



Phaëton

The Official Newsletter of the
Maryland Entomological Society

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FACULTY SPONSOR: Frank E. Hanson and Austin P. (Bob) Platt
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Meeting Announcement

The Maryland Entomological Society's 277th regular meeting will be held **Friday, November 19, 2010**, beginning 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 to share. Refreshments will be provided. Presentations are scheduled to begin at 8:15 p.m.

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

Title: "Bed Bugs, Their Public Health Impact, and Some Things You Can Do"

This presentation will cover general background biology and behavior for the common Bed Bug, *Cimex lectularius* Linnaeus (Hemiptera: Cimicidae). It will address several main elements of their current public health impact (especially in the U.S.) and some currently effective general control strategies and techniques. It will also offer suggestions for some practical things individuals can do to help prevent infestations and help themselves deal with infestations after they have occurred.

Harold Harlan earned a Ph.D. in 1984 from the Ohio State University with a dissertation 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. He worked as Senior Entomologist for the National Pest Management Association (NPMA) for 9 years, and is currently a U.S. Department of Defense (DoD) civilian analyst researching and writing on vector and medical threat information topics for the U.S. Armed Forces Pest Management Board (AFPMB). He has worked with and raised common Bed Bugs for the past 38 years, and has authored or co-authored 37 peer reviewed articles or book chapters, seven of which focused mainly on Bed Bugs. Since 1998, he has advised, assisted, and provided live Bed Bugs for a number of others to perform basic or applied research. He has provided information, images, and/or technical reviews for more than 20 peer reviewed scientific articles and websites, including the current Environmental Protection Agency (EPA), Centers for Disease Control and Prevention (CDC), and AFPMB websites. In the past 10 years, he has given presentations about Bed Bugs at more than 30 professional entomological, public health, pest management, or public outreach meetings.

Meet for Dinner before the Lecture

If you are interested in dinner before the lecture, join Gene Scarpulla, Marcia Watson, and usually Fred Paras and the guest speaker, as well as other 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, just 15 minutes from UMBC. Coupon specials can be printed online at <http://kibbysrestaurant.net>. We meet at the restaurant at 6:00 p.m.

For more information concerning this meeting, please contact one of the following people:

Annapolis Area:	Harold Harlan	(410) 923-0173 (Home)	haroldharlan@comcast.net
Baltimore Area:	Fred Paras	(410) 374-0425 (Home)	bugandrockman@msn.com
	Phil Kean	(410) 944-4630 (Home)	
	Frank Hanson	(410) 455-2265 (Biological Sciences, UMBC)	hanson@umbc.edu
Southern MD:	Bob Platt	(410) 586-8750 (Home)	platt@umbc.edu

OCTOBER 15, 2010 MES MEETING MINUTES

The 276th general meeting of the Maryland Entomological Society was held on Friday, October 15, 2010 at UMBC and began at 8:34 p.m. with a welcome by President Fred Paras and then proceeded immediately into the main program, which is summarized below. This was followed by a short break, and then the business meeting was conducted. The May 2010 meeting minutes were read and approved, and then the treasurer's report was delivered. The MES funds total is in a state of flux at this time of the year with new dues receipts and payment of society publication expenses being processed, but the total at the end of the meeting stood at \$1749.74. Treasurer Ed Cohen noted that he had recently received donations to the MES in amounts from \$40 to \$100. The occurrence of several monetary donations to the MES in such a short period was a relatively new phenomenon for the Society, and some discussion ensued as to what sorts of recognition would be appropriate. Gene Scarpulla is currently sending letters of appreciation to each donor, and the suggestion was made to publish a list of donors' names and an annual total of all donations in a subsequent issue of *Phaëton*. Society journal editor Gene Scarpulla was able to publish and distribute Volume 5, Number 2 of *The Maryland Entomologist* in September 2010. This was another spectacular issue incorporating professional quality paper, printing, and photography; and we again thanked Gene for his fine job. Gene is currently assembling material for journal issues in 2011 and 2012 also. Dick Smith announced that Dwight Johnson of the Robert E. Lee Park Nature Council has issued a request for lists of any State-listed rare, threatened and endangered insect species known from the park. This City of Baltimore-owned park located in Baltimore County encompasses a multi-acre concentration of serpentine soil and rock outcrop and associated vegetation that many local naturalists refer to as "Bare Hills." Fred Paras and Phil Kean recalled that MES Honorary and Founding Member Dr. William Andersen had collection records from this area, so he will be consulted for this information. Harold Harlan announced and circulated the new *Spider Identification Guide* by Dr. Gerald S. Wegner, published in November 2009 and copyrighted by BASF Corporation. Ed Cohen announced a new book on Hymenoptera entitled *Bees, Wasps, and Ants: The Indispensable Role of Hymenoptera in Gardens* written by Dr. Eric Grissell and published by Timber Press on 30 June 2010. After these announcements, the meeting adjourned and fine refreshments (including ice cream provided by Joy and Ed Cohen) were had by all. In addition to microscope slides of thrips provided by the main program speaker, items on display after the meeting included Florida Lepidoptera and Coleoptera collected in 2010 by Ed Cohen, and examples of high elevation Wyoming butterflies collected in 2010 by Dick Smith.

