



Smithsonian  
National Museum of Natural History



# *EntNews*

**The Newsletter of the Department of Entomology**

Vol. 21 No. 4/5 April/May, 2006



**Cathy and Andrew Apgar**



**Buena and Barry Valentine**



**John LaPolla**



**Matt Buffington**

## Front Page:

**Cathy** and **Andrew Apgar** appear at a Baby Shower/Resignation Party in April. Cathy has been employed with the Systematic Entomology Lab for 9.5 years. She and Andrew have purchased 96 acres of land in Pawnee, Oklahoma, and will be moving there in the near future.

**Buena** and **Barry Valentine** were recent visitors to the Coleoptera Unit. Barry long ago achieved legendary status in the world of beetles, and is always a welcome visitor.

**John LaPolla** has been accepted for a position at Towson State University, and is congratulated for this career move.

**Matt Buffington** joined the Systematic Entomology Unit on May 01, and is a specialist in Cynipoidea and Proctotrupoidea, two superfamilies of parasitic wasps. His position is one of the replacements for the “chalcid brothers” Eric Grissell and Michael Schauff.

(Apgar photo/L. Rodriguez; Valentinesphoto/C. Staines; LaPolla and Buffington photos/G. Hevel; front page formatting/J. Louton)

## ANNOUNCEMENTS:

The 1101<sup>th</sup> regular meeting of the **Entomological Society of Washington** convened on May 04 at 7:00 pm in the Cathy Kerby Seminar Room at the National Museum of Natural History. **Cole Gilbert** from Cornell University presented the topic “All the Better to See You with My Dear: Visually-guided Aerial Pursuit of Females by Male Fleshflies.”

The **Entomological Society of Washington Banquet** will be held on June 06 in the National Museum of Natural History. A reception and dinner will occur from 6:30 to 7:50 pm, followed by a presentation at 8:00 pm in Baird Auditorium. The speaker of the evening will be **Michael Sharkey** of the University of Kentucky, who will discuss “Tricksters, Hypnotists, and Puppeteers: The Strategies and Tools of Parasitoid Hymenoptera.” Contact Michael Gates as soon as possible for tickets at [mgates@sel.barc.usda.gov](mailto:mgates@sel.barc.usda.gov).

On May 28, **Gary Hevel** will present his Backyard Entomology program at BALTICON, the Maryland Regional Science Fiction and Fantasy Convention, to be held at the Baltimore Marriott Hunt Valley Inn in Hunt Valley, Maryland. The 40<sup>th</sup> anniversary event will showcase artists, authors, musicians, scientists and filmmakers.

## GENERAL NEWS:

On April 22, **John Burns** closed the Smithsonian Botanical Symposium “Island Archipelagos: Cauldrons of Evolution” with a reading of his poem “Drosophila in Paradise” from his book of biological poetry called *BioGraffiti: A Natural Selection*.”

## PUBLICATIONS BY STAFF:

Research papers by members of the combined entomological staff who are retired will be listed, and those will be preceded by a double asterisk.

Beutel, R., M. Balke and **W. E. Steiner, Jr.** 2006. The systematic position of Meuridae (Coleoptera, Adephaga) and the phylogeny of the smaller aquatic adephagan beetle families. *Cladistics* 22: 102-131.

--abstract—a phylogenetic analysis of Adephaga is presented. It is based on 148 characters of adults and larvae and focused on the placement of the recently described Meruidae, and the intrafamilial phylogeny of the smaller aquatic families Gyrinidae, Haliplidae and Noteridae. We found a sister group relationship between Gyrinidae and the remaining adephagan families as was found in previous studies using morphology. Haliplidae are either the sister group Dytiscoidea or the sister group of a clade comprising Geadephaga and the dytiscoid families. Trachypachidae was placed as the sister group of the rhyssodid-carabid-clade (Geadephaga) or of Dytiscoidea. The monophyly of Dytiscoidea including *Meru* is well supported. Autapomorphies are the extensive metathoracic intercoxal septum, the origin of the metafurca from this structure, the loss of Mm. furcacoaxalis anterior and posterior, and possibly the presence of an elongated subcubital setal binding patch. Meruidae was placed as sister group of

