On the cover:

After a lengthy period of deteriorating health, our colleague Mary Jo Molineaux has recently passed away. She served the Department of Entomology as a Museum Technician for more than twenty years. Those who knew her well were aware of her wonderful sense of humor as she frequently found amusement with her environment and the oddities of human behavior. For years, she listened daily to the local “comedy team” of Don and Mike. But she was not one to guffaw, and it was rare that she laughed out loud. Those who knew her well were aware that she had a strong interest in square dancing, and with her husband Richard would attend such dances in the local area. Those who knew her well were impressed with her devotion to education of children, eagerly volunteering to participate in Museum initiatives, including “bring your daughters and sons to work” activities. Those who knew her well were aware of her avid interest in travel, and her trips would commonly result in insect collecting, especially during family trips to Florida and the Bahamas.

During one of her trips to the Bahamas, she found a new species of darkling beetle (Tenebrionidae) which Warren Steiner later named after her: Adelina maryjoae.

Those who knew her well would have difficulty in remembering any complaints from her in conversations, as she had a positive attitude in dealing with life. Mary Jo will be sharply missed in Entomology and at the Museum, with her warm smile and responsible approach to work, family, and friends. ~

GENERAL NEWS:

Congratulations to Don Davis, who was selected as an honorary life member of the Lepidopterists’ Society earlier this year.

David Furth participated in a press conference in Philadelphia to officially receive the transfer from the USDA Inspector General’s office of most of the 26 beetles that were shipped alive illegally from Taiwan to a private individual in PA who was prosecuted for the crime. It was a great example of collaboration of several governmental agencies (SI, two branches of USDA, U.S. Postal Inspection Service, Homeland Security [U.S. Customs & Border Protection and U.S. Immigration & Customs Enforcement]) to protect US borders from invasive species that could carry disease, parasites, etc. Read the story at: http://blogs.smithsonianmag.com/aroundthemall/2009/06/illegal-giant-beetles-come-to-the-smithsonian/

David Gold (right) was an outstanding summer volunteer from Grinnell College in Iowa who worked on the robber fly collection and on our BioSystematic Database of World Diptera. He made significant improvements to both.

Said Chris Thompson: “Best volunteer that I ever had in my some 40 years”.

Rosser Garrison and Natalia von Ellenrieder (left) visited the Odonata collection from July 27 to August 7 to study and identify damselflies. They also worked with Jerry Louton to finalize the “Damselfly Genera of the New World” book to be published in 2010.
PUBLICATIONS:
(** retired, emeritus, or former dept. member)


--abstract-- The 11 world genera of chlamis Gressit are reviewed, diagnosed, and illustrated. A key for their identification is provided. A replacement name is proposed, Kakita Chamorro-Lacayo & Konstantinov, nom. n., for Ceratolamys Bokermann, 1961, a junior homonym of Ceratolamys Habe, 1946 (Mollusca). Chlamisus rousei Medvedev, 1993 is designated as a junior synonym of Chlamisus stramineus Suffrian, 1866, syn. n.

--abstract-- The new eccritotarshine plant bug Pycnoderiella insularis, n. sp., is described from Cuba and Jamaica and compared with the type species of Pycnoderiella Henry, P. virginiana Henry, known from only a restricted coastal area of Virginia, in the eastern United States. Color dorsal and lateral adult images, illustrations of male genitalia, and a key are provided to facilitate recognition. The relationship of Pycnoderiella with other New World eccritotarsine Bryocorinae is discussed.


--abstract-- The internal female reproductive tract of Risa is characterized by a pair of short spermathecal ducts with no spermathecae, paired short accessory glands, and a large thimble-shaped strongly sclerotized ventral receptacle. This condition is identical with that in the ground plan of Ephydridae but differs from that of their next relatives, i.e., Camillidae and Diastatidae, regarding the shape of the ventral receptacle. It therefore corroborates the close relationship of Risa with Ephydridae either as its sister taxon or within that family.