Respectfully submitted, Richard H. Smith, MES Secretary

OCTOBER 15, 2010 MES LECTURE

"Seeing the Invisible: a new look at our smallest insects, the thrips (Thysanoptera)" – Speaker: Dr. David A. Nickle, Research Entomologist, Systematic Entomology Laboratory, ARS, USDA, Beltsville, MD

Dr. Nickle started his talk with a brief history of the study of thrips. Pioneering work was done by American entomologist Theodore Pergande (1840-1916) who published species descriptions and archived type specimens on microscope slides. Following this, there were publications by others displaying line drawings of morphological details, and then photographs at a later time. Improved photos of thrips species have been generated by Lorna Ash in the Department of Biological Sciences at the University of Alberta. Thrips undergo what is termed simple metamorphosis, passing from egg to two larval stages and then through two pupal stages (the first is termed the propupa), and then to adult. The pupae have non-functioning leg-like appendages, as well as mouthparts that can feed. The thrips hemolymph apparently contains glycerol because they can withstand prolonged freezing. Several species tend their larvae, some species can produce sounds, and some can induce plant galls in which they breed and protect their eggs and larvae. There are currently about 4000 known species of thrips worldwide. Dr. Nickle has written papers on and has helped to identify potential pest species of thrips for 32 U.S. ports of entry. Approximately 100 species are known to act as agricultural pests. Grass Thrips, *Anaphothrips obscurus* (Müller), are well-known grain pests. Since most thrips are the size of pepper grains and require high magnification to study their morphological features, Dr. Nickle has pursued scanning electron micrographs (SEMs) and cryo (extreme low temperature [-50° C]) fixation techniques to examine immature forms, feeding behavior, and other invertebrates such as mites associated with thrips populations. SEM techniques also allow photomontage constructions, perfectly focused multi-level images, and three-dimensional multi-directional subject depictions. He has studied the complicated tarsi of thrips, which have Velcro®-like surfaces that the thrips can evert into a bladder. Their ovipositors resemble those of Orthoptera, and antennae contain extra sensory cones. Mouthparts contain separate piercing, sucking, and grasping structures. Dr. Nickle is amazed at the complexity of their structures for such a small organism. He has studied in much detail the Cuban Laurel Thrips, *Gynaikothrips ficorum* (Marchal), which causes damage to dates, figs, and related ornamental plants, and he has also studied the Weeping Fig Thrips, *Gynaikothrips uzeli* (Zimmermann), which is injurious to a single species, the weeping fig *Ficus benjamina* L. Thrips feed on plant leaves and pollen and can carry plant viruses. Dr. Nickle has found that the distribution, distance between, and the length of specific lateral setae can be used to distinguish thrips species. With other species, the dorsal surfaces of the thorax (mesonotum and metanotum areas) are distinctive as well as various metathoracic tergal spiracles. Previous studies relied on

plant associations to distinguish species. The Six-spotted Thrips, *Scolothrips sexmaculatus* (Pergande), is predaceous and has been found to be effective in controlling spider mites (Arachnida: Acari: Tetranychidae) on soybean crops. One particular thrips genus contains approximately 40 predaceous species, some of which may offer control advantages for other crop pest mite species. A cryo-SEM taken by Dr. Nickle showed a thrips with partially eaten mites and mite eggs attached to its dorsal surface, apparently to disguise its presence among prey. Surprisingly, some species of mites in turn feed on thrips. Other predators of thrips include spiders and small hemipterans.

