Smithsonian
National Museum of
Natural History

NATURAL HISTORY NEWS

April 10, 2006

Vol. 3, No. 5

“Understanding Nature and Our Place in It”

www.mnh.si.edu

<http://smithson.si.edu:8080/>

FY06: 1,931,500 visitors

FY06: 5,890,223 web sessions

KUDOS

A new frog species has been named for **W. Ronald Heyer**, curator in the Division of Amphibian and Reptiles. Boistel, Renaud, Jean-Christophe de Massary, & Ariadne Angulo. 2006. Description of a new species of the genus *Adenomera* (Amphibia, Anura, Leptodactylidae) from French Guiana. *Acta Herpetologica* 1:1-14. *Adenomera heyeri*, n. sp. (page 4) "This species is dedicated to W. Ronald Heyer for his important contributions to leptodactylid frog studies of South America and in particular the genus *Adenomera*." (page 10).

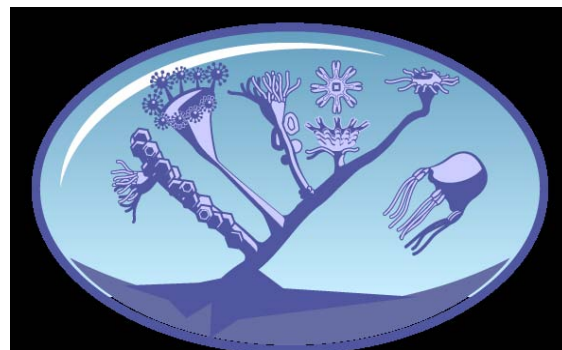
Dorothy Lippert of the Repatriation Office has been elected to the Board of Directors of the Society for American Archaeology.

MEDIA

Doug Erwin's book, "Extinction: How Life on Earth Nearly ended 250 Million Years Ago," was the subject of a feature article in *The Cleveland Plain-Dealer* on March 12.

Cnidarian Tree of Life Project at NMNH

As part of the large-scale NSF Tree of Life Initiative, \$2.85 million over 5 years has been granted to a team including **Allen Collins** of Smithsonian's partner agency, the National Systematics Laboratory of NOAA's Fisheries Service, to study the relationships within Cnidaria (jellyfish, hydroids, sea anemones, corals, and kin). In a new paper published in *Systematic Biology*, (see publications), Collins and his colleagues have published the data from a smaller-scale collaborative effort to understand the phylogeny and evolution of the medusa-bearing cnidarians. This work played an important role in the team's winning the large NSF grant that aims to obtain DNA from 1,800 cnidarian species from around the world and generate 23 million base pairs of molecular sequence data. The cnidarian Tree of Life project will essentially change the previous efforts to more of a "big science" approach with dozens of collaborators and large scale sequencing and taxon sampling. The NSF AToL initiative provides significant resources to help resolve the phylogenetic relationships of biodiversity and to disseminate this information to as wide an audience as possible. Collins is co-PI, along with colleagues at the University of Kansas, which as the lead institution was awarded \$1.6 million of the funds. Partner institutions include Ohio State University, Pomona College, Harvey Mudd College, Duke University, Northern Illinois University, and the University of the Virgin Islands. Results of the research will be used to create educational materials for the NMNH ocean science initiative and its associated Oceans exhibit, including web resources and a bilingual classroom poster created with a K-12 educator supported through NSF's Research Experience for Teachers program. Several NMNH scientists are involved in other AToL projects, including **Ted Schultz** and **Sean Brady** (ants); **Mike Braun** (birds); **Jon Coddington** (spiders); **Don Davis** and **Charles Mitter** (moths and butterflies); and **Rafael Lemaitre** and **Chris Tudge** (crustaceans).



Logo for the Cnidarian Tree of Life Project

Linda Perry and Dolores Piperno's paper in *Nature* showing that maize was grown and eaten by people in the Peruvian Andes 1,000 years earlier than previously thought attracted significant international news coverage with stories by *The Los Angeles Times*, *MSNBC*, *Reuters*, *ABC News*, *The Christian Science Monitor* and *UPI*.

