Phaëton

The Official Newsletter of the
Maryland Entomological Society

Volume 35, Number 1 **October 2014**

EDITOR: **Eugene J. Scarpulla** – ejscarp@comcast.net
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
WEBSITE: http://www.mdentsoc.org/

Meeting Announcement

The **M**aryland **E**ntomological **S**ociety's **300th** regular meeting will be held **Friday, 17 October 2014**, 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.

Speaker: Jeffrey W. Shultz Ph.D. – Associate Professor and Director of Graduate Studies, Department of Entomology, University of Maryland, College Park

Title: "The Diversity and Sex Lives of Daddy Longlegs (Opiliones)"

Courtesy of Joe Warfel (Eighth-Eye Photography)

The eastern United States is a diversity hotspot for the harvestman subfamily Leiobuninae, the group than encompasses most of the species commonly known as "daddy longlegs." However, the eastern leiobunines have been neglected by systematists, such that it is nearly impossible for most people—including most arachnologists—to reliably identify even common species. Dr. Shultz started to bring order to leiobunine taxonomy about 10 years ago and has discovered many new species in the process. As is the case with most arthropod groups, species delimitation in harvestmen depends largely on differences in genitalia and other reproductive characters, but these structures also revealed interesting insights into the evolution of mating systems in harvestmen. The penes in some species have cuticular sacs for delivering nuptial gifts to the female, while penes in other species lack sacs and appear to be specialized for forcing copulation. Males in the latter group often have pedipalps enhanced for powerfully clasping the female during mating and the pregenital opening in females is armed with sclerotized barriers. Upon mapping these features on a phylogenetic tree, it is clear that mating in leiobunines has shifted multiple times from a system dominated by gift-giving males to systems dominated by sexually antagonistic males. This talk will review the evidence for genitalic evolution in the eastern leiobunine harvestmen and discuss possible explanations for patterns in mating system.

Jeff Shultz has worked on the phylogeny and functional morphology of arachnids and other arthropods for about 30 years. He earned a B.S. in Zoology from Michigan State University in 1982, an M.S. in Biology from Ohio University in 1985, and a Ph.D. in Zoology from Ohio State University in 1990. His postdoc was concerned with molecular evolution. He has been a member of the Department of Entomology at the University of Maryland since 1994 and has served as the membership secretary and on the executive committee of the American Arachnological Society for 10 years.

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 Wilkens Avenue, Baltimore, MD 21229, just 15 minutes from UMBC. Meet at the restaurant **promptly at 6:00 p.m.**

*****DON'T FORGET TO RENEW*****
*****IT'S MEMBERSHIP RENEWAL TIME*****
OCT 2014 – SEP 2015 MEMBERSHIP YEAR

Membership renewal forms were inserted in the front of the September 2014 issue of *The Maryland Entomologist* that was mailed out in September. If the date on your address label reads 2014, it is time for you to renew for the "October 2014 – September 2015" membership year. Please check that your contact information is correct and return the form along with your check (made out to Maryland Entomological Society) to: **Edgar A. Cohen, Jr.** (MES Treasurer), 5454 Marsh Hawk Way, Columbia, MD 21045.

WELCOME TO NEW MEMBERS

MES welcomes the following new members to the Society:

Michael K. Burchett Churchville, MD

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
George H. Harman
Janet A. Lydon
Timothy M. McMahon
Tomas M. Mustelin
Frances B. Pope
Sue A. Ricciardi
Robert P. & Joanne K. Solem
F. Christian Thompson
Timothy W. Thompson

FLOYD W. SHOCKLEY RECEIVES AWARD OF EXCELLENCE

MES member **Floyd Shockley** (Curation, Collection Management, and Systematics Research; Department of Entomology, National Museum of Natural History, Smithsonian Institution) has received The University of Georgia College of Agricultural and Environmental Sciences (CAES) Alumni Association Award of Excellence. Floyd received his Ph.D. at the University of Georgia. The Award of Excellence recognizes CAES alumni who have achieved excellence in their chosen field and/or in their community. "Congratulations Floyd!"