Respectfully submitted, Richard H. Smith, MES Secretary

*****DID YOU REMEMBER TO***
RENEW YOUR MES MEMBERSHIP?**

It's time to renew your MES membership for the October 2010 through September 2011 membership year. Yearly dues are \$10 (individuals), \$15 (household), or \$5 (fulltime students). Please send your check (made out to Maryland Entomological Society) and any address or other changes to:

Edgar A. Cohen, Jr., MES Treasurer
5454 Marsh Hawk Way
Columbia, MD 21045
Phone: (410) 740-0481
E-mail: edcohenfam@yahoo.com

MES MEMBERSHIP LIST

Most MES members do not know who their fellow members are. In the May 2011 issue of *Phaëton*, we plan to publish a list of current MES members with the state that they hail from. No other personal information will be included in the listing. This will be a way to find out if the colleague sitting next to you is also a member. It will also be a way for you to recruit new members for the Society.

MEMBER DONATIONS

Members who made donations to the Society in addition to this year's membership renewal will be honored in the February *Phaëton*.

MES MEMBER DEMOGRAPHICS

MES members hail from 16 states as well as DC. The breakdown is as follows: Maryland-62, Virginia-6, District of Columbia-4, Florida-4, Maine-2, Pennsylvania-2, West Virginia-2, Arizona-1, California-1, Michigan-1, Mississippi-1, Missouri-1, New York-1, North Carolina-1, South Carolina-1, Texas-1, and Wyoming-1.

During a recent discussion amongst local members, the question arose as to why long-distance members are members of MES. If you are a non-Maryland/DC member

and would like to share your reasons with the Society, please e-mail your responses to ejscarp@comcast.net. The responses will be printed in the February *Phaëton*. Please let us know if you wish your response to remain anonymous.

A CLUTTER OF SPIDERS AT BACK RIVER WWTP

A fascinating article has just been published in the fall 2010 issue of *American Entomologist*. It documents a "clutter" (or "cluster") of an estimated 107.3 million spiders in the sand filtration building at the City of Baltimore's Back River Wastewater Treatment Plant in Baltimore County, MD. It was estimated that the 16,099 m² (~4 acres) building contained 8,922.42 m² of laminar webbing and 4,162.14 m³ of volumetric webbing. The article states that the web masses were "Far greater in magnitude than any previously recorded aggregation of orb-weavers..." Six families and 9 genera of spiders were represented with *Tetragnatha guatemalensis* O. Pickard-Cambridge (Tetragnathidae), Guatemalan Longjawed Orbweaver, and *Larinioides sclopetarius* (Clerck) (Araneidae), Bridge Orbweaver, being the two most abundant species, ~82.0 million and ~18.8 million respectively. The article citation is: Greene, A., J. A. Coddington, N. L. Breisch, D. M. De Roche, and B. B. Pagac, Jr. 2010. An immense concentration of orb-weaving spiders with communal webbing in a man-made structural habitat (Arachnida: Araneae: Tetragnathidae, Araneidae). *American Entomologist* 56(3): 146-156.

**FIRST DOCUMENTED PENNSYLVANIA RECORD
OF THE CLICK BEETLE *Oestodes tenuicollis***

On 15 July 2010, Edgar A. Cohen, Jr. collected the first documented record of *Oestodes tenuicollis* (Randall) (Coleoptera, Elateridae) in Pennsylvania.

(Editor's Note: Ed will publish the details of his finding in *The Maryland Entomologist*.)

MEMBER CLASSIFIEDS

WANTED: Downie, N. M., and R. H. Arnett, Jr. 1996. *The Beetles of Northeastern North America* (two volumes). Sandhill Crane Press, Gainesville, FL. 1721 pp. If you know of a spare copy of this set that anyone is willing to part with, please contact Gene Scarpulla at ejscarp@comcast.net.

PHAËTON ELECTRONIC DISTRIBUTION REPORT

The Society thanks all of the members who are now receiving the *Phaëton* by e-mail. Mailing costs have dropped dramatically. Previously, approximately 90 newsletters were mailed out 6 times per year. Postal-mailed issues have now dropped to 5; all others now being sent by e-mail. This has resulted in a tremendous cost savings to the Society (\$237.60/yr. vs. \$13.20/yr.). Thank you for helping us to lower our operating costs.

Distributing this newsletter by e-mail saves the costs of printing and mailing, and allows for rapid distribution of information. If you are receiving a hard copy and have an e-mail address, please provide your e-mail address to ejscarp@comcast.net.