National Public Radio broadcast an interview with **Doug Owsley** about forensics and the new forensics exhibit at the National Library of Medicine. The story aired March 25 on the "Weekend Saturday" program.



Raphael Ritson-Williams, Mari Yotsu-Yamashita, and **Valerie Paul**'s PNAS paper on the use of tetrodotoxin for prey capture by a flatworm received international attention in the media with stories in *The New York Times*, *the Columbus Dispatch*, *Science News*, *Chemical and Engineering News*, and the Finnish science magazine *Tiede*.

Ives Goddard was featured in a story on the Algonquin and other disappearing languages in the March 7 edition of *The New York Times* "Science Times."

The Washington Diplomat published a review of "**The Spirit of Ancient Colombian Gold**" in the March 2006 issue. The exhibition was one of *The Washington Post*'s "Our Picks" in its April 2 issue.

Phytolith Studies Highlighted in *Nature*

Linda Perry, Daniel H. Sandweiss, **Dolores R. Piperno**, Kurt Rademaker, Michael A. Malpass, Adán Umire & Pablo de la Vera have published "Early maize agriculture and interzonal interaction in southern Peru" in *Nature* 440 (7080): 76-79. The paper reports on the analyses of plant microremains from a late preceramic house in the highland southern Peruvian site of Waynuna. Results from plant microfossil analyses extend the record of maize by at least a millennium in the southern Andes, demonstrate on-site processing of maize into flour, and provide direct evidence for the deliberate movement of plant foods by humans from the tropical forest to the highlands. The archaeobotanical data indicate that a combination of microfossil analyses, both starches and phytoliths, will be key to gaining an understanding of ancient plant use and migration in this region.

Kennewick Man

Doug Owsley's landmark research on Kennewick Man was the cover story for the March 13 issue of *TIME* magazine (See sidebar). Owsley's late February talk, "Kennewick Man: Nowhere Near the Last Word," for the Last Word Society at the Academy of Forensic Science Meetings in Seattle, Washington, was covered extensively by *TIME* as well as the international media. In his talk, Owsley gave background information on the Kennewick case, the resolution of the case to date, and the results from the first and second study phases of the skeleton. This was the first occasion that results were presented to the public. *Nature* magazine is planning an article on these latest findings in the near future. Meanwhile, Owsley is coordinating the third phase of study for the Kennewick Man, which will involve more than 20 researchers from a number of different specialties. **Dennis Stanford** has also been involved with the research, and recently returned from the Burke Museum in Seattle, Washington, where he examined the projectile point that was embedded in the over 9,000 year-old Kennewick Man. Regarding the coverage in *TIME* magazine, it is the third time NMNH has been the subject of a cover story in recent years: Doug Erwin's research was featured in 1995 and the Vikings exhibition was profiled in 2000.

Neurotoxin Used to Paralyze Flatworm Prey

Even though many marine flatworms are conspicuous inhabitants of coral reefs, their ecology remains for the most part unknown and most of them remain undescribed. In a recent *Proceedings of the National Academy of Sciences* (PNAS) article, **Raphael Ritson-Williams**, Mari Yotsu-Yamashita, and **Valerie Paul** describe the feeding ecology of an undescribed planoceric flatworm. Most free living marine flatworms eat benthic sessile organisms, but planoceric sp. 1 ate at least 11 families of mobile gastropods. Through chemical analysis the authors found that this flatworm uses the potent neurotoxin tetrodotoxin to paralyze its prey. Even though tetrodotoxin is a complex compound, it has been found in over 10 phyla (marine and terrestrial) of animals and is probably best known from puffer fish. Tetrodotoxin can be used for defense and is known to be a pheromone for puffer fish, but through ecological experiments it was found to be used for prey capture by this flatworm. This research highlights the evolutionary success of tetrodotoxin and its multiple ecological functions for marine organisms.