9 MAY 2014 MES MEETING MINUTES

The 299th general meeting of the Maryland Entomological Society was held on Friday, 9 May 2014 at UMBC and began at 8:30 p.m. with a welcome by Co-President **Fred Paras** and then the introduction of the speakers for the main program. The program, which is summarized below, consisted of both a student and an MES member presentation. Secretary **Dick Smith** also summarized some recent discoveries and the occurrence status of a few rare butterfly species in the Maryland/Virginia area. Attendees broke for a period of discussion and refreshments, and then the Society business meeting was convened. The April MES meeting minutes were read by the Secretary and approved, and Treasurer **Ed Cohen** delivered his report which cited the General Fund balance currently at $3197.94. There was no old business, but new business for the evening included election of Society officers for next year and a decision on date and location for the Society field trip. After some discussion of the officer positions, Society elections resulted in a vote that all current officers resume their individual roles for another year. The Society field trip was voted to be held at Green Ridge State Forest on 14 June, with 15 June as a rain date. A few announcements, as follows, were made next. The Penn State Insect Fair would be held on Saturday, 13 September 2014. MES member **Ikumi Kayama** announced that the Guild of Natural Science Illustrators, of which Ikumi is a member, will open a unique exhibit at the Garden Art Gallery of Quiet Waters Park in Annapolis, Maryland, on 27 August. It will feature contemporary works of scientific illustration, and it will continue until 12 October 2014. MES member **Mike Turell** again offered his colorful nature T-shirts, cups, and emblems for sale as a fundraiser for his Frederick 4-H entomology group. For meeting displays, Vice President **Phil Kean** brought in two Cornell drawers containing examples of some of the world's largest beetles and strikingly-shaped and colorful moths. These included the Atlas Beetle, *Chalcosoma atlas* (Linnaeus) (Dynastidae); Eastern Hercules Beetle, *Dynastes tityus* (Linnaeus) (Dynastidae); Neptune Beetle, *Dynastes neptunus* Quenzel (Dynastidae); Titan Beetle, *Titanus giganteus* (Linnaeus) (Cerambycidae); Elephant Beetle, *Megasoma elephas* Fabricius (Scarabaeidae); Comet Moth, *Argema mittrei* Guérin-Meneville (Saturniidae); Jersey Tiger (moth), *Euplagia quadripunctaria* (Poda) (Arctiidae); Atlas Moth, *Attacus atlas* Linnaeus (Saturniidae); and the day-flying and toxic moth *Alcides agathyrsus* Kirsch (Uraniidae). The latter moth is native to Indonesia and New Guinea and is mimicked by the butterfly *Papilio laglaizei* Depuiset (Papilionidae) native to Papua New Guinea.

*Respectfully submitted, **Richard H. Smith**, MES Secretary*.

9 MAY 2014 MES LECTURES

Speaker: Jaslyn Ann F. Lumongsod, Sophomore, Baltimore City Community College, Baltimore, Maryland

Title: "Fermented Banana Peelings, Molasses, and Vinegar Combination as an Alternative for a Commercial Fruit Fly Trap"

The presentation, which builds on the one that Jaslyn presented last year, aimed toward developing an alternative to commercial fruit fly traps. Commercial traps have drawbacks, as they contain harmful and unnecessary chemicals such as insecticides; and thus, they may kill non-harmful and beneficial insects too. Additionally, her study was designed to improve on the use of the "yeast + water" combination, which is commonly used in laboratories studying fruit flies. Lastly, her study aimed to develop a fruit fly trap that is inexpensive, durable and safe for

the environment. Jaslyn's study objectives in this research were to: (1) determine which mixture is the most effective for trapping flies; and (2) determine if there is a significant difference between the widely-used "yeast + water" combination and the fermented fruit fly trap in terms of the number of fruit flies trapped within a given period of time. Jaslyn prepared combinations of the known fruit fly attractants: banana peel (B), molasses (M), vinegar (V), and yeast (Y) plus water, and allowed them to ferment one week before exposing to fruit flies. Agar was added to thicken solutions and prevent spills. The specific combinations of ingredients were (1) B+V, (2) B+V+Y, (3) B+M+Y, and Y+water. The B+M+Y mixture proved to be the best attractant; the B+V was the least; however, attraction differences were not significant from a statistical standpoint.

