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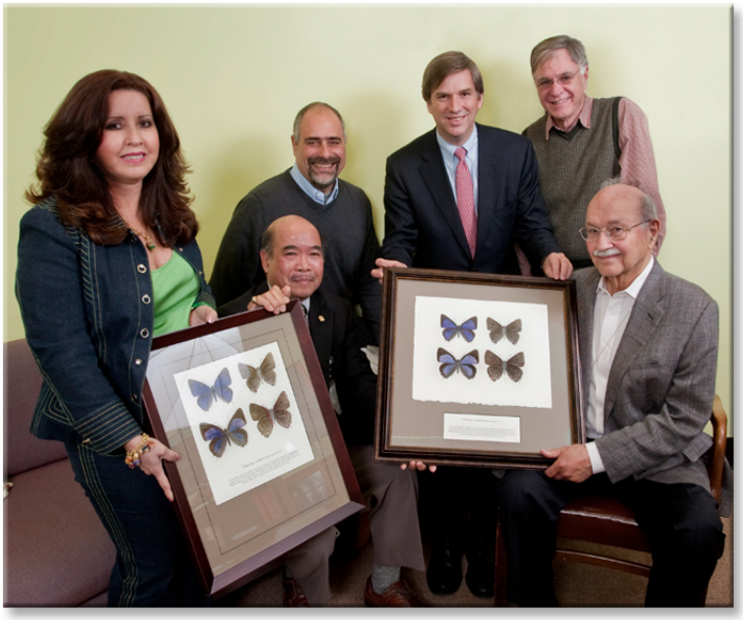

Vera Lourenco, Vichai Malikul, Bob Robbins, Christián Samper, Terry Erwin and Peter Buck.

Tom Gaffigan (in 1978) practicing for retirement.

John Burns and Steve Yanoviak

On the cover:

In recognition of his generous support of science at the NMNH (many millions of dollars as well as a rare Burmese ruby), Peter Buck, nuclear physicist and co-founder of the Subway sandwich chain, was recently presented with an original painting of *Thepytus carmen*, the new species of butterfly from Brazil named in memory of his wife Carmen Lúcia. The hairstreak butterfly was named by **Bob Robbins** and Marcelo Duarte (University of São Paulo) and painted by **Vichai Malikul**. Carmen Lúcia's sister, Vera Lourenco, was presented with a copy of the painting which was professionally photographed and printed by Jim Di Loreto (NMNH Imaging Office), (photo by Jim DiLoreto).

--Catching up with Tom Gaffigan--

After eighteen years, one month, and nine days, **Tom Gaffigan** decided that he had had enough and retired. Tom started at NMNH in October, 1971 as a trust fund technician on an Army-funded mosquito project (SEAMP = Southeast Asia Medical Project). Ten years later he joined the permanent civil service unit WRBU (Walter Reed Biosystematics Unit), and continued to work in the trenches of science. On November 2 of 2009, the Army, in its finite wisdom, transferred him to their Silver Spring facility to play nursemaid to Phlebotomine larvae. One month later, Tom retired. He now spends his time at his "significant other's" house in southern Maryland where he is concierge, chief cook, and general factotum, on his 41ft sailboat at Solomons, or at his house on Smith Island, MD (before it's underwater), where he is now allowed to squash any mosquito he finds. "So far they have all been *Aedes sollicitans."* Tom's last unofficial act before leaving Army property was to say good-bye to Rich Robbins, another SI-Ent refugee, who still works at the Armed Forces Pest Management Board. (photo by Gary Hevel).

--ESW speaker--

Steven Yanoviak from the Department of Biology, University of Arkansas, presented "Ecology and behavior of ants in the tropical rain forest canopy" at the 1136th Regular Meeting of the Entomological Society of Washington which convened at 7:00 pm on April 08 in the Schmitt Room of the National Museum of Natural History.

The following day Steve presented "How to fall from trees: gliding ants in tropical rain forests" for the Entomology Department Seminar. (photo by Gary Hevel).

