



Phaëton

The Official Newsletter of the
Maryland Entomological Society

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FACULTY SPONSORS: **Frank E. Hanson** and **Austin P. (Bob) Platt**
Department of Biological Sciences
University of Maryland Baltimore County (UMBC)
1000 Hilltop Circle
Baltimore, MD 21250

Meeting Announcement

The Maryland Entomological Society's 294th regular meeting will be held **Friday, 18 October 2013, at 8:00 p.m., in Room 004** (one floor below the street level), **Biological Sciences Building**, University of Maryland Baltimore County (UMBC). Bring a friend and specimens, observations, and books to share. Refreshments will be provided. Presentations are scheduled to begin at 8:15 p.m.

IF THE FEDERAL GOVERNMENT SHUTDOWN ENDS IN SUFFICIENT TIME, THE SPEAKER WILL BE:

Speaker: **Andrew W. Ulsamer – Biological Science Lab Technician, Bee Research Laboratory, Beltsville Agricultural Research Center, Agricultural Research Service, United States Department of Agriculture, Beltsville, Maryland**

Title: **Colony Collapse Disorder and Pollinator Decline**

Andrew Ulsamer will discuss the emergence of colony collapse disorder (CCD) of the Honey Bee, *Apis mellifera* Linnaeus (Hymenoptera: Apidae), what the research tells us about CCD, and how it relates to the larger issue of the general decline of native pollinators.

Andrew graduated from the University Of Maryland with a Bachelor of Science in Entomology. He joined the USDA Bee Research Laboratory in Beltsville in 1998. He is a lab technician in the disease diagnostic lab. The lab offers a free diagnostic service where any beekeeper, worldwide, can submit samples of bees or comb for diagnosis of most known Honey Bee diseases. Andrew currently manages and maintains the lab's Honey Bee colonies. He assists the researchers in setting up and performing their field research projects. In the past, he has administered the USDA's Africanized Honey Bee Identification Program. Andrew has also been involved in research aimed at preserving Honey Bee germplasm and has been trained in artificial insemination of Honey Bee queens.

IF THE FEDERAL GOVERNMENT SHUTDOWN DOES NOT END IN SUFFICIENT TIME, THE SPEAKER WILL BE:

Speaker: **Harold J. Harlan, Ph.D., B.C.E. – Former Entomologist, Information Services Division, Armed Forces Pest Management Board, Forest Glen Annex, Silver Spring, Maryland**

Title: **Some Newer and Novel Mosquito Control Options**

Over the past few years, several new strategies, techniques, and devices have been imagined, developed, and tested for control of mosquitoes (Diptera: Culicidae). Their main targets have been human pathogen vectors, but some potentially will impact mosquito species that are mainly human-biting pests. Some of those are already patented and currently being developed for commercial marketing. A few other novel, but interesting, techniques are still very "theoretic" and may never reach practical or affordable routine use. A number of these newer mosquito control options will be described, shown as images, and discussed.

Harold Harlan earned a Ph.D. in 1984 from the Ohio State University with a dissertation topic on Rocky Mountain spotted fever. He retired from the Army in 1994 after 25 years as an active duty Medical Entomologist, including assignments in Vietnam, Panama, and Saudi Arabia. From August 1979 to July 1982, he lived in the Panama Canal Zone, an endemic area for Chagas' disease. For most of that period, he participated in routine surveillance, preventive outreach education and limited efforts of applied research focused on the two main Chagas' disease vector species in Panama, *Rhodnius pallescens* Barber and *Triatoma dimidiata* (Latreille) (both Hemiptera: Reduviidae). He worked as Senior Entomologist for the National Pest Management Association for 9 years, and recently retired as a civilian analyst for the U.S. Armed Forces Pest Management Board, focused on vectors, biologic hazards, and their avoidance and management. He has authored or co-authored 37 peer reviewed articles or book chapters, most of them on preventive medicine or public health topics.

