



Phaëton

The Official Newsletter of the
Maryland Entomological Society

Volume 34, Number 6

March 2014

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Meeting Announcement

The Maryland Entomological Society's 297th regular meeting will be held **Friday, 21 March 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: Stuart H. McKamey, Ph.D. - Research Entomologist, Systematic Entomology Laboratory, Agricultural Research Service, United States Department of Agriculture, National Museum of Natural History, Smithsonian Institution, Washington, DC

Title: “Aliens of the Amazon: Treehoppers”

Dr. Stuart H. McKamey will introduce the award-winning documentary “Aliens of the Amazon: Treehoppers.” Dr McKamey was a key scientist on this expedition to the Yasuni Biosphere Reserve in eastern Ecuador. Yasuni is one of the greatest biodiversity hotspots in the world, indigenous peoples’ homeland, and target for oil production. This Mona Lisa Productions film has received an award for Best Science Documentary in Italy. The documentary covers general information on tropical leafhoppers, species diversity, and habitat, as well as communication within species and with bees and ants.

Dr. McKamey received a B.S. in Entomology at the University of California – Berkeley. In 1989, he earned a M.Sc. in Entomology at North Carolina State University in the only treehopper lab in the country at that time. In 1994, he earned a Ph.D. in Entomology at the University of Connecticut. Dr. McKamey has collected extensively in the tropics, including Trinidad, Costa Rica, Panama, Venezuela, Ecuador, Peru, other locations in Central America and northern South America, and the Eastern Arc rainforests of Tanzania. Since 1997, Dr. McKamey has been at the USDA’s Systematic Entomology Laboratory specializing in leafhoppers (Cicadellidae), treehoppers (Membracidae), froghoppers (Cercopidae), and planthoppers (Fulgoroidea).

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.**

NEW DATE SCHEDULED FOR THE MAY MES MEETING

The date for the May MES meeting has been changed to **Friday, 9 May 2014** so as not to conflict with the [2014 Maryland Ornithological Society \(MOS\) Annual Conference](#) that will be held at the Holiday Inn Solomons Conference Center, Solomons, Calvert County, Maryland on Friday-Sunday, 16-18 May 2014. The theme for this year's MOS conference is Maryland Biodiversity and many of the birding trips will be paired with another discipline, such as dragonflies & damselflies, butterflies & moths, and bees & wasps. Several MES members will be attending this year's MOS conference imparting their knowledge of Maryland's insects.

21 FEBRUARY 2014 MES MEETING MINUTES

The 296th general meeting of the Maryland Entomological Society was held on Friday, 21 February 2014 at UMBC and began at 8:11 p.m. with a welcome by Co-President **Fred Paras** and then the introduction of the speaker for the main program. Master Beekeeper Steve McDaniel helped to arrange and publicize the meeting, and the resulting attendance was an almost record-breaking 35 people, many of whom were beekeepers or had an interest in apiculture. Also, an announcement for tonight's meeting was on the Natural History Society of Maryland's meet-up calendar. The lecture is summarized below. Attendees broke for a period of refreshments and discussion after the talks, and then a business meeting was convened. The minutes of the November 2013 meeting were read by Secretary **Dick Smith** and approved, and Treasurer **Ed Cohen**'s report was given, citing a General Funds total of \$2911.07. A partial cost (\$50) of the plaque awarded at the November meeting will be paid from the fund. (Faculty Sponsor **Bob Platt** donated the remaining amount [\$50] for the plaque). The MES membership and dues receipts also grew notably at the meeting, as several of the meeting attendees joined the Society. Next in the business meeting was much discussion about including at our May meeting a few short entomology talks by one or more of the very bright and productive middle and high school students in member **Mike Turell**'s Frederick, Maryland-area 4-H entomology group. Dr. Turell also announced a 4-H entomology exhibit by some of his students at the Francis Scott Key Mall in Frederick on 22 February 2014, 1-5 p.m. Due to conflicts with other natural history events in May and the position on the calendar of the Memorial Day weekend, a motion was forwarded and approved to change the date of the MES May meeting from 16 May to 9 May 2014. Secretary Smith circulated a list of potentially declining moth species of interest to the Maryland Natural Heritage Program. This list and a request for information on these and other potentially declining moth species in Maryland will appear in the March issue of the *Phaëton*. Under exhibits, Vice President **Phil Kean** brought in a Cornell drawer of various Admiral, *Limenitis* (Fabricius) (Nymphalidae), species and forms from around the United States and also a drawer of amazing Birdwing butterflies (this selection was from the genus

Troides Hübner [Papilionidae]).

Respectfully submitted, Richard H. Smith, MES Secretary

21 FEBRUARY 2014 MES LECTURE

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”

Mr. Ulsamer began his lecture by stating some statistics on the value of pollination to the food industry. Among edible plant products, about two-thirds of the world's diet comes from grasses and grains, which are wind pollinated. The remaining one-third, consisting of fruits, vegetables, and nuts, relies on insect pollination to produce harvestable material. The annual world cost of these later food products is about \$200 billion. Honey Bees, *Apis mellifera* Linnaeus (Apidae) lead the share in commercial crop pollination, so that a significant decline in their numbers will seriously affect food production. Unfortunately, Colony Collapse Disorder (CCD), first reported in 2004, is indeed producing such a decline. It was then that commercial beekeepers began noticing that their adult worker honeybees would leave the hive, and a large percentage would not return. Without a source of food and individual bees for hive maintenance and feeding of immatures, the hive eventually dies out. Specific characteristics of hives suffering from CCD show (1) excess new broods, (2) small clusters of only young bees surrounding the queen, (3) few adult worker bees, and (4) few or no dead bees. On normal years, commercial beekeepers might expect to lose 10-15% of their colony, but in the period from 2007 to 2013, mortality rates for commercial bee operations in the United States have ranged from 22%-35%. The effect is even more serious in some European countries. Switzerland had 50% losses in 2013. Some suspected sources of these losses included reaction to Varroa Mite (*Varroa destructor* Anderson & Trueman [Arachnida: Varroidae]) infestations, as these organisms are known to pass on viruses to bees; changes in nutrition; monoculture nectar sources; errors in bee management; reaction to *Nosema* Nägeli (a microsporidian or small, unicellular gastro-intestinal fungal parasite); other fungal diseases; secondary pathogens (these invade a host weakened by a primary pathogen or stressor); and reaction to pesticides, such as systemic neonicotinoids. However, after seven years of study, the bottom-line conclusion is that no single stressor is to blame. A combination of all of the above stressors has led to a loss of the honeybee worker's natural ability to forage for food and serve the hive. Apparently, a combination of stressors reached a critical level by 2006 but no primary cause could be identified. Around the world, CCD does not appear to be as serious in developing countries. “Africanized” (or “killer”) Honey Bees are seen to have resilience to most stressors. However, they are too dangerous to use commercially, and they do not create hives as large as “European” Honey Bees. Mr. Ulsamer went on to discuss previous tests for Honey Bee

pesticide exposure. High percentages of pesticides (61% in the U.S., 69% in France) have been discovered in various plant pollens. Honey has not been tested for pesticides, but with flower nectaries being located mostly at the internal bases of a flower's structure, they are less likely to collect pesticides. The leading pesticide types detected include fluvalinate, a treatment for mites, and imidacloprid, a neonicotinoid and the most widely used pesticide in the world. The spike in CCD in 2006 has not been tied to an abrupt increase in any particular pesticide.

However, it has been found that *Nosema* infection progresses rapidly in hives with increased worker exposure to pesticides. Studies have shown also that Honey Bees do best with a variety of nectar sources. Unfortunately, with increasing urbanization and narrow or no weedy margins and borders in modern farm field plots, a diverse diet is not achievable. Numerous flowering trees such as maples, *Acer* L. (Aceraceae), would also aid Honey Bees, but these are usually not considered. These trends are causing a decline in all pollinator species, including beetles (Coleoptera) and flies (Diptera). A majority of Honey Bees in the United States are used commercially. About 2.6 million Honey Bee hives are used to pollinate almond, *Prunus dulcis* (Mill.) D.A. Webb (Rosaceae), orchards in California. These hives are then transported east and around the country later in the year to pollinate other large crop and orchard areas.

However, commercial beekeepers cannot sustain nearly enough hives to meet demand. The pollinator crisis is worldwide. In parts of Asia, such as in China's Sichuan Province, bees have virtually disappeared and farmers have resorted to hiring workers to meticulously conduct pollen transfer from plant to plant by hand using small implements. This is impractical on a global scale. More effort must be exercised toward Honey Bee conservation, and Mr. Ulsamer listed three major endeavors that are being promoted: (1) enact measures that improve Honey Bee health such as providing a more diverse diet and continuing to combat known hive pathogens, (2) decrease Honey Bee pesticide exposure, and (3) reestablish natural Honey Bee habitat. Substantial crop borders and greenways with native vegetation are needed. Pesticide testing protocols need to be upgraded to include evaluation of long-term effects of systemic pesticides. Current protocols only cover external application techniques such as dusting or spraying. Also, so-called "sublethal" effects of pesticides (wherein an organism is weakened and less able to combat existing pathogens and environmental declines), as opposed to immediate mortality rates, are not studied. Several conservation organizations such as [The Xerces Society](#), the [North American Pollinator Protection Campaign](#), the Pollinator Defense Fund, and the [Pollinator Stewardship Council](#) have initiated campaigns to create and improve pollinator habitat. In adjacent Pennsylvania in the past three years, Pennsylvania State University has launched its [Center for Pollinator Research](#) with a sizable staff of Ph.D.s and researchers. Neonicotinoid use has been banned in Europe due to its observed effect in disorienting Honey Bee workers. It is too soon to tell if this ban will actually reduce the incidence of CCD. [Bayer CropScience](#), which sells imidacloprid, claims that the link of neonicotinoids to CCD is

inconclusive and is an over-reaction. Dr. Mike Turell, who was in the audience and has researched CCD, asserted that removing this one agent may well not bring an end to CCD, since there are a variety of other current environmental and disease stressors on Honey Bees. Even the earlier springs from global warming are causing adaptation problems for Honey Bees. Studies have recently been initiated to tag Honey Bees so that deaths in the field can be linked to declining hives.

Respectfully submitted, Richard H. Smith, MES Secretary

WELCOME TO NEW MEMBERS

MES welcomes the following new members to the Society:

John M. Bocan	Millersville, MD
Marco Carlucci	University Park, MD
Alison C. Dibble	Brooklin, ME
Francisca L. Laguna	Point of Rocks, MD
Amanda Mills	Baltimore, MD
Andrew W. Ulsamer	Laurel, 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*.

William A. Andersen
Harold J. Harlan
Austin P. Platt
Robin G. Todd

PURITAN TIGER BEETLE IS IN THE CENTER OF A BATTLE OVER ENDANGERED SPECIES AND PROPERTY RIGHTS

The 13 March 2014 edition of "Entomology Today" reports on the controversy involving Maryland's endangered Puritan Tiger Beetle, *Cicindela puritana* G. Horn (Carabidae: Cicindelinae), and property owners. The "Entomology Today" website also links to related articles on WBAL-TV, The Washington Post, Southern Maryland Newspapers Online, and the U.S. Fish & Wildlife Service. "Entomology Today" can be accessed at: <http://entomologytoday.org/2014/03/13/beetle-is-center-of-battle-over-endangered-species-and-property-rights/>.

2013 REPORTS OF NEW MARYLAND, DELAWARE, & DISTRICT OF COLUMBIA BUTTERFLY RECORDS

Among all butterfly groups, it was the yellows (Pieridae: Coliadinae) that earmarked 2012 as a special year, but in 2013 it was the hairstreaks (Lycaenidae: Theclinae) that made a fabulous showing. The four typical Maryland elfin species, Henry's (*Callophrys henrici* [Grote and Robinson,]), Brown (*C. augustinus* [Westwood]), Eastern Pine (*C. nippon* [Hübner]), and Frosted (*C. irus* [Godart]), all appeared in greater than average numbers in Maryland in 2013. In the spring, Brown Elfins were especially common at some selected sites on the Eastern Shore and in the Frederick City Watershed. Eastern Pine Elfins appeared in Central Maryland at several sites unreported before, and they were especially common at the

Patuxent Research Refuge South Tract. In June, Banded Hairstreaks (*Satyrium calanus* [Hübner]) were especially common in Prince George's County along the Northeast Branch Trail and in southeastern Charles County. Adding to the excitement, the less common to rare Coral Hairstreak (*S. titus* [Fabricius]) and Striped Hairstreak (*S. liparops* [Le Conte]) also showed up at the Prince George's County site as well as at some other previously unreported sites in Central Maryland. Later in the summer, the Silvery Checkerspot (*Chlosyne nycteis* [E. Doubleday]) staged an irruption at several sites in Central Maryland. Also, the Southern Broken-Dash (*Wallengrenia otho* [J. E. Smith]) is becoming a permanent resident now in the more northern counties in Central Maryland. Although none of these represented county records, butterfly enthusiasts nevertheless were able to garner four new county records throughout Maryland in 2013. Also, four new county records from previous years were reported in 2013. All of these new records and rare species sightings are summarized below. Entries for the sightings (and photograph(s), if they accompanied record submission) have been entered into and may be viewed at the Butterflies and Moths of North America (BAMONA) permanent record-keeping website at: <http://www.butterfliesandmoths.org/>. These may be reviewed in detail by going to this website and selecting "Regional Checklists" and then "butterfly," "United States," "Maryland," and "Apply" and then by selecting the species of interest. You will need to scroll to the United States map displayed at the bottom of the species discussions, zoom in the Maryland area, and click on any of the sighting dots having orange rings. These are BAMONA's "Verified Sightings." Clicking on the "More Details" option will take you to the record information (and photo(s) too, if these were submitted).

I have also recently updated my public online historical Maryland and Delaware butterfly county lists to include your new records. These appear at the Leplog website under its local listings section at: <http://leplog.wordpress.com/washington-area-butterfly-club/local-and-regional-lists-and-info/butterfly-records-for-maryland-delaware-and-the-district-of-columbia/>. The prolog at this link gives some historical background on the listing and informs the user as to how to access all state, county, and city butterfly lists and state cross-sectional county-by-county occurrence charts.

The outline below gives the state and new county of record, the species common name, the species scientific name, the date of record, the location of record, the name(s) of the record contributor(s), and finally any record-related notes. All contributors are to be congratulated and commended for their diligence in keeping a watchful eye for new and unusual butterfly species while out in the field and for their interest, efforts, and persistence in forwarding that data for addition to the permanent scientific record as maintained on BAMONA and Leplog for the Maryland-Delaware-District of Columbia area.

Lastly, if you are aware of any new butterfly records from a county or statewide standpoint, from 2013 that I apparently overlooked or forgot to include below, please write me an e-mail and let me know. Also, if you are aware of any butterfly

county records that actually precede those listed below, please send me that information so I can correct and amend the bookkeeping. Thanks much.

New Maryland County Records

Anne Arundel County

Dion Skipper – *Euphyes dion* (W. H. Edwards)
01 SEP 2013; Plummer House garden, Parris N. Glendening Nature Preserve, [Jug Bay Wetlands Sanctuary](#)
Annette Allor

Baltimore County

White Admiral – *Limenitis arthemis arthemis* (Drury)
Fully-banded specimen
19 AUG 2013; White Marsh
MES member **Bob Gardner**

Kent County

Pipeline Swallowtail – *Battus philenor* (Linnaeus)
16 AUG 2013; [Eastern Neck National Wildlife Refuge](#)
Dave Amadio, Chris Herz, Denise Bittle

Queen Anne's County

Dun Skipper – *Euphyes vestris* (Boisduval)
27 MAY 2007; [Wye Island Natural Resource Management Area](#)

Jim Brighton, Steve Collins, Tom Feild, Bill Hubick

Aaron's Skipper – *Poanes aaroni* (Skinner)
25 AUG 2012; [Chesapeake Bay Environmental Center](#)
Jim Brighton

Henry's Elfin – *Callophrys henrici* (Grote and Robinson)
27 APR 2013; Chino Farms Grasslands Plantation
Jim Brighton, Tom Feild, Bill Hubick, Lance Biechele

Talbot County

Swarthy Skipper – *Nastra lherminier* (Latreille)
27 MAY 2007; [Pickering Creek Audubon Center](#)
Jim Brighton, Steve Collins, Tom Feild, Bill Hubick

Wicomico County

Great Purple Hairstreak – *Atlides halesus* (Cramer)
28 JUL 2012; Nassawango Creek, Wango
Lynn Davidson, Hal Wierenga, MES member **Sue Ricciardi**

Submitted by MES member **Richard H. Smith, MD, DE, and DC Butterfly Records Coordinator for BAMONA**

BUTTERFLY UNKNOWN SPECIES STATUS PROJECT

Butterfly populations are known to be dwindling worldwide; and thus for the support of conservation in our local area, it is important to keep abreast of which local species may be showing signs of decline. Given this information, state Natural Heritage Programs will be better able to propose specific measures that will hopefully stem some of these trends. This has been the motivation for my recent project to circulate Maryland and Delaware Butterfly Unknown Status Charts to local lepidopterists and natural history field surveyors. The full charts may be viewed at the website <http://leplog.wordpress.com/local-and-regional-lists-and-info/butterflies-of-unknown-status-in-the-dc-area/>. The charts

are organized with species versus county and city for Maryland, Delaware, and the District of Columbia. These charts contain all of the local uncommon to rare butterfly species for which I, as a local Lepidoptera record keeper and coordinator of MD, DE, and DC butterfly records for the website Butterflies and Moths of North America (BAMONA) at <http://www.butterfliesandmoths.org/>, have received few or no records of occurrence of the species in the past 15 years in the indicated jurisdictions. A check mark (✓) indicates that a recent record already exists for a species whereas the symbol “U” (for unknown) shows those species for which no recent records have been received in the indicated jurisdictions. As an aid to surveyors, I have replaced the check mark for some species and jurisdictions with the symbols “A”, “S”, or “X” to show those species for which we do not expect recent records in the specified jurisdictions. “A” indicates that the original occurrence record was Accidental; “S” indicates that the species is considered a Stray; and “X” indicates that the species is already considered to be extirpated in the noted jurisdiction. For purposes of this project, I am requesting that field surveyors send to me by email at Richard.Smith@jhuapl.edu the date and location (nearest town is sufficient) of their latest observation in the specified jurisdiction of each species now shown with a “U” symbol in that jurisdiction in my charts. Recently supplied data is already shown in the charts. If you have a later date, please send that information also. By citing the latest date, we will be able to assess for conservation purposes just how recently each of these species is known to have occurred in the area of interest and whether or not it may be in decline or is showing a shrinking distribution statewide.

Submitted by MES member **Richard H. Smith**, MD, DE, and DC Butterfly Records Coordinator for BAMONA

MARYLAND NATURAL HERITAGE RARE, THREATENED, AND ENDANGERED MOTH SPECIES

The Natural Heritage Program (NHP) of the Maryland Department of Natural Resources will soon be revising the list of moth species (see below) currently featured in the latest edition of the Rare, Threatened, and Endangered Animals of Maryland. Because the list has not been revised in quite some time, NHP is interested in providing a more accurate assessment of the status of Maryland moths. We would like to refine the ranks of species that are rare and already present on the list, as well as include rare species that are not currently listed and remove common species that should not be listed. The only way we can do this is by soliciting data from local entomologists and moth enthusiasts. Any information you can share will be greatly appreciated and will help make the rare moth list more accurate. Data provided may be in the form of general observations or apparent trends, although specific details are desirable, especially for rare species. Data that we generally ask for when species observation records are submitted include the date of observation, the number of individuals observed and what they were doing (ovipositing, nectaring, etc.), site information and site description, and the observer(s) name and contact information. GPS coordinates or

maps (even paper maps) are always incredibly helpful. Please contact Jen Frye if you would like to share information or if you have any questions or general comments. And thank you for your help!

Jen Frye
Natural Heritage Program
Maryland Department of Natural Resources
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Phone: 410-827-8612 x102
Email: jfrye@dnr.state.md.us

Current List of Maryland Natural Heritage Rare, Threatened, and Endangered Moth Species

Noctuids

1. *Agnorisma bollii* – Bolle’s Dart
2. *Apamea apamiformis* – Rice Worm Moth
3. *Apamea mixta* – Coastal Plain Apamea
4. *Apamea plutonia* – Dusky Apamea
5. *Capis curvata* – Curved Halter Moth
6. *Catocala marmorata* – Marbled Underwing
7. *Catocala pretiosa pretiosa* – Precious Underwing
8. *Datana ranaeiceps* – Post-burn Datana, a Hand-maid Moth
9. *Elaphria georgei* – George’s Midget
10. *Hadena ectypa* – Champion Coronet
11. *Haploa colona* – Colona Moth
12. *Leucanopsis longa* – Long-streaked Tussock Moth
13. *Meropleon titan* – (no common name)
14. *Papaipema duovata* – Seaside Goldenrod Borer
15. *Papaipema polymniae* – Cup Plant Borer
16. *Schinia parmeliana* – (no common name) (a flower moths)

Nepticulids

1. *Ectoedemia castaneae* – American Chestnut Moth
2. *Ectoedemia phleophaga* – Phleophagan Chestnut Moth

Sphingids

1. *Agrius cingulata* – Pink-spotted Hawkmoth
2. *Isoparce cupressi* – Bald Cypress Sphinx
3. *Sphinx franckii* – Franck’s Sphinx

Geometrids

1. *Lytrosis sinuosa* – Sinuous Lytrosis Moth
2. *Chloropteryx tepperaria* – Angle-winged Emerald
3. *Cyclophora nanaria* – Dwarf Tawny Wave
4. *Nemoria catachloa* – (no common name) (an emerald moth)
5. *Nemoria tuscarora* – (no common name) (an emerald moth)

Saturniids

1. *Hemileuca maia maia* – Buck Moth

Sesiidae

1. *Synanthedon castaneae* – Chestnut Borer

APPENDIX I – CHANGED STATUS (these were re-included above)

1. *Cyclophora nanaria* – Dwarf Tawny Wave (Geometroidea) – SU ->S1?

2. *Hemileuca maia maia* – Buck Moth (Saturniidae) – S4 ->SU
3. *Schinia parmeliana* – (no common name) (Noctuoidea) – SU ->SH
4. *Synanthedon castaneae* – Chestnut Borer (