--abstract-- Chaenusa aurantium Kula and Martinez, new species and Chaenusa steineri Kula, new species, both from the Neotropical Region, are described. The former species was reared from an undescribed species of Hydrellia Robineau-Desvoidy (Diptera: Ephydridae) in Argentina under evaluation for control of Egeria densa (Planch.) (Alismatales: Hydrocharitaceae), Brazilian waterweed, in the United States. Chaenmus pallidinervis (Brethes), also from the Neotropical Region, is redescribed. New distribution records are reported for Chaenus trumani Kula, Chaenusa whattoni Kula, and Chaenusa wooley Kula from the Nearctic Region, as well as Chaenusa ireneae Kula from the Neotropical Region. These data supplement a recently published revision of New World Chaenusa Haliday sensu lato.


---abstract---The larva, pupa, and adults of Prionispa houjayi sp. nov. are described and illustrated in detail. Some autapomorphies of immature stages of this new species are proposed by comparing Chaeridionica picea Baly, C. thailandica Kimoto, and Oncocephala quadrilobata (Guerin), including the quadrate abdominal apex and prominent labial palpi in the larva, and the lateral scoli of the pronotum in the pupa. Prionispa houjayi larvae mine in leaves of Liliaceae belonging to Disporum. This is the first host record of the Liliaceae for the subfamily Cassidinae.


---abstract---Deciplatus, a new genus of Monoplatina with two new species (D. jundaiaensis and D. nigritus), from the south of Brazil is described and illustrated. Deciplatus is compared to Ulrica Scherer and Laselva Furth. Use of the name Monoplatina is clarified.


---abstract---The Anastrepha robusta species group is revised to include the following 29 species: A. amaryllis Tigrero (Ecuador), A. amazonensis, n. sp. (Brazil: Amazonas), A. bella, n. sp. (Panama), A. binodosa Stone (Brazil: Amazonas, Para), A. concava Greene (Costa Rica to Ecuador and Brazil: Amazonia), A. cordata Aldrich (Mexico to Venezuela), A. cryptostrepha Hendel (Peru, Surinam), A. cryptostrephoides, n. sp. (Peru), A. distictrus, n. sp. (Jamaica), A. fenestrata Lutz & Lima (Brazil: Amazonas, Para), A. fenestrella, n. sp. (Costa rica, Panama), A. furcata Lima (Panama, French Guiana, Brazil: Amazonas, Para, Bahia, Espirito Santo), A. fuscatia, n. sp. (Peru), A. isolata n. sp. (Ecuador, Brazil: Amazonas), A. jamaicensis, n. sp. (Jamaica), A. lambda Hendel (Peru), A. miza, n. sp. (Venezuela), A. nigra, n. sp. (Panama), A. nigricascia Stone (Bahamas, USA: Florida), A. nigrittata, n. sp. (Guyana), A. partita, n. sp. (“Amazon”), A. phaeoptera Lima (Brazil: Bahia, Rio Grande do Sul), A. pittieri Caraballo (Panama, Venezuela), A. pseudorobusta, n. sp. (Peru, Trinidad, Venezuela), A. rafaeli, n. sp. (Brazil: Roraima, Venezuela), A. robusta Greene (Mexico to Panama), A. rojasi, n. sp. (Costa Rica, Panama), A. simulans Zucchi (Brazil: Parana, Sao Paulo, Rio de Janeiro), and A. speciosa Stone (Panama. Moutabea longijolia is recorded as a host plant of A. rojasi, the first host record for Anastrepha species from the plant family Polygalaceae. The larvae feed on the seeds within the fruit. A key to the species and descriptions and illustrations for each species are provided, and their possible relationships are discussed.


---abstract---Several years in the making, this book represents the first comprehensive assessment of the fauna of Caribbean crickets to date. It treats 585 cricket species, of which 448 are described as new species. Of the total 539 island species, 420 species are new to science. An additional 15 new species from surrounding continental areas are described. The enormous fauna is composed of 53 genera (19 of which are described as new). After an introduction to the main evolutionary characteristics of island crickets and the main topographical and ecological features of each of the Greater Antilles, a list to all genera and species is provided. Then the groups of species are treated by subfamilies and pictorial keys are given by genera.