Publication News

Discovery Highlights Endemic Fauna Of Lake Tanganyika

In the February issue of the *Zoological Journal of the Linnean Society*, Geoffrey A. Boxshall (The Natural History Museum) and **Ellen E. Strong** (NMNH) described a new species of cyclopoid copepod, *Eucyclops bathanalicola* sp. nov., parasitic on a gastropod (snail) endemic to Lake Tanganyika, *Bathanalia straeleni* (Cerithioidea). *E. bathanalicola* is a fascinating mosaic. In most respects, the new species closely resembles a typical free living *Eucyclops*. The impact of the adoption of parasitism is expressed primarily in the modification of the mouthparts which have been transformed into a powerful and specialised attachment mechanism; nothing like these modifications exists anywhere within the Cyclopidae. Copepods have shifted into parasitism independently in numerous different lineages, but the occurrence of a single parasitic species within a large and well-defined free-living clade is extremely rare. Hence this species represents a unique foray into a parasitic lifestyle from an otherwise free-living group of copepods living in Lake Tanganyika. Additionally, it is a rare account of a freshwater copepod parasitic on an invertebrate host, the first record from a host in the freshwater Paludomidae (Cerithioidea) - only the second family of freshwater gastropods reported to host copepods - and only the third record of a copepod parasite on a freshwater snail. As such, this discovery highlights yet another intriguing facet of the endemic fauna of Lake Tanganyika.

New Book on Phytoliths

In her recently published book, *Phytoliths*, (Alta Mira Press, 2006), **Dolores Piperno** makes sense of the

Awards

Hershler, Robert. \$10,640. US Department of the Interior/Bureau of Land Management. Vale District Aquatic Snail Inventory 2006.

Recent Publications

To enter your publications into the NMNH publication database, go to <http://ravenel.si.edu/pubs/cfm/>

Agnarsson, I. and M. Kuntner. 2005. Madagascar: an unexpected hotspot of social *Anelosimus* spider diversity (Araneae: Theridiidae). *Syst. Entomol.* 30: 575-592.

Baker, T.R., O.L. Philips and **T.L. Erwin**. 2005. Late twentieth-century trends in the biomass of Amazonian forest plots, pp. 129-141. In M. Yadvinders and O.L. Oliver, eds. *Tropical Forests and Global Atmospheric Change*. Oxford University Press, Oxford.

Barrows, E.M., A.M. McIntyre and **O.S. Flint, Jr.** 2005. Alderfly (Neuroptera: Sialidae) flight periods, sex ratios, and habitat use in a Virginia freshwater tidal marsh, low forest, and their ecotones. *Proc. Entomol. Soc. Wash.* 107(3): 693-689.

Boxshall, G.A. and **E.E. Strong**. 2006. An extraordinary shift in life habit within a genus of cyclopoid copepods in Lake Tanganyika. *Zool. J. Linn. Soc.* 146(2): 275-286.

Brown, R.P., **D.H. Ubelaker** and M.S. Schanfield. 2006. Evaluation of Purkait's triangle method for determining sexual dimorphism. *Proc. Am. Acad. Forensic Sci.* XII: 285-286.

Carrasco-Núñez, G., K. Richter, J. Chesley, **L. Siebert** and J.J. Aranda-Gómez. 2005. Contemporaneous eruption of calc-alkaline and alkaline lavas in a continental arc (Eastern Mexican Volcanic Belt): chemically heterogeneous but isotopically homogeneous source. *Contr. Mineral. Petrol.* 150: 423-440.

Cho, H., R.R. Paine, **D.H. Ubelaker**, **D.M. Mulhern**, S.D. Stout and M.A. Streeter. 2006. Forensic bone histology. *Proc. Am. Acad. Forensic Sci.* XII: 33.

Collins, A.G., P. Schuchert, A.C. Marques, T. Jankowski, M. Medina, and B. Schierwater. 2006. Medusozoan phylogeny and character evolution clarified by new large and small subunit rDNA data and an assessment of the utility of phylogenetic mixture models. *Systematic Biology.* 55(1): 97-115.

de Queiroz, K. 2006. The PhyloCode and the distinction between taxonomy and nomenclature. *Syst. Biol.* 55(1): 160-162.