Speaker: Eugene J. Scarpulla, MES Publications Editor and Associate at the Bee Inventory and Monitoring Laboratory, Patuxent Wildlife Research Center, Beltsville, Maryland

Title: "The Cuckoo Wasps (Hymenoptera: Chrysididae) of Hart-Miller Island, Chesapeake Bay, Baltimore County, Maryland"

In 2009, Gene conducted a yearlong "bee bowl" survey on Hart-Miller Island, which is located in the northern Chesapeake Bay directly offshore from the Baltimore County mainland. A transect was laid out in each of six different habitat type on the island, and 20 colored bowl traps, which are effective with just a small amount of dishwashing detergent and water mix in the bottom, were positioned along each transect. Bees and other insects were collected from the bowls on 18 different sampling days from 4 April 2009 through 17 March 2010. A total of 4446 bee specimens were collected. In addition, there was also a bycatch of 534 wasp specimens that Gene is currently identifying. Forty-one of the wasp specimens were cuckoo wasps (Hymenoptera: Chrysididae). Wasps in this family display striking blue, green, and purple metallic cuticle colors. Their ovipositors are able to telescope in and out for egg laying, and their sting is highly reduced. Most are parasitic on a variety of other insect immature forms, such as sawfly larvae, walking stick eggs, stinging wasps, and bees. Their cuticle is heavily armored; and their terga (dorsal abdominal segments) are strongly convex, which allows them to roll up into a tight ball to avoid being stung by other adult wasp species as the cuckoo wasp oviposits in the wasp's nest. The best habitat for the wasps was the same as for bees, i.e., those exhibiting plentiful flowering vegetation as well as sandy soil for nesting. Of the 41 specimens collected, Gene identified seven species representing two cuckoo wasp tribes. The seven species were: Tribe Elampini: *Hedychridium dimidiatum* (Say) and *Hedychrum parvum* Aaron; and Tribe Chrysidini: *Caenochrysis doriae* (Gribodo), *Ceratochrysis declinis* Bohart, *Chrysis conica* Brullé, *Ch. pellucidula* Aaron, and *Ch. propria* Aaron. Final confirmation of identifications was credited to Lynn S. Kimsey, Ph.D. (Professor of Entomology, Director of the Center for Biosystematics, and Director of the Bohart Museum of Entomology, University of California - Davis).

Speaker: Richard H. Smith, MES Secretary

Title: "A Few Recent Rare Butterfly Observations and a Species Status Summary"

An Early Hairstreak, *Erora laeta* (W. H. Edwards) (Lycaenidae), was spotted by an observer at Sugar Hollow, West Virginia on 20 April 2014. Secondly, although the 'Appalachian' Grizzled Skipper, *Pyrgus centaureae wyandot* (W. H. Edwards) (Hesperiidae), has not been seen definitely in Maryland since 2001, at least three were spotted by two observers at a barrens area in Alleghany County, Virginia on 21 April 2014. Thirdly, Kathy Barylski of Jefferson, Maryland photographed a specimen of the recently resurrected species, Northern (or Lucia) Azure, *Celastrina lucia* (W. Kirby) (Lycaenidae), along the Chesapeake and Ohio Canal west of Little Orleans, Allegany County, Maryland, on 27 April 2014. The identification was verified by *Celastrina* expert Harry Pavulaan of Leesburg, Virginia. Lastly, butterfly surveys in the past four years in Green Ridge State Forest, Allegany County, Maryland, were able to uncover at least four colony sites for the Olympia Marble, *Euchloe olympia* (W. H. Edwards) (Pieridae), and one site is continuing to produce a few specimens this spring.

Respectfully submitted, ***Richard H. Smith***, *MES Secretary*.

POSITIONS OPENING AT i2L RESEARCH USA, INC.

i2L Research USA, Inc. (1330 Dillon Heights Avenue, Baltimore, MD 21228) has two positions opening later in October.

1. Study Director: Insect efficacy tests (some insect rearing but mainly running and reporting efficacy tests).

2. Regulatory Specialist: Registration of pest control products with the United States Environmental Protection Agency (EPA), the States, and the Health Canada Pest Management Regulatory Agency (PMRA). Lots of regulations, paperwork, interactions with clients, and regulatory officials.