THE MARYLAND ENTOMOLOGIST – 2010

The September 2010 issue of *The Maryland Entomologist*, Volume 5, Number 2, was mailed out to paid members in September. In this issue, James D. Young documented the interception of a *Stenhomalus* longhorned beetle at the Port of Baltimore, MD; Frank G. Guarnieri presented a three-year survey of the beetles of Pocomoke River State Park, Worcester Co. and Tuckahoe State Park, Caroline Co., MD; Frederick Paraskevoudakis described his encounter with a Milbert's Tortoiseshell, *Aglais milberti*, in Carroll County, MD; James F. White, Jr. related the finding of a Milbert's Tortoiseshell, *Aglais milberti*, in New Castle Co., DE; Daniel J. Schamberger and Eugene J. Scarpulla offered an addendum to last year's annotated list of the mosquito species of MD; Richard L. Orr presented a three-year survey of the native bees of Assateague Island National Seashore, Worcester Co., MD; Timothy Foard offered his preliminary observations on the use of artificial nest sites by ants at Patapsco Valley State Park, Howard Co., MD. If you are a paid member and did not receive a copy of the journal, please contact ejscarp@comcast.net

OTHER NEARBY ENTOMOLOGICAL SOCIETIES

The American Entomological Society (AES)

www.ansp.org/hosted/aes

AES is the oldest continuously-operating entomological society in the Western Hemisphere, founded on March 1, 1859. AES welcomes all who are interested in the science of entomology. They alternate their monthly meetings between The Academy of Natural Sciences, Philadelphia, PA and the University of Delaware, Newark, DE. AES publishes *Entomological News* (5/yr), *Transactions of AES* (4/yr), and *Memoirs of AES* (irregularly).

Entomological Society of America (ESA)

www.entsoc.org

The ESA is the largest entomological organization in the world. It was founded in 1889, and today has more than 6,000 members. The ESA website offers an abundance of basic information about insects and their relatives and offers materials and ideas for use in youth education and public outreach. It also offers concise and detailed information about entomology job opportunities, news, and availability of resources for students and educators, with useful facts, text, images and points of contact. ESA publishes *ESA Newsletter* (monthly), *American Entomologist* (4/yr), *Annals of the ESA* (6/yr), *Environmental Entomology* (6/yr), *Journal of Economic Entomology* (6/yr), *Journal of Medical*

Entomology (6/yr), *Arthropod Management Tests* (1/yr), and *Journal of Integrated Pest Management* (4/yr).

Entomological Society of America – Eastern Branch

www.ebesa.ento.vt.edu/index.html

ESA-EB is the local branch of the Entomological Society of America. ESA-EB holds an annual meeting highlighting entomological research and topics from the region. The 2010 meeting was held in Annapolis, MD; the 2011 meeting will be held in Harrisburg, PA on March 18-21.

The Entomological Society of Washington (ESW)

www.entsocwash.org

ESW has met regularly since 1884. ESW extends an invitation for membership to anyone with an interest in the science of entomology. ESW publishes the *Proceedings of the ESW* (4/yr), *Memoirs of the ESW* (irregularly) and *Miscellaneous Publications* (irregularly). ESW meets on the first Thursday of each month, October through June, at the Smithsonian Institution, National Museum of Natural History, 10th and Constitution Ave., N.W., Washington, DC and an annual banquet is held in June.

SUBMITTAL DEADLINES

FEB 2011 issue of *Phaëton*:

Please send member news items by February 4, 2011.

SEP 2011 issue of *The Maryland Entomologist*:

Please send first drafts of articles and notes by April 1, 2011.

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

2010/2011 PROPOSED MEETING SCHEDULE

Regular MES meetings are held the 3rd Friday of each of 6 months coinciding with UMBC's academic year. Proposed meetings for the current MES membership year are:

Date	Speaker	Topic
Oct 15	David Nickle	Our Smallest Insects – Thrips
Nov 19	Harold Harlan	Bedbugs – Public Health Impact
Feb 18	TBA	
Mar 18	TBA	
Apr 15	TBA	
May 21	Members' "Potpourri" Presentations	
TBA	Annual Field Trip	

2011 SOCIETY YEAR MES OFFICERS

President	Frederick Paras
Vice-President	Philip J. Kean
Secretary	Richard H. Smith
Treasurer	Edgar A. Cohen, Jr.
Historian	Robert S. Bryant
Faculty Sponsors	Frank E. Hanson & Austin P. Platt
Journal Editor	Eugene J. Scarpulla
Newsletter Editor	Eugene J. Scarpulla