Durden, L.A. and **N.E. Adams**. 2005. Primary type specimens of sucking lice (Insecta: Phthiraptera: Anoplura) in the U.S. National Museum of Natural History, Smithsonian Institution. *Zootaxa* 1047: 21-60.

Ewe, S.M.L. and L. da S.L. Sternberg. 2005. Growth and gas exchange of Brazilian pepper (*Schinus terebinthifolius*) and native South Florida species to salinity. *Trees* 19: 119-128.

Fitzhugh, W.W. and V.V. Pitulko, eds. 2005. *Taymyr: The Archaeology of Northernmost Eurasia*. Arctic Studies Center, Contributions to Circumpolar Anthropology, 5, Washington D.C. 236 pp.

discipline for both those working directly with phytoliths in the field or in the lab, and for those who rely on the results of phytolith studies for their own research. The book includes over a hundred images, and will be of great benefit to archaeologists and paleobotanists alike. The study of phytoliths has developed dramatically over the last twenty years, giving scientists and other scholars an entirely new tool kit with which to study the past. Phytoliths are inorganic silica remnants that plants leave behind when they die and decay, and it is their "tell tale" traces that can be studied using microscopes to reconstruct the plants that once lived in their stead. Over the last twenty years, new publications have documented a diverse array of phytoliths from many regions around the globe, while new understandings have emerged as to how and why plants produce phytoliths. Together, these developments make phytoliths a powerful tool in reconstructing past environments as well as human uses of plants from the past.

PUBLIC OUTREACH

Butterfly House and Hall of Co-Evolution Core Update

The core team met with the designers for the Butterfly House on March 1-2. The team reviewed the existing Statement of Purpose, the various "givens" of the project; i.e., footprint, budget, schedule, and discussed the expected outcomes of the exhibit. This exhibit should convey the magic of butterflies, and present examples of evolution, co-evolution, and adaptation using butterflies and other insects in their relationships with plants. The team also met with the engineering and architectural firm to discuss the budget, schedule, and coordination of the design and construction of the butterfly house shell, as well as the HVAC details. The Butterflies Core Team includes: Botany: **John Kress** (with alternate

Gates, M. and M. Schauff. 2005. *Oncastichus goughi* (Hymenoptera: Eulophidae), an introduced pest of waxflower (Myrtaceae; *Chamelancium uncinatum*) newly reported from Peru. *Entomol. News* 116(2): 115-116.

Hasek, B.E. and **D.L. Felder**. 2005. Biochemical composition of ovary, embryo, and hepatopancreas in the grapsoid crabs *Armases cinereum* and *Sesarma nr. reticulatum* (Crustacea, Decapoda). *Comp. Biochem. Physiol.* 140: 455-463.

Hochberg, R. 2005. Musculature of the primitive gastrotrich *Neodasys* (Chaetonotida): functional adaptations to the interstitial environment and phylogenetic significance. *Mar. Biol.* 146: 315-323.

Hochberg, R. 2005. First record of *Polymerurus* (Gastrotricha, Chaetonotida) from Australia with the description of a new species from Queensland and of cuticular ultrastructure in *P. nodicaudus*. *Invertebr. Biol.* 124(2): 119-130.

Huang, Y.-M. 2005. *Cornetius*, a new subgenus of *Aedes*, and a redescription of *Aedes* (*Cornetius*) *cozi* Cornet (Diptera: Culicidae). *Proc. Entomol. Soc. Wash.* 107(3): 517-529.

Konstantinov, A.S. and E. Sprecher-Uebersax. 2005. Genus *Aphthona* Chevrolat in Nepal (Coleoptera, Chrysomelidae). *Mitt. Schweizerischen Entomol. Gesellschaft Bull. Soc. Entomol. Suisse* 78: 173-219.

Krupnik, I. and **W.W. Fitzhugh**. 2005. Foreword, pp. xiii-xv. In L.P. Khlobystin, ed. *Taymyr: The Archaeology of Northernmost Eurasia*. Arctic Studies Center, Smithsonian Institution, Contributions to Circumpolar Anthropology, 5, Washington DC.