Please see the job descriptions that are attached with this issue of the *Phaëton*. Kris Styer (Kristine@i2lresearch.com) is the contact for the Study Director position and Janice Asato (Janice@i2lresearch.com) is the contact for the Regulatory Specialist position.

Submitted by MES member ***Robin G. Todd*** *(Executive Director i2LResearch USA, Inc.)*.

FIELD GUIDE TO THE SYRPHIDAE OF NORTHEASTERN NORTH AMERICA

Originally planned as a traditional printed book, times have changed and the authors (including MES member **Chris Thompson**) have decided instead to publish the *Field Guide to the Syrphidae of Northeastern North America* online. Syrphids are dipterans commonly known as flower flies or hover flies.

The *Field Guide to the Syrphidae of Northeastern North America* can be accessed at:

http://www.canacoll.org/Diptera/Staff/Skevington/Syrphidae/Syrphidae.htm.

The companion *Key to the Genera of Nearctic Syrphidae* can be accessed at: http://www.biology.ualberta.ca/bsc/ejournal/mylmst_23/mylmst_23.html.

Chris asks that you try them out and let him know what you think.

Submitted by MES member ***F. Christian Thompson*** *(Adjunct Scientist [Emeritus], Department of Entomology, Smithsonian Institution).*

NEW COUNTY RECORDS FOR MARYLAND

Carolina Satyr
Hermeuptychia sosybius (Fabricius) (Lepidoptera: Nymphalidae)
Green Ridge State Forest, Allegany County
6 June 2014
MES member **Phil Kean**

Emerald Ash Borer
Agrilus planipennis Fairmaire (Coleoptera: Buprestidae)
Green Ridge State Forest, Allegany County
19 June 2014
MES member **Bob Gardner**

BALTIMORE CBP INTERCEPTS FIRST IN PORT SNAIL

A 24 September 2014 U.S. Customs and Border Protection (CBP) news release reports that a U.S. Department of Agriculture (USDA) - Animal and Plant Health Inspection Service (APHIS) - Plant Protection and Quarantine (PPQ) identifier and the USDA national malacologist confirmed on 20 September 2014 that CBP agriculture specialists at the Port of Baltimore discovered a snail, *Acusta* Albers sp. (Mollusca: Gastropoda: Bradybaenidae), while inspecting the outside of a container of aluminum sheets from China on 10 September 2014.

A snail, *Acusta* Albers sp. (Mollusca: Gastropoda: Bradybaenidae). (Image courtesy of MES member **Jim Young**, Entomologist Identifier, USDA-APHIS-PPQ-Baltimore)

The full news release can be accessed at: http://www.cbp.gov/newsroom/local-media-release/2014-09-24-000000/baltimore-cbp-intercepts-first-port-acusta-snail.

PHILADELPHIA CBP INTERCEPTS BEETLES IN RICE FROM SAUDI ARABIA

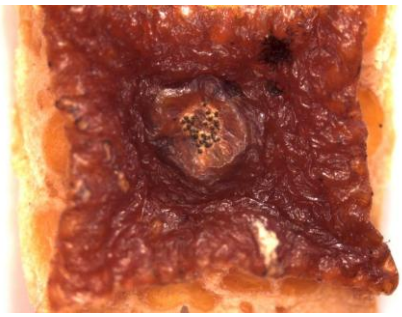
A 24 September 2014 U.S. Customs and Border Protection (CBP) news release reports that a U.S. Department of Agriculture (USDA) - Animal and Plant Health Inspection Service (APHIS) - Plant Protection and Quarantine (PPQ) identifier confirmed on 27 August 2014 that CBP agriculture specialists at Philadelphia International Airport, discovered immature and adult Khapra Beetles, *Trogoderma granarium* Everts (Coleoptera: Dermestidae), while inspecting two burlap sacks that contained a combined nine pounds of rice being carried on 19 August 2014 by a family travelling from Saudi Arabia via Qatar.