Noteridae. Synapomorphies are the absence of the

transverse ridge of the metaventrite, the fusion of abdominal segments III and IV, the shape of the strongly asymmetric parameres, and the enlargement of antennomeres 5, 7, and 9. The *Meru*-noterid clade is the sister group of the remaining Dytiscoidea. The placement of *Aspidytes* within this clade remains ambiguous: it is either the sister group of Amphizoidae or the sister group of a clade comprising this family and Hygrobiidae + Dytiscidae. The sister group relationship between Spanglerlogyrinae and Gyrininae was strongly supported. The two included genera of Gyrinini form a clade, and Enhydrini are the sister group of a monophylum comprising the remaining Enhydrini and Orectochilini. A branching pattern (*Peltodytes* + (*Brychius* + *Halipilus*)) within Haliplidae was confirmed. *Algophilus*, *Apteralipilus* and the *Halipilus*-subgenus *Liaphilus* are monophyletic. The generic status of the two former taxa is unjustified. The Phreatodytinae are the sister group of Noterinae, and *Notomicrus* (+ *Sphenoterus*), *Hydrocoptus*, and *Pronoterus* branch off successively within this subfamily. The search for the larvae of *Meru* and a combined analysis of morphological and molecular data should have high priority.

**Brake, I.** 2006. Diverse *Milichiella* Giglio-Tos (Diptera: Milichiidae) in Miocene Dominican amber. *Insect Syst. Evol.* 37: 17-26.

--abstract—Seven new species of *Milichiella* are described from Dominican amber: *M. archaia* n. sp., *M. dolichosurstyla* n. sp., *M. dominicana* n. sp., *M. hennigi* n. sp., *M. margaretae* n. sp., *M. quadrisetosa* n. sp., and *M. theodori* n. sp. These species represent the first record of the subfamily Milichiinae in amber and the first descriptions of the family in Dominican amber. The fossil species differ from extant species only in species-level details except *M. archaia*, which probably belongs to the stemline of *Milichiella* + *Ulia*.

**Brown, J. W.** and J. Baixeras. 2006. *Macrocydia divergens*, a new genus and species of Grapholitini (Lepidoptera: Tortricidae: Olethreutinae) from Central America. *Zoo taxa* 1197: 45-54.

--abstract—*Macrocydia divergens* Brown and Baixeras, new genus and new species, from Costa Rica and Panama, is described and illustrated. The new genus can be distinguished from other Grapholitini by its remarkably large size, distinctive pale forewing pattern, and elongate, porrect labial palpi. Other interesting morphological features of diagnostic value

include female frenulum with two bristles (three in most Tortricidae), female genitalia with a single large signum (paired in most Grapholitini), and a well-defined chorda and M-stem in the forewing venation. Owing to its highly divergent appearance and the relatively unremarkable male and female genitalia of the single included species, which are similar to many species of *Cydia* and *Grapholita*, it is not possible to identify the closest relative of *Macrocydia*.

**Flint, O. S., Jr., R. H. Bastardo, and D. E. Perez-Gelabert.** 2006. Distribution of the Odonata of the Dominican Republic. *Bull. Amer. Odonatology* 9(3, 4): 67-84.

--abstract—The Dominican Republic is known to support 19 species of damselflies (Zygoptera), of which four are endemic to the island, and 48 species of dragonflies (Anisoptera) of which three are endemic to the island. We present 173 new provincial records for 49 of the 67 insular species. All newly reported provincial records are given with full data. For all species a complete list of reported provinces is provided. Study of the species of *Sympetrum* on the island reveals that it is *S. gilvum* not *S. illotum*. Due to lack of substantiated records we question the presence of *Hypolestes clara*, *Progomphus integer*, and *Erythemis attala* on the island.

**Mathis, W. N.** and T. Zatwarnicki. 2006. A review of the New World species of the shore-fly genus *Leptopsilopa* Cresson (Diptera: Ephydriidae). *Annales Zool.* 56(1): 85-138.

--abstract—The 12 New World species of *Leptopsilopa* are reviewed, including the following new species (type localities noted parenthetically): *L. andiana* (Peru, Huanuco: Espensa, [11 km N Huanuco]), *L. flavicoxa* (Belize, Stann Creek: Cockscomb Basin Wildlife Sanctuary [16°47'N, 88°30'W]), *L. martharum* (United States, Texas, Jim Wells: Mathis (7.5 km S; Nueces River; 28°02.2'N, 97°52.2'W; 15 m), and *L. placentia* (Belize, Stann Creek: Placentia Lagoon, Rum Point; 16°32'N, 88°21'W). Lectotypes are designated for *Psilopa similis* Coquillett, *Psilopa varipes* Coquillett, and *Psilopa metallina* Becker. The monophyly of *Leptopsilopa* is established, but only if the Old World species are excluded. The genus is most closely related to a lineage of species currently included in the genus *Psilopa* (the *dupla* group, including *P. metallina*), which is rendered paraphyletic by the recognition of *Leptopsilopa* as an included, monophyletic lineage. The New World species are arranged into two

monophyletic species groups, the *atrimana* and the *similes* groups. Of the 12 species now recognized, 10 occur in the neotropics, where other undescribed species will probably be discovered.