Kuntner, M. 2005. A revision of *Herennia* (Araneae: Nephilidae: Nephilinae), the Australasian 'coin spiders.' *Invertebr. Syst.* 19: 391-436.

Kuntner, M. 2005. On the validity of the Japanese spider genus *Metimorpha* (Araneae, Araneidae). *Zool. Sci.* 22(11): 1277-1278.

LaPolla, J.S. 2005. Ancient trophophoresy: a fossil *Acropyga* (Hymenoptera: Formicidae) from Dominican Amber. *Trans. Am. Entomol. Soc.* 131(1+2): 21-28.

La Polla, J.S. and S.P. Cover. 2005. New species of *Pheidole* (Hymenoptera: Formicidae) from Guyana, with a list of species known from the country. *Trans. Am. Entomol. Soc.* 131(3+4): 365-374.

LaPolla, J.S. and B.L. Fisher. 2005. A remarkable new species of *Acropyga* (Hymenoptera: Formicidae) from Gabon, with a key to the Afrotropical species. *Proc. Calif. Acad. Sci.* 56(30): 601-605.

Laughlin, R. 2004. In the Book of Matthew thus spake John: Tzotzil dialogue. *J. Latin Am. Lore* 22(2): 197-238.

Lehr, M.A., C.W. Kilpatrick, **R.C. Wilkerson** and J.E. Conn. 2005. Cryptic species in the *Anopheles* (*Nyssorhynchus*) *albitarsis* (Diptera: Culicidae) complex: incongruence between random amplified polymorphic CNA-polymerase chain reaction identification and analysis of mitochondrial DNA COI gene sequences. *Ann. Entomol. Soc. Am.* 98(6): 908-917.

Mawdsley, J.R. 2005. Additional historic records of *Cicindela dorsalis* Say and *Cicindela puritana* Horn (Coleoptera: Carabidae: Cicindelini) from the Chesapeake Bay region,

Ken Wurdack); Entomology: **Ted Schultz** (with alternate **Bob Robbins**); Paleontology: **Conrad Labandiera**; Writer: **Sharon Barry** - contractor, and former head writer for NMNH; Horticulture: **William Donnelly**; Education & Butterfly Husbandry: **Nate Erwin**; Exhibit Developer: **Sally Love**; Project manager: **Elizabeth Musteen Allison**; Design Firm: (Reich + Petch) represented by Fang Pin Li and Stephen Petri.

Exhibition Workshop: What Does It Mean To Be Human?

The first of several planned workshops for the new Hall of Human Origins ("What Does It Mean to Be Human?") was held February 24-25, 2006.

Developed by **Rick Potts, Kathleen Gordon** and **Heather Rostker**, the workshop's goals were to discuss three important exhibition themes: the presentation of evolutionary time, the primate heritage of humans, and how to communicate the scientific process. The participants came up with many inspiring and bold ideas concerning exhibition content, its educational goals, and specific methods to effectively communicate the content and goals. Thirty-two participants included a wide range of scientists, designers, artists, and educators. NMNH participants included: **Kay Behrensmeyer, Gloria Chernay, Christine Elias, Kathleen Gordon, Sarah Grusin, April Hawkins, Jennifer Clark, Lisa Kolker, Jim Luhr, Carolyn Margolis, Kim Moeller, Briana Pobiner, Rick Potts, Heather Rostker, Hans Sues, and Robert Sullivan.**

Design Firm Meets With Korea Gallery Team

On March 2, 2006, the Korea Gallery core team met for the first time with the new design firm for

SA. *Proc. Entomol. Soc. Wash.* 107(4): 808-811.

Mawdsley, J.R. 2005. Review of: *A Field Guide and Identification Manual for Florida and Eastern U. S. Tiger Beetles* by Choate, P.M. *Proc. Entomol. Soc. Am.* 107(4): 903-913.

McCarthy, D.A. 2005. 2003 Summer upwelling events off Florida's Atlantic coast. *Fla. Sci.* 68(1): 56-62.