Khapra Beetle, *Trogoderma granarium* Everts (Coleoptera: Dermestidae). (Image courtesy of CBP)

The full news release can be accessed at: http://www.cbp.gov/newsroom/local-media-release/2014-09-24-000000/philadelphia-cbp-intercepts-world%E2%80%99s-most-destructive.

PHILADELPHIA CBP INTERCEPTS CITRUS BLACK SPOT DISEASE

A 24 September 2014 U.S. Customs and Border Protection (CBP) news release reports that a U.S. Department of Agriculture (USDA) - Animal and Plant Health Inspection Service (APHIS) - Plant Protection and Quarantine (PPQ) identifier confirmed on 28 August 2014 that CBP agriculture specialists at Philadelphia International Airport, discovered Citrus Black Spot, *Guignardia citricarpa* Kiely (Fungi: Ascomycota: Botryosphaeriaceae), while inspecting five black lesions on an orange carried by a man travelling from Doha, Qatar on 16 July 2014.



Citrus Black Spot, *Guignardia citricarpa* Kiely (Fungi: Ascomycota: Botryosphaeriaceae). (Image courtesy of CBP)

The full news release can be accessed at: http://www.cbp.gov/newsroom/local-media-release/2014-09-24-000000/philadelphia-cbp-intercepts-destructive-citrus-black.

THE COLEOPTERISTS SOCIETY YOUTH INCENTIVE AWARD

The Coleopterists Society, an international organization of professionals and hobbyists interested in the study of beetles, has established a program to recognize young people studying beetles. The Society has pledged to provide up to $300 each year for the Youth Incentive Award Program. Each of the two awards (Junior and Senior) is a monetary grant of $150, award recipients also will receive up to $200 (Junior Award) and $400 (Senior Award) of equipment credit from the BioQuip Products, Inc. catalog. In addition to monetary and BioQuip grants, award recipients will receive a one year subscription to the Society journal *The Coleopterists Bulletin*. This is for children of grades 7-12 only.

The objectives of the Youth Incentive Award are to:

- Provide encouragement and assistance to young beetle enthusiasts (grades 7-12).
- Promote the study of beetles, the most diverse group of insects, as a rewarding lifelong avocation or career.
- Provide opportunities for young people to develop important life skills such as leadership, cooperation, communication, planning and conducting a scientific study, grant writing, and managing funds.
- Provide some financial support to enrich activities or projects.

The Youth Incentive Award Committee from the Coleopterists Society will evaluate the applications and will select up to two winners annually; one each in junior (grades 7-9) and senior (grades 10-12) categories. The selection committee invites proposals for topics such as field collecting trips to conduct beetle species inventories or diversity studies, attending workshops or visiting entomology or natural history museums for special training and projects on beetles, studying aspects of beetle biology, etc. The proposed activities or projects will be evaluated on their degree of creativity, educational benefit to the applicant, scientific merit, feasibility and budgetary planning. This Award is for proposals by individuals only. Each applicant is strongly encouraged to find an adult advisor (teacher, youth group leader, parent, etc.) to provide guidance in proposal development, but the proposal MUST be written by the applicant. The Coleopterists Society would also be happy to assist in establishing contacts between youth and professionals.

Additional details and application forms for The Coleopterists Society Youth Incentive Award Program can be obtained from: Dr. David G. Furth; Entomology, NHB, MRC 165; P.O. Box 37012; Smithsonian Institution; Washington, DC 20013-7012 (phone: 202-633-0990, fax: 202-786-2894, email: furthd@si.edu). Applications for this year must be submitted by **1 November 2014**.

Submitted by MES member ***Donna Finnegan*** (Virginia Master Naturalist).

BEAUTIFUL MARYLAND: ART BY THE GUILD OF NATURAL SCIENCE ILLUSTRATORS

Exhibition: through Sun, 12 October 2014

Garden Gallery, Quiet Waters Park
600 Quiet Waters Park Road
Annapolis, MD 21403

The Garden Art Gallery of Quiet Waters Park features a unique exhibition of contemporary works of scientific illustration through Sunday, 12 October 2014. "Beautiful Maryland" features over 20 works by members of the Guild of Natural Science Illustrators (GNSI), a non-profit group dedicated to educating the public about scientific illustration and effective communication through visuals. The exhibit is sponsored by The Friends of Quiet Waters Park.