Meet for Dinner before the Lectures

If you are interested in meeting for dinner before the lectures, you are invited to join the guest speaker and your fellow MES members at [Kibby's Restaurant and Lounge](#), "Home of Baltimore's Best Shrimp Salad Sandwich." Kibby's is located inside the Baltimore Beltway at 3450 Wilkins Avenue, Baltimore, MD 21229, just 15 minutes from UMBC. Meet at the restaurant **promptly at 6:00 p.m.**

17 MAY 2013 MES MEETING MINUTES

The 293rd general meeting of the Maryland Entomological Society was held on Friday, 17 May 2013 at UMBC and began at 8:35 p.m. with a welcome by President **Fred Paras** and then led immediately into the main program. This meeting was the annual Members' Potpourri night and consisted of presentations by two MES members. Summaries of the talks are given below. Attendees broke for a period of refreshments and discussion after the talks, and then a business meeting was convened. Due to the lateness of the hour, minutes of the April 2013 meeting were not read, and attendees were referred instead to the copy of these minutes in the newsletter. The Treasurer's report cited a General Funds total of \$3281.88. **Gene Scarpulla**, Journal Editor, reported that seven manuscripts had been submitted for the next issue of *The Maryland Entomologist* and that six were in peer review at the time of his report. Gene also said that member **Elizabeth Hill** would set up an MES website and that Gene would act as Webmaster. An almost complete set of MES newsletters, back to the first few years of the Society, has been accumulated; and these will eventually be scanned and available on the website. (Other members subsequently offered to supply copies of those issues found missing or damaged in Society archives.) Finally, Gene will make arrangements for another Society crab feast in September 2013. Society elections were held and resulted in all current officers resuming their roles for another year, except for President Fred Paras. Fred wished to relinquish his office and is working with and will provide assistance to another MES member who is giving consideration to taking on the office of President next year. **Dick Smith** agreed to continue arrangements with the Bethesda-Chevy Chase Chapter of the Izaak Walton League to hold our Society field trip on the grounds of their Conservation Farm in Poolesville, Maryland this summer (date set later for Sunday, 30 June 2013). **Ed Cohen** mentioned that MES member **John Glaser**, now in West Virginia, is occasionally donating beetles and moths to the National Museum of Natural History and that John's daughter and Ed are assisting in the specimen transfer. At this meeting, Gene Scarpulla displayed several references on bees in connection with his survey talk, and Fred Paras showed four drawers of tropical Lepidoptera for his talk on Bolivia.

Respectfully submitted, Richard H. Smith, MES Secretary

**17 MAY 2013 MES LECTURE
"MEMBER'S POTPOURRI NIGHT"**

The program consisted of two member presentations.

Speaker: Eugene J. Scarpulla, Publications Editor – Maryland Entomological Society, and Associate – Bee Inventory and Monitoring Laboratory, Patuxent Wildlife Research Center, Beltsville, MD

Title: "A Yearlong Survey of the Bees (Hymenoptera: Apoidea) of a Human-made Habitat Created from Dredged Material: Hart-Miller Island, Chesapeake Bay, Baltimore County, Maryland"

Gene began by briefly mentioning his various other surveys

(birds, butterflies, odonates, and other insects) conducted at Hart-Miller Inland since 1983. Through some urging by MES member **Sam Droege**, Gene took Sam's week-long course at Patuxent Wildlife Research Center on bee identification and then conducted the survey at Hart-Miller from April 2009 through March 2010. Gene continued in his talk with discussions that included some details of bee biology, bee statistics, bee families, and bee identification techniques. Among bee species, 72.2% are solitary, 23.2% are parasitic, and only 4.6% are social. In the United States, there are about 4000 bee species comprising six families. About 800 species occur east of the Mississippi River, and about 400 species occur in Maryland. Little is known about the status of native bee populations. Gene presented dorsal, ventral, and lateral views of the bee's body, and also views of the head, wing, and hind leg to show the many anatomical features involved in bee identification. Identification keys with ample pictures are available on the Discover Life website http://www.discoverlife.org/mp/20q?guide=Bee_genera to aid the non-expert. Bee specimen data was also entered into the Discover Life database. In Gene's survey, 4446 bee specimens were collected, comprising five families, 27 genera, and at least 86 species. For extensive details on Gene's survey procedures and findings, which were presented in his talk, including bee abundance graphs, a long reference list, and acknowledgements, please see his paper (same title as above) in the September 2013 (Vol. 6, No. 1, pp. 56-84) issue of *The Maryland Entomologist*.