Micheli, C.J. and E.H. Nearn. 2005. Two new species of *Plectromerus* Haldeman (Coleoptera: Cerambycidae) from the West Indies. *Zootaxa* 1028: 23-26.

Miljutin, D.M., A.V. Tchesunov and **W.D. Hope.** 2006. *Rhaphothyreus typicus* Hope and Murphy, 1969 (Rhaphothyreidae): an anatomical study of an unusual deep-sea nematode. *Nematology* 8(1): 1-21.

Miller, J.A. 2005. A redescription of *Porrhomma cavernicola* Keyserling (Araneae, Linyphiidae) with notes on Appalachian troglobites. *J. Arachnol.* 33: 426-438.

Perry, L., D.H. Sandweiss, D.R. Piperno, K. Rademaker, M.A. Malpass, A. Umire and P. de la Vera. 2006. Early maize agriculture and interzonal interaction in southern Peru. *Nature* 440(7080): 76-79.

Philips, O. L. and **T.L. Erwin.** 2005. Late twentieth-century patterns and trends in Amazon tree turnover, pp. 107-128. In M. Yadvinders and O.L. Oliver, eds. *Tropical Forest and Global Atmospheric Change.* Oxford University Press, Oxford.

Piperno, D. 2006. *Phytoliths: A Comprehensive Guide for Archaeologists and Paleoecologists.* AltaMira Press.

Polhemus, D.A. 2005. Further studies on the genus *Orthobytlus* (Heteroptera: Miridae) in the Hawaiian Islands, with descriptions of thirty-four new species. *J. New York Entomol. Soc.* 112(4): 227-333.

Proadhan, R., **D.H. Ubelaker** and D.A. Prince. 2006. Evaluation of three methods of age estimation from human skeletal remains (Suchey-Brooks, Lamendin, and Two-Step Strategy). *Proc. Am. Acad. Forensic Sci.* XII: 284-285.

Rader, R. and **S. Reed.** 2005. A method of tagging *Aratus pisonii* (H. Milne Edwards, 1837) (Decapoda, Brachyura, Grapsidae) crabs for population and behavioural studies. *Crustaceana* 78(3): 361-365.

Ramos, M., **J.A. Coddington,** T.E. Cristenson and D.J. Irschick. 2005. Have male and female genitalia co-evolved? A phylogenetic analysis of genitalic morphology and sexual size dimorphism in web-building spiders (Araneae: Orbiculariae). *Evolution* 59(9): 1989-1999.

Razowski, J. and **J. Brown.** 2005. Review of *Oregocerata* Razowski (Lepidoptera: Tortricidae: Euliini), with descriptions of four new species. *Proc. Entomol. Soc. Wash.* 107: 903-913.

Ritson-Williams, R., M.A. Becerro and V.J. Paul. 2005. Spawning of the giant barrel sponge *Xestospongia muta* in Belize. *Coral Reefs* 24: 160.

Ritson-Williams, R., V.J. Paul and V. Bonito. 2005. Marine benthic cyanobacteria overgrow coral reef organisms. *Coral Reefs* 24: 629.

the Korea Gallery; Reich + Petch. The team reviewed the existing Statement of Purpose, the budget and schedule, and the expected outcomes of the exhibit. The exhibit will focus on three major themes—Nature and Geography of the Korean Peninsula, Life in Pre-modern Korea, and Modern Transformations. Korea Gallery Core Team: **Junko Chinen**: Project Manager, Public Programs; **Margery Gordon**: Exhibit Educator, Public Programs; **Sarah Grusin**: Exhibit Scriptwriter, Public Programs; **Chang-su Houchins**: co-curator of exhibition (with P.M. Taylor); Andrew Pekarik: Content Advisor, Office of Policy and Analysis; **Paul M. Taylor**: Curator/Director, ACHP; co-curator of exhibition (with C.S. Houchins); Design firm: Reich and Petch. Extended exhibit development team: **Tae-hee Lee**: Consultant, National Folk Museum of Korea; **Meg Rivers**: Project Assistant, Public Programs; **Michel Lee**: Content Researcher, ACHP, Department of Anthropology.

NATURAL HISTORY NEWS:

Cristián Samper, Editor;
Ruth O. Selig, Deputy Editor;
Gary Krupnick, Publications Editor;
Donna Attaway-Dancy,
Contributing Editor.

The editors thank the NMNH departmental liaisons and the NMNH Editorial Group for their input to this newsletter.

Ritson-Williams, R., M. Yotsu-Yamashita and **V. Paul**. 2006. Ecological functions of tetrodotoxin in a deadly polyclad flatworm. *Proc. Natl. Acad. Sci. USA* 103(9): 3176-3179.

Schauff, M. and **M. Gates**. 2005. Revision of Nearctic *Aulogygmus* (Hymenoptera: Eulophidae) with nomenclatural changes. *Acta Soc. Zool. Bobem.* 68: 225-245.

Schulze, A. 2005. Sipuncula (peanut worms) from Bocas del Toro, Panama. *Caribbean J. Sci.* 41(3): 523-527.

Solis, M.A., D.R. Davis and K. Nashida. 2005. Life history and systematics of *Albusambia elaphoglossumae* (Lepidoptera: Crambidae): a new genus and species of musotimine with leaf-mining biology from Costa Rica. *Int. J. Trop. Biol.* 53: 487-501.

Stach, T. 2005. Comparison of the serotonergic nervous system among Tunicata: implications for its evolution within Chordata. *Org. Divers. Evol.* 5: 15-24.

Staines, C.L. 2005. *Cicindela hirticollis hirticollis* Say (Coleoptera: Cicindelidae) naturally colonizing a restored beach in the Chesapeake Bay, Maryland. *Cicindela* 37(3-4): 79-80.

Staines, C.L. 2005. Franz Spaeth: Publications and proposed new taxa. *Zootaxa* 1035: 1-49.

Steiner, W.E., Jr. 2005. Two new species of three-horned *Hypogena* from Peru (Coleoptera: Tenebrionidae). *Ann. Zool.* 55(4): 571-574.

Strasser, K.M. and **D.L. Felder**. 2005. Larval development of the mud shrimp *Axianassa australis* under laboratory conditions. *J. Nat. Hist.* 39(25): 2289-2306.

Ubelaker, D.H., B.A. Buchholz and J. Stewart. 2006. Evaluation of date of death through analysis of artificial radiocarbon in distinct human skeletal and dental tissues. *Proc. Am. Acad. Forensic Sci.* XII: 316.

White, W.H., **D. Adamski**, J. Brown, T.E. Regan, J.A. Villanueva-Jimenez, M.M. Lopez and M.O. Way. 2005. Survey results for the sugarcane pest, *Blastobasis graminea* (Lepidoptera: Coleophoridae), in Texas and Louisiana in 2002. *Southwest. Entomol.* 30: 85-92.

Wilkerson, R.C., P.G. Foster, C. Li and M.A.M. Sallum. 2005. Molecular phylogeny of Neotropical *Anopheles* (*Nyssorhynchus*) *albitarsis* species complex (Diptera: Culicidae). *Ann. Entomol. Soc. Am.* 98(6): 918-925.

Winston, J.E. and A.E. Migotto. 2005. A new encrusting interstitial marine fauna from Brazil. *Invertebr. Biol.* 124(1): 79-87.

Winterton, S.L. and **M.A. Metz**. 2005. *Cyrtosathe* gen. n.: the first non-scenopinine window fly from sub-Saharan Africa (Diptera: Scenopinidae). *Zootaxa* 975: 1-12.

Yang, D., **S.D. Gaimari** and P. Grootaert. 2005. New species of *Hybos* Meigen from Guangdong Province, South China (Diptera: Empididae). *Zootaxa* 912: 1-7.

Yang, Z-Q., J.S. Strazanac, **P.M. Marsh**, C. van Achterberg and W-Y. Choi. 2005. First recorded parasitoid from China of *Agrilus planipennis*: a new species of *Spathius* (Hymenoptera: Braconidae: Doryctinae). *Ann. Entomol. Soc. Am.* 98(5): 636-642.