The exhibited works feature original watercolor, scratchboard, acrylic, and digitally rendered illustrations created by the Guild's professional members. Each artwork displays a blend of scientific accuracy and artistic techniques. The theme of the show is the Chesapeake Bay Region, and the illustrations will feature a range of natural science subject matters from astronomy to zoology.

For additional information go to: http://www.gnsi.org/event/exhibit/qwp-annapolis-2014 or contact the exhibit coordinator (MES member) **Ikumi Kayama**, at ikumikayama@gmail.com or (770) 364-8237.

PATUXENT WILDLIFE FESTIVAL AT THE NATIONAL WILDLIFE VISITOR CENTER

Sat, 18 October 2014, 10:00 a.m. – 3:00 p.m.
National Wildlife Visitor Center, 10901 Scarlet Tanager Loop (off Powder Mill Road), Laurel, Maryland 20708-4027

Find out about the ground breaking research being done at Patuxent! Activities include live animal displays, children's crafts, shuttle tours, research exhibits, and behind-the- scenes

tours of the USGS Patuxent Wildlife Research Center to see endangered whooping cranes and much more.

- All ages!
- The event is FREE.
- USGS tours are limited; tickets are available first come first served on the day of the event.
- Refreshments are available for purchase.

The USGS Bee Inventory and Monitoring Laboratory exhibit will be staffed by MES members **Sam Droege** and **Gene Scarpulla**.

UNIVERSITY OF MARYLAND DEPARTMENT OF ENTOMOLOGY COLLOQUIA

Fri, 10 October 2014, 12:00 p.m.
"The art of paracrine cell communication in morphogenesis in *Drosophila*"
Sougota Roy (Assistant Professor, Department of Cell Biology and Molecular Genetics, UMD)

Fri, 17 October 2014, 12:00 p.m.
"The influence of a Y chromosome gene on vector control in *Anopheles stephensi*"
Frank Crisione (Department of Entomology, UMD)

Fri, 24 October 2014, 12:00 p.m.
"Effects of Pesticides on Honeybee Metabolic Physiology"
Steve Cook (Research Entomologist, ARS USDA, Southern Plains Area, Weslaco, TX)

Fri, 31 October 2014, 12:00 p.m.
"Diversity of Burrowing Benthic Invertebrates and their Impact on Phosphorus Dynamics in Agricultural Drainage Ditches"
Alan Leslie (Department of Entomology, UMD)

Fri, 7 November 2014, 12:00 p.m.
"Genetic tools to study developmental hormones in Drosophila"
Aaron Baumann (Postdoctoral Associate, HHMI Janelia Farm Research Campus, Ashburn, VA)

Entomology colloquia take place in 1130 Plant Sciences Building, College Park, MD. For additional information, go to: http://entomology.umd.edu/news/events.

ENTOMOLOGICAL SOCIETY OF WASHINGTON PUBLIC MEETING

Thu, 6 November 2014; 7:00 p.m.
Topic: TBA
Speaker: TBA
National Museum of Natural History, Smithsonian Institution, Washington, DC
http://entsocwash.org/.

UPCOMING NOVEMBER MES LECTURE

2014/2015 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:

Date	Speaker	Topic
Sep 21	Crab Feast/Meet-&-Greet at J. KING'S Restaurant	
Oct 17	Jeffrey Shultz	Diversity & Sex Lives of Daddy Longlegs
Nov 21	William Cooper	The Butterflies of Iguazu Falls, Argentina
Feb 20	Lecture	TBA
Mar 20	Lecture	TBA
Apr 17	Lecture	TBA
May 15	Members' & Students' Presentations & Elections	
TBA	Survey/Field Trip	

OCT 2014 – SEP 2015 MES MEMBERSHIP YEAR OFFICERS

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

SUBMITTAL DEADLINES

NOV 2014 issue of the ***Phaëton***:
Please send member news items by 7 November 2014.

SEP 2015 issue of ***The Maryland Entomologist***:
Please send first drafts of articles and notes by 1 April 2015.

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