Speaker: Fred Paraskevoudakis, President – Maryland Entomological Society, and Professor – Natural and Physical Sciences Department, Baltimore City Community College, Baltimore, MD

Title: "Bolivia: The Altiplano, Yungas, and Jungles. People, Places, and a Naturalist's Perspective on Biodiversity"

Fred visited this mostly high elevation South American tropical country of natural spectacles and adventure for 3½ weeks in the summer of 2012. Fred flew into the Bolivian "seat of government," La Paz, itself sitting at almost 12,000 ft in elevation, visited the Lake Titicaca region to the west, and then traveled north up the Rio Beni. Mountains to the north and west of La Paz rise to 16,000 ft.; Bolivia's highest mountain is over 21,000 ft. High mountain villagers' crops include potatoes and fava beans. The country contains one of the world's largest silver mines, began by the Spaniards in the 16th century. In La Paz, cathedrals, dating from this time period, are still in use. On Lake Titicaca, the town of Copacabana is a tourist attraction. Visitors venture from here to the Isla del Sol (Island of the Sun), which contains ruins both of the Incas (15th century) and of predecessor tribes of peoples dating from over 2000 BC. Excavations reveal city drainage systems. At Tiwanaku west of La Paz, huge stone edifices and a pyramid are found, built from stone brought in from many miles away and dating from the 1st century AD. In La Paz, Fred attended a parade and festival, "The Festival of the Great Power," from early in the morning to about 11:00 p.m. An almost endless procession of groups from around the country, dressed in elaborate and colorful outfits and

accompanying musicians playing interesting percussion instruments, gave performances and marched by. Fred showed a few videos of the performances. Almost everyone in the country chews coca leaves (*Erythroxylum* P. Browne spp. [Erythroxylaceae]), which is a cultural phenomenon and quickly cures altitude sickness. Fred actually had breakfast with Evo Morales, President of Bolivia. Fred later visited jungle areas in northern Bolivia several miles from the town of Rurenabaque near the Rio Beni. At one spot he saw numerous Lepidoptera puddling at a small trickle infused with farm runoff and urine. Fred showed a video of the Lepidoptera flying and puddling in this area. The species included:

- *Urania leilus* Linnaeus (Uraniidae) – Green-banded Urania: large blue-green, day-flying, swallowtail-like moth
- *Historis odius* (Fabricius) (Nymphalidae) – Stinky Leafwing: large, dead-leaf-like butterfly
- Other nymphalid genera:
 - *Diathria* Billberg – eighty-eights
 - *Marpesia* Hübner – dagger-wings
 - *Eunica* Hübner – purplewings
 - *Doxocopa* Hübner – emperors
 - *Heliconius* Kluk – longwings; including *H. dido* Neustetter, *H. doris* (Linnaeus) – Doris Longwing, and *H. wallacei* Reakirt – Wallace's Longwing
- Pierid genera:
 - *Anteos* Hübner – angled sulphurs
 - *Phoebis* Hübner – tropical sulphurs
 - *Dismorphia* Hübner – mimic-whites

Finally, Fred entertained us with some photos and video of his bike ride with a small group of comrades down the 40-mile stretch of the very narrow and crumbling dirt road along high cliffs near La Paz called "Death Road." The more adventurous tourists who visit Bolivia often include this bike ride in their schedules.