---abstract---Based on morphological analysis, the species Dargida procinctus (Grote), currently considered to be widespread from Canada to Bolivia, is found to include three previously unrecognized species: Dargida spinicassida, n. sp., from northern Mexico; Dargida juxta, n. sp., from southern Mexico and Costa Rica; and Dargida lilum, n. sp., from Bolivia. Adults and male and female genitalia of all four species are illustrated. Dargida grammivora Walker and Dargida meridionalis (Hampson) are closely related species that could be confused with those of the Dargida procinctus complex. Adults and male and female genitalia of these are illustrated for comparison. A key is provided for differentiation of these six closely related species.


---abstract---Inventory work conducted at Patuxent Research Refuge, Laurel, Maryland from March 1999 to October 2001 found 17 species of Dytiscidae, two species of Gyrinidae, six species of Haliplidae, one
species of Hydrochidae, 17 species of aquatic Hydrophilidae, and one species of Noteridae. These 44 species represent 23.6% of the known Maryland fauna of these families. The most unusual find was the woodland pool specialists *Hoperius planatus* Fall and *Agabates acuductus* (Harris) (Dytiscidae), candidates for Maryland threatened/endangered species status.


abstract-- This paper, treating the tortricid subfamily Chlidanotinae (comprised of Chlidanotini, Hilarographini, and Polyorthini), represents the first in a proposed three-part series examining variation in the number of bristles in the frenulum of female tortricid moths. Based on an examination of 86 described species and 11 undescribed species representing 31 genera of Chlidanotinae, the vast majority of females of Chlidanotini and Hilarographini has a two-bristled frenulum, whereas a three-bristled frenulum is the more common state in Polyorthini. When the character states are mapped on a composite, schematic phylogeny of the subfamily, the change from three to two bristles appears to have evolved once at the base of the Chlidanotini + Hilarographini clade and twice within Polyorthini. The consistency of this character within Chlidanotini and Hilarographini provides further evidence for the exclusion of *Mictocommosis* Diakonoff, *Mictopsichia* Hubner, and *Tortrimosaica* Brown and Baixeras from Hilarographini. The distribution of the two-bristled frenulum in Polyorthini appears to support one major clade identified by Razowski (i.e., *Ardeutica* Meyrick, *Polyortha* Dognin, *Pseudatteria* Walsingham, *Polythora* Razowski), plus one outlier, *Cnephasitis* Razowski. In the monotypic *Olinidia schumacherana* (Fabricius), five of 18 representatives examined had two bristles, whereas the remainder had three. Minor deviations from this pattern appear to represent intraspecific variation. Preliminary investigation of the character in other tortricid subfamilies suggest a high degree of variation within tribes, genera, and species, with asymmetry common in many individuals. In contrast to the situation in most tortricid taxa, we conclude that variation in the number of bristles in the frenulum is phylogenetically informative in Chlidanotinae.

VISITORS:

John Ascher from the American Museum of Natural History, New York City, visited Sean Brady and the Apoidea Collection June 22-26.

Jason T. Botz from USDA-APHIS-PPQ, Nogales, Arizona, will be a visitor with Natalia Vandenberg and the

Barkley Butler from Indiana University of Pennsylvania visited Ted Schultz and the Formicidae Collection June 23-25, to capture data of ants from Pennsylvania.

Sydney Cameron from the University of Illinois visited Sean Brady and the Apoidea Collection June 22-25.

Jay Cordeiro from Nature Serve (United States) visited Sean Brady and the Apoidea Collection on June 19 to look at *Bombus* and *Habropoda* bees.

Liz Day from Purdue University visited Sean Brady and the Apoidea Collection June 22-26.

Marc Epstein from the Department of Food and Agriculture, Sacramento, California visited the Lepidoptera Collection June 20-28.

Steve Fratello from West Islip, Massachusetts visited Robert Robbins and the Butterfly Collection June 29 to July 02.

Rosser Garrison from the California Department of Food and Agriculture, Sacramento, visited Jerry Louton and the Odonata Collection July 27 through August 07. He identified specimens of unsorted Zygoptera and tested keys in a large manuscript.