**Staines, C. L.** 2006. A new combination and two new species of *Aslamidium* Borowiec (Coleoptera: Chrysomelidae: Cassidinae). *Zootaxa* 1195: 61-68.

--abstract-- *Aslamidium* (*Neoslamidium*) *flavomaculata* from Colombia, Ecuador, and Panama and *A. (N.) lepidum* from Colombia are described as new and illustrated. *Demotispia strandi* Uhmann is transferred to *Aslamidium* (*Neoslamidium*) and is reported for the first time from Panama. A key to the known species of *Aslamidium* is presented.

## VISITORS:

**Federico Agrain** from Lab. Cricyt, Mendoza, Argentina is visiting Terry Erwin and the Chrysomelidae Collection May 07 through June 15.

**Deborah Brosnan** from Sustainable Ecosystems Institute, Portland, visited Terry Erwin and participated in a NMNH administrative meeting regarding the upcoming Oceans Hall.

**Mirna Casagrande** from Universidade Federal do Parana, Curitiba, Brazil, will visit Robert Robbins and the Butterfly Collection June 20 through July 11.

**Gerry Cassis** from the Australian Museum, Sydney, visited Thomas Henry and the Heteroptera Collection April 18-21.

**Robert Copeland** from the Department of Home, Kenya, will visit Allen Norrbom and other dipterists May 27 through July 05.

**Fabricio Feduchy**, a nature photographer and filmmaker from Valle de Bravo, Mexico, visited David Furth on May 13 for a tour of the Entomology collections.

**Juanita Forrester** from the Morphology & Systematic Lab., University of Georgia, Athens, will visit Natalia Vandenberg and the Coccinellidae Collection May 28 through June 02.

**Cristy Jo Gerasi** from Clemson University visited Terry Erwin to study Trichoptera from his canopy research May 17-19.

**Linda Gerasi** from Princeton University visited Terry Erwin May 18-22 for consultation on math in science.

**Jose Adriano Giorgi** from the Morphology & Systematics Insect Lab., University of Georgia, Athens, will visit Natalia Vandenberg and the Coccinellidae Collection May 28 through June 02.

**Mike Ivie** from Montana State University visited several coleopterists and the Coleoptera Collection May 09-10.

**Allison Koch**, from the Pinhead Institute, Telluride, Colorado, visited Terry Erwin and met with Christian Samper regarding the Encyclopedia of Life program on April 27.

**Rory McDonnell** from the University of California at Riverside visited Wayne Mathis and the Sciomyzidae Collection May 08-12.

**Olaf Mielke** from Universidade Federal do Parana, Curitiba, Brazil, will visit Robert Robbins and the Butterfly Collection June 20-27.

**James Miller** from the American Museum of Natural History will visit Robert Robbins and the Butterfly Collection on May 26.

**Christina Rheims** from Laboratorio de Artropodes Instituto Butantan, Sao Paulo, Brazil, visited Jon Coddington and the Sparassid Collection April 06-14.

**David Roubik** from the Smithsonian Tropical Research Institute, Panama, will visit the Entomology Department from May 01 to August 01 for research on bees.

**Soledad Sallenave** from Lab. Cricyt, Mendoza, Argentina is visiting Terry Erwin and the Carabidae Collection May 07 through June 15.

**Randall Schuh** from the American Museum of Natural History visited Thomas Henry and the Heteroptera Collection April 18-21.

**Masahiro Sueyoshi** from the Forestry & Forest Product Research Institute, Kumamoto, Japan, visited Wayne Mathis and other Dipterists during a visit from May 01 through May 15.

**Buena** and **Barry Valentine** from Ohio State University visited several coleopterists April 24-28.

**Tadeusz Zatwarnicki** from the University of Opole, Poland, will visit Wayne Mathis and the Ephyridae Collection May 25 through July 05.

**TRAVEL BY STAFF:**

**Terry Erwin** recently visited Houma, Louisiana as an advisor on the predation of a carabid beetle species on the sugarcane borer moth.

**John LaPolla** recently returned from a lengthy trip to South Africa, where he conducted research on ants.

**Charlie** and **Sue Staines** will be in the Great Smoky Mountains National Park June 19-27 for continued work on the beetle portion of the ATBI project.

**Charlie** and **Sue Staines** will be in Taiwan July 10-31 as part of a team to train workers of the Taiwan Forestry Institute and National University of Taiwan in beetle inventory techniques.