Respectfully submitted, Richard H. Smith, MES Secretary

HONORING MEMBER DONORS

MES wishes to honor the following members who made charitable donations along with their recent membership renewals. These donations help with the printing and mailing of *The Maryland Entomologist*.

Linda M. & Charles A. Davis

Mark C. Etheridge

Jennifer A. Frye

Stuart M. Fullerton

Suzanne M. Gregoire

George M. Jett

Frances B. Pope

Karen D. Rennich

Sue A. Ricciardi

Richard G. Robbins

Floyd W. Shockley

David R. Smith

Robert P. & Joanne K. Solem

Theodore W. Suman

IN MEMORIAM: ROBERT S. BRYANT 30 DECEMBER 1941 – 18 AUGUST 2013

It is with deep regret and sorrow that I announce the passing of MES charter member and co-founder, **Robert S. Bryant**.

Many of our older members will remember Bob as an enthusiastic supporter of the Society in its early years and as an ardent collector. Although his interest in entomology was generally broad-based, he was most noted for his interest in Maryland's moth fauna and he had accumulated a sizeable collection over his lifetime.

Bob served the Society in many ways over the years. He nurtured both our newsletter and our journal through their "infancy," serving as our first Editor of both publications as well as authoring several articles for the journal. He also served as the Society's official Historian for many years.

In his later years, Bob was beset by both declining health and fortunes which limited his participation in Society activities, but retained his interest in insects to the end. He passed away peacefully at the Frederick Villa Nursing Home in Catonsville on 18 August 2013 from heart failure. In keeping with his wishes, his remains were donated to the University of Maryland School of Medicine.

With the help and participation of MES members, the bulk of his personal collection was acquired by the Natural History Society of Maryland and is now housed in their facilities on Belair Road in Baltimore where it will remain accessible for reference and study for generations to come.

On a personal level, I had known Bob since the founding of the Society in 1971. Although he was an almost painfully shy and quiet man, he was also an insightful observer and lover of nature. This can be seen in the words of his favorite poem:

*A butterfly lights beside us like a sunbeam.
And for a brief moment its glory and beauty
belong to our world.
But then it flies on again,
and though we wish it could have stayed,
we feel so lucky to have seen it.*

Author Unknown

Thanks Bob. I couldn't have said it better myself. Rest assured that you will be remembered.

Respectfully submitted, Philip J. Kean, MES Vice President

IN MEMORIAM: STEPHEN J. HARRISON 26 APRIL 1948 – 27 SEPTEMBER 2013

Stephen J. Harrison, former member and past President of MES died unexpectedly on 17 September 2013 at Northwest Hospital in Baltimore, where he had been transferred following a prostate biopsy procedure from which he never recovered. He is survived by his niece, Ms. Abbey C. Singer, and by her parents, Stephen's sister, Maria Singer and her husband, Philip, all of whom were quite close to him. His relatives also include many other nieces and nephews and their children. Stephen himself never married. An evening Memorial Service was held

on 6 October 2013 in Catonsville. His funeral was private.

Stephen worked as a laboratory technician and research associate in the Department of Biological Sciences for many years while he was an undergraduate at the University of Maryland Baltimore County (UMBC). Later, he worked as a Medical Researcher at The Johns Hopkins University in Baltimore. He was intuitive, very bright, thoughtful and kind. Despite his physical difficulties, he always was cheerful, and maintained a marvelous sense of humor. He enjoyed pets, naming many of his house cats after historic female Irish pirates. He often quipped that his 12+ year old house cat named "Grace O'Malley" was even older than our present Governor's daughter, bearing the same name!