Grant Gentry from Tulane University, New Orleans, visited Robert Robbins and the Butterfly Collection on July 09.

Sabrina Jepson from the Xerces Society, California, visited Sean Brady and the Apoidea Collection June 22-26.


Shazia Mahandallie from the Natural History Museum in London visited Rich Wilkerson and the Sandfly Collection June 23 to July 14.

James Miller from the American Museum of Natural History, New York City, visited Don Harvey and the Collections of Arctiidae and Notodontidae, using the USNM collection for identification of Ecuador arctiid and notodontid moths, August 11-12.

Ulrich Mueller from the University of Texas at Austin visited Ted Schultz and the Formicidae Collection June 18-22.

Weston Opitz from Kansas Wesleyan University, Salina, Kansas, visited Gary Hevel and Natalia Vandenberg August 10-13, to examine clerid beetles.

Claudia Ortiz from Univ. Nacional de Colombia Ins. De

**Steve Roble** from the Department of Conservation and Recreation, Richmond, Virginia, visited Robert Robbins and the Butterfly Collection on August 06.

**Aaron Smith** from Michigan State University visited Warren Steiner and the Tenebrionidae Collection June 08-10.

**Alexey Tishechkin** from Louisiana State University, Baton Rouge, visited Alex Konstantinov and Warren Steiner August 08-13 for contract work with various beetles.

**Natalia von Ellenrieder** from the Callifornia Department of Food and Agriculture, Sacramento, visited Jerry Louton and the Odonata Collection July 27 to August 07. She identified unsorted Zygoptera specimens and tested keys for a large manuscript.

**Kevin Williams** from the University of Utah visited Sean Brady and the Collections of Pompilidae and Mutillidae June 22-26.

**Paul Williams** from the Natural History Museum in London visited Sean Brady and the Apoidea Collection June 22-26.

**Janusz Wojtusiak** from Jangiellonian University Zoological Museum, Krakow, visited Patricia Gentili-Poole and the Geometridae Collection, and 2) Mike Pogue and the Noctuidae Collection, June 01-05.

**TRAVEL:**

**Jonathan Coddington** visited the American Museum of Natural History during the week of August 17-24.

**Terry Erwin** visited the California Academy of Sciences, San Francisco, for research investigations August 17-21.

**Warren Steiner** and Jil Swearingen traveled 17-25 June to continue fieldwork and attend the 13th Symposium on the Natural History of the Bahamas at the Gerace Research Center, San Salvador, Bahamas. Warren presented an illustrated talk, “Progress on the Survey of the Darkling Beetles (Coleoptera: Tenebrionidae) of New Providence Island, Bahamas,” which was updated (abstract below) with two new island records obtained en route to San Salvador on the first day of travel. The talk was dedicated to **Mary Jo Molineaux**, whose invitation to join her family’s trip to Grand Bahamas in 1987 inspired the continuing studies on these islands. Included among several new island records presented was a series of *Adelina maryjoae* Steiner, previously known only from the holotype from Freeport.

---abstract--- As part of an ongoing survey of the darkling beetles of the Bahamas, documenting the endemicity and adventives elements in the islands of the Bahamian region, a list of species known to date from New Providence is presented. Of all Bahamian islands, New Providence is the most developed, with severe habitat fragmentation and loss of native vegetation. However, by sampling remnant tracts of coastal scrub and interior forests on three brief visits (11-15 February 2005, 14-18 April 2007, 17 June 2009), the 200 square kilometer island was found to be rich in species of this family. Dense tropical hardwood scrub interfaces with beach strand habitats and relatively open interior karst flats with sparse Caribbean pine. Prior to this work, only 8 species of Tenebrionidae were known from the island. By focusing on known habitats and collecting techniques, a total of 35 species are currently documented as a result of the 11 days of field work and supplemented by literature records and museum specimens. A number of new island records, first-time Bahamian occurrences, and one undescribed flightless species (*Trientoma*) are reported, along with other distributional data. A rare flightless species, *Branchus woodi* LeConte, was “rediscovered” at several coastal localities, as it had not been known from the island since its original description in 1866.