OPPORTUNITIES:

Two **Ph.D./M.S. Positions in Systematic Entomology** at Texas A&M University are available in the laboratory of Dr. John Oswald in the Department of Entomology. Both will be filled for the Fall Semester 2010. The students will participate as the primary trainees in a 5-year NSF PEET project to train the next generation of insect systematists with specialized expertise in the family Myrmeleontidae (order Neuroptera) – the antlions. The students will undertake monographic research of selected antlion taxa, and conduct phylogenetic studies on antlions using both morphological and molecular data. The students will have opportunities to participate in a wide variety of systematic training activities, including 1) the development/refinement of skills in taxonomic monography; 2) participation in national (USA) and international field excursions, museum visits and scientific meetings; 3) development/refinement of skills associated with the capture and analysis of data for morphological and molecular pylogenetics; and 4) contributing to the further development of the neuropteran biodiversity informatics portal the Lacewing Digital Library (http://lacewing.tamu.edu/). Applications should consist of 1) a cover letter, 2) a curriculum vitae, 3), a statement of research experience that explains your background, specific interest in the project, and experience/interests in the topic areas outlined above,

and 4) the names and contact information for at least three scientists who have agreed to serve as professional references. Interested persons should send their application documents to Dr. John Oswald: j-oswald@tamu.edu. For further information on the department and the application process see: http://insects.tamu.edu/futurestudents/grads.html.

GENERAL NEWS:

Gary Hevel presented the topic "What has 10,000 legs and lives in your backyard?" at 7:00 pm, April 21st, in the venue of a Science Café, sponsored by the Rockville Science Center. In attendance at the presentation was her honor Phyllis Marcuccio, the mayor of Rockville.

Stephanie Norby, the executive director of the Smithsonian Center for Education and Museum Studies visited **C. J. Geraci** and the Coleoptera Collection on April 7th.

C.J. Geraci, Terry Erwin, Karie Darrow, Alma Solis and **Matt Buffington** provided tours for members of the NMNH Board on April 9th, discussing entomological activities and the importance of the National Entomological Collection.

Gary Hevel provided a tour of the Entomology Department on April 1st for Andrew Revkin and his family. Andrew is a well-known environmental reporter, previously with the New York Times, who has now joined Pace University in New York City as a "senior fellow for environmental understanding".

PUBLICATIONS:

(** retired, emeritus or former dept. member)

Adamski, D., Copeland, R.S., **Miller, S.E.,** Hebert, P.D.N., **Darrow, K.,** and Luke, Q. 2010. A review of African Blastobasinae (Lepidoptera: Gelechioidea: Coleophoridae), with new taxa reared from native fruits in Kenya. *Smithsonian Contributions to Zoology* 630: 68 pp.
--**abstract—** Twenty-five species of African Blastobasinae (Lepidoptera: Coleophoridae) are reviewed; 12 species are redescribed, and 13 species are described as new. Rearing of Lepidoptera ancillary to sampling efforts targeted for fruit flies (Diptera: Tephritidae) and their parasitoids was conducted in and near forested areas in coastal, central highland, and western highland habitats in Kenya. Reared moths were associated with fruits of 64 plant species in 34 families. Two new species, *Blastobasis millicentae* and *Neoblastobasis perisella,* were discovered in mixed original type series of species described by Meyrick and also reared from fruit. Eight new species, *Blastobasis acirfa, B. aynekiella, B. chukka, B. elgonae, B. kenya, B. glauconotata,* and *Neoblastobasis ximeniaella,* and *N. wangithiae,* are known only from specimens reared from fruit. One new species, *Blastobasis catappaella,* was reared from fruit and collected at black light. Finally, two new species, *Neoblastobasis laikipiae* and *Blastobasis mpala,* are known only from black light samples. DNA barcodes augmented the ability to discriminate between some closely related species within several genera. Male specimens of *Blastobasis kenyra, B. acirfa,* and *B. aynekiella* and some associated female conspecifics, in particular, had distinctly different barcodes but were not initially diagnosed using standard morphological features. Subsequentlyy, corroborative morphological features were found to support the DNA barcode data, and both data are discussed herein. Lectotypes are designated for *Blastobasis arguta* Meyrick, 1918; *B. byrsodepta* Meyrick, 1913; *B. egens* Meyrick, 1918; *B eridryas* Meyrick, 1932; *B. extensa* Meyric, 1918; *B. indigesta* Meyrick, 1931; *B. industria* Meyrick, 1913; and *B. trachilista* Meyrick, 1921. *Zenodocium arguta* Meyrick, 1918 is transferred to *Calosima* Dietz, 1910, new combination, and *Tecmerium irroratella* Walsingham, 1891 and *Blastobasis extensa* Meyrick, 1918 are transferred to *Holcocera* Clemens, 1863, new combinations. *Neoblastobasis indigesta* (Meyrick, 1931), revised status, is transferred to *Blastobasis* Zeller, 1855. *Syndroma* Meyrick is a junior synonym of *Holcocera* Clemens, 1863, and *Syndroma ligynodes* Meyrick, 1914 is transferred to *Holcocera,* new combination. The first African records for *Holcocera, Calosima,* and *Neoblastobasis* are reported. A key for all African Blastobasinae is included, together with photographs of the adults and illustrations of the male and female genitalia.

Beutel, R.G., Balke, M., & **Steiner, W.E., Jr**. 2010. Meruidae Spangler & Steiner, 2005. Pp. 28-34 *in:* Leschen, R.A.B., Beutel, R.G., & Lawrence, J.F. (eds.), *Handbook of Zoology. Volume IV. Arthropoda: Insecta. Part 39. Coleoptera, Beetles. Volume 2: Morphology and Systematics (Elateroidea, Bostrichiformia, Cucujiformia partim).* Walter de Gruyter, Berlin.

Craft, K.J., Pauls, S.U., **Darrow, K., Miller, S.E.,** Hebert, P.D.N., **Helgen, L.E.,** Novotny, V., & Weiblen, G.D. 2010. Population genetics of ecological communities with DNA barcodes: an example from New Guinea Lepidoptera.

Proceedings of the National Academy of Sciences. 107(11): 5041-5046.

--**abstract**-- Comparative population genetics of ecological guilds can reveal generalities in patterns of differentiation bearing on hypotheses regarding the origin and maintenance of community diversity. Contradictory estimates of host specificity and beta diversity in tropical Lepidoptera (moths and butterflies) from New Guinea and the Americas have sparked debate on the role of host-associated divergence and geographic isolation in explaining latitudinal diversity gradients. We sampled haplotypes of mitochondrial cytochrome c oxidase I from 28 Lepidoptera species and 1,359 individuals across four host plant genera and eight sites in New Guinea to estimate population divergence in relation to host specificity and geography. Analyses of molecular variance and haplotype networks indicate varying patterns of genetic structure among ecologically similar sympatric species. One-quarter lacked evidence of isolation by distance or host-associated differentiation, whereas 21% exhibited both. Fourteen percent of the species exhibited host-associated differentiation without geographic isolation. 18% showed the opposite, and 21% were equivocal, insofar as analyses of molecular variance and haplotype networks yielded incongruent patterns. Variation in dietary breadth among community members suggests that speciation by specialization is an important, but not universal, mechanism for diversification of tropical Lepidoptera. Geographically widespread haplotypes challenge predictions of vicariance biogeography. Dispersal is important, and Lepidoptera communities appear to be highly dynamic according to the various phylogeographic histories of component species. Population genetic comparisons among herbivores of major tropical and temperate regions are needed to test predictions of ecological theory and evaluate global patterns of biodiversity.

Hernandez, L. and **Henry, T.J.** 2010. The Plant Bugs, or Miridae (Hemiptera: Heteroptera), of Cuba. Pensoft Series Faunistica No. 92, 212 pp. Pensoft, Sofia-Moscow.

--**abstract—** This taxonomic review of the Cuban Miridae (Hemiptera: Heteroptera) treats 105 genera. Twelve new species are described, two new synonyms are recognized, and four previously recorded species are removed from the list. All genera and species are diagnosed, and a thorough literature review and information on host plants and distribution are given. Male genitalia are illustrated and a color image is provided for nearly all species. Identification keys to subfamilies, tribes, genera, and species are included, and the biogeography of the Cuban and West Indian mirid fauna is discussed. This work will form a solid foundation for future research on the plant bugs of Cuba, providing a summary of the information known about each species and the means to accurately identify them.

Lawrence, J.F., Gimmel, M.A. and **Steiner, W.E., Jr.** 2010. Phalacridae Leach, 1815. pp. 368-374, *in:* Leschen, R.A.B., Beutel, R.G., and Lawrence, J.F. (eds.), *Handbook of Zoology. Volume IV. Arthropoda: Insecta. Part 39. Coleoptera. Beetles. Volume 2: Morphology and Systematics (Elateroidea, Bostrichiformia, Cucujiformia partim).* Walter de Gruyter, Berlin.

Mathews, E.G., Lawrence, J.F., Bouchard, P., **Steiner, W.E., Jr.** and Slipinski, S.A. 2010. Tenebrionidae Latreille, 1802. Pp. 574-659 *in* Leschen, R.A.B., Beutel, R.G., and Lawrence, J.F. (eds.), *Handbook of Zoology. Volume IV. Arthropoda: Insecta. Part 39. Coleoptera. Beetles. Volume 2: Morphology and Systematics (Elateroidea, Bostrichiformia, Cucujiformia partim).* Walter de Gruyter, Berlin.

Staines, C.L. 2010. Nomenclatural notes on Chalepini and Sceloenopliini (Coleoptera: Cassidinae). *Insecta Mundi* 0122: 1-2.

--**abstract—** The authorship and type species of the genera *Acentroptera* and *Metazycera* are reviewed. The correct author of *Acentroptera* is Guerin-Meneville, 1844; *Acentroptera dejeani* Guerin-Meneville, 1944, is here designated as the type species. *Metazycera* is the correct spelling of the genus described by Chevrolat, 1837; the type species is *Hispa trimaculata* Olivier, 1808, by monotype; *Metaxycera* Baly, 1864 is an unjustified emendation.

VISITORS:

Yves Bousquet from Agriculture and Agri-Food Canada, Ottawa, will visit **Terry Erwin** and the Coleoptera Collection April 26 through May 02.

Jon Gelhaus from the Academy of Natural Sciences, Philadelphia visited **David Furth** and the Tipulidae Collection on March 29.

Henri Goulet from Agriculture and Agri-Food Canada, Ottawa, will visit **Dave Smith** to study wasps of the family Siricidae, April 26-30.

David Grimaldi from the American Museum of Natural History in New York City visited **David Furth** and the Diptera Collection March 29-30.

Li Houhun from the College of Life Science, University of Nankai, China will visit **Don Davis** and the microlepidoptera Collection April 17-30.

Wei Song Hwang from the University of California at Riverside will visit **Tom Henry** and the Heteroptera Collection April 19-21.

Juliana Jaramillo from the International Centre of Insect Physiology and Ecology, Kenya, will visit **Natalia Vandenberg** and the Scolytidae Collection, and has interest in coffee pests.

Cleopatra Pimienta from the Universidad del Valle, Colombia, will visit **Terry Erwin** and the Coleoptera Unit April 14 through May 14.

Sagitas Podenas from Vilnius University, Lithuania visited **David Furth** and the Tipulidae Collection March 29.

Fernando Vega from the Sustainable Agricultural Systems Laboratory, USDA, Beltsville, Maryland will visit **Natalia Vandenberg** and the Scolytidae Collection, and has interest in coffee pests.

Lars Vilhelmsen from the Zoological Museum, University of Copenhagen, Denmark will visit **Dave Smith** and the Hymenoptera Collection April 19-21.

Monte and **Grace Wood** will visit **Norm Woodley** and the Diptera Collection April 22 through May 03.

Guanyang Zhang, (below) a Ph.D. student from the University of California, Riverside, is visiting **Tom Henry** on a two-month (Feb. 22 – Apr. 28) Smithsonian Fellowship. His research involves a revision of the reduviid genus *Zelus* (Hemiptera: Heteroptera). Below right: several species of *Zelus* from plate 15 in: Insecta. Rhynchota. Hemiptera-Heteroptera . Volume II (1897-1901) by George C. Champion (Biologia Centrali-Americana).

TRAVEL:

Matt Buffington and **Mike Gates** were recently in Florida collecting micro-hymenoptera. They joined forces with Jens Prena there.

Gary Hevel will participate in the "National" Annual BioBlitz, sponsored by the National Park Service and the National Geographic Society, April 30 and May 01, held this year at Biscayne National Park, near Miami, Florida. He will take the opportunity to also spend a few days collecting insects in Florida before returning on May 10.

Jens Prena and **Steve Lingafelter** have returned after a short visit to Florida where they collected beetles and visited Mark Deyrup and the Archbold Biological Station, an independent natural history institution near Lake Placid, Florida.

Alex Konstantinov is currently in Florida to collect insects, and will return on April 21st.

Warren Steiner will participate in the "National" Annual BioBitz, sponsored by the National Park Service and the National Geographic Society, April 30 and May 01, held this year at Biscayne National Park, near Miami, Florida. He will leave the event early to fly to the Bahamas, where he and Dan Kjar will collect during a two-week period

The *EntNews* is produced by
The Deptartment of Entomology
National Museum of Natural History,
Smithsonian Institution,
Washington, DC, 20560

Chair: Terry Erwin
Editor: Gary Hevel Coordinator: Juanita Hall