Stephen was interested in almost everything, including natural history, philosophy, early United States and European history, antiques, professional sports, and especially, the U.S. Civil War and his Confederate heritage. He seldom watched television, but was widely read and knowledgeable. For many years, the two of us attended the Maryland Arms Collectors Association spring Original Baltimore Antique Arms Show held at the Maryland State Fairgrounds in Timonium. Occasionally, we hunted birds and shot antique firearms together. During the 1970s and 80s, Stephen regularly attended MES meetings, and contributed a number of brief notes to the early issues of *The Maryland Entomologist*. He also published papers in other journals with Dr. Platt. He earned his Master of Science degree at Towson University in Biology, while working in Dr. Platt's lab at UMBC. He studied the effects of varying levels of cupric sulfate (CuSO_4) on non-target aquatic insect larvae. [This chemical is an algaecide often spread in freshwater pond and lake waters]. Stephen used starch-gel electrophoresis to study the chemical's disruptive effects on various tricarboxylic acid (TCA) enzymes in several species of dragonfly naiads collected from UMBC ponds.

Stephen will be greatly missed by his family and friends. He will be well-remembered by all who knew him. After his serious accident, with his mobility restricted, he kept in touch with his friends via the internet. At the time of his death he was working on what he termed his "Life's Work", an extensive philosophical treatise.

Respectfully submitted, Austin P. Platt, UMBC Faculty Emeritus

USGS WEBINAR: INSECT MACROPHOTOGRAPHY *SAM DROEGE*

The United State Geological Survey (USGS) has presented their first Google+ Hangout which features MES member **Sam Droege**, Head of the USGS's Bee Inventory and Monitoring Laboratory at the Patuxent Wildlife Research Center. Sam demonstrates the techniques used to create the stunning macrophotographs of insects that he and his interns have produced at the lab. These photographs can be viewed at: <http://www.flickr.com/photos/usgsbiml/sets/72157630468783226/>. The webinar can be viewed at: <https://plus.google.com/events/c5569losvskrv2nu606ltof8odo#vents/c5569losvskrv2nu606ltof8odo>.

JOHN CARROLL HAS MOVED TO TEXAS

MES member **John Carroll** retired from the United States Department of Agriculture, Agricultural Research Service earlier this year and has relocated to Texas. He sends the following message:

"I hope all is going well. Lots of new fauna and flora to learn here, but other stuff is keeping my retirement busy. Please give my regards to MES folks. We live 20 minutes from downtown Austin so I may see some members at the ESA [Entomological Society of America] annual meeting next month."

"CBP AND MERCHANT SHIP CREW INTERCEPT 27 DESTRUCTIVE ASIAN GYPSY MOTH EGG MASSES ON CAR CARRIER SHIP"

A 30 September 2013 U.S. Customs and Border Protection (CBP) news release reports that a U.S. Department of Agriculture laboratory confirmed that CBP agriculture specialists at the Port of Baltimore encountered six egg masses of the Asian Gypsy Moth (AGM, *Lymantria dispar* [Linnaeus] ssp. [Lepidoptera: Lymantriidae]) during a routine inspection of the M/V Columbia Highway, a vehicle carrier ship that arrived from the United Kingdom. The agriculture specialists discovered the pest on 16 September 2013. Subsequent inspections yielded an additional 21 egg masses. The AGM differs from the European Gypsy Moth (EGM, *Lymantria dispar* [Linnaeus] ssp.) in that female AGM can fly, whereas female EGM are flightless.



Asian Gypsy Moth (AGM, *Lymantria dispar* [Linnaeus] ssp. [Lepidoptera: Lymantriidae]) (Image courtesy of CBP)

The full news release can be accessed at:

http://www.cbp.gov/xp/cgov/newsroom/news_releases/local/09302013_2.xml.

FIRST MARYLAND RECORD***Halticus intermedius* Uhler (Hemiptera: Miridae)**

MES member **Ed Cohen** happened to collect a plant bug new to Maryland in Grantsville, Garrett County, on 30 July 2013. It was a specimen of *Halticus intermedius* Uhler (Hemiptera: Miridae). The specimen was confirmed by MES member **Tom Henry**, Research Entomologist at the USDA Systematic Entomology Laboratory at the National Museum of Natural History. The species has been recorded from Pennsylvania. Tom points out that *H. intermedius* is found in conjunction with anemones (*Anemone* L. spp. [Ranunculaceae]). Ed found the plant bug in his car outside the Penn Alps Restaurant & Craft Shop, 125 Casselman Road in Grantsville.

**UNIVERSITY OF MARYLAND
ENTOMOLOGY EVENTS**

Fri, 18 October 2013, 12:00 p.m.

“Symbionts associated with the salivary glands of the Potato Leafhopper, *Empoasca fabae*”

Entomology Colloquium by Bridget DeLay, UMD

Fri, 25 October 2013, 12:00 p.m.

“Investigating in vivo Honey Bee toxicology and whole Honey Bee hive dynamics using fluorescent dyes”

Entomology Colloquium by Grace Kunkel, UMD

Fri, 1 November 2013, 12:00 p.m.

“Population level consequences of interactions between plants and insect herbivores”

Entomology Colloquium by Nora Underwood, Florida State U

Fri, 8 November 2013, 12:00 p.m.

“How to use a fungus to fight malaria”

Entomology Colloquium by Raymond St. Leger, UMD

For additional information, go to:

<http://entomology.umd.edu/news/events>.

**AMERICAN ENTOMOLOGICAL SOCIETY
PUBLIC MEETINGS**

23 October 2013; 4:00 p.m.

American Entomological Society Public Meeting

“Pollination of *Parsonsia alboflavescens* (Apocynaceae, milkweed family): implications for the evolution of pharmacophagy in the Danainae (milkweed butterflies)”

Tatyana Livshultz (Assistant Professor, Department of Biodiversity, Earth and Environmental Sciences, Drexel University; Assistant Curator, Department of Botany, Academy of Natural Sciences)

University of Delaware, Allen Biotechnology Lab, Conference Room 101, 601 Sincock Lane, Newark, Delaware.

<http://darwin.ansp.org/hosted/aes/mtgSched.htm>.

20 November 2013; 7:00 p.m.

American Entomological Society Public Meeting

Topic: TBA

Speaker: TBA

The Academy of Natural Sciences of Drexel University, Ewell Sale Stewart Library, Second Floor, 1900 Benjamin Franklin

Parkway, Philadelphia, Pennsylvania

<http://darwin.ansp.org/hosted/aes/mtgSched.htm>.

2013/2014 PROPOSED MES EVENT SCHEDULE

Regular MES lecture/meetings are held at UMBC on the 3rd Friday of each of the 6 months coinciding with UMBC's academic year. Proposed events for the upcoming MES membership year are:

<u>Date</u>	<u>Speaker</u>	<u>Topic</u>
Sep 8	Crab Feast/Meet-&-Greet at J. KING'S Restaurant	
Oct 18	Andrew Ulsamer	Colony Collapse Disorder
	or: Harold Harlan	New & Novel Mosquito Control Options
Nov 15	Sam Droege	Insect Photography
Feb 21	Lecture	TBA
Mar 21	Hal White	Dragonflies & Damselflies of Delmarva
Apr 18	Lecture	TBA
May 16	Members' Potpourri Presentations & Elections	
TBA	Survey/Field Trip	TBA

OCT 2013 – SEP 2014 SOCIETY YEAR OFFICERS

Co-Presidents	Timothy Foard & Frederick Paras
Vice President	Philip J. Kean
Secretary	Richard H. Smith, Jr.
Treasurer	Edgar A. Cohen, Jr.
Historian	(vacant)
Faculty Sponsors	Frank E. Hanson & Austin P. Platt
Publications Editor	Eugene J. Scarpulla

SUBMITTAL DEADLINES

NOV 2013 issue of the *Phaëton*:

Please send member news items by 1 November 2013.

SEP 2014 issue of *The Maryland Entomologist*:

Please send first drafts of articles and notes by 1 April 2014.

Send drafts for both publications to ejscarp@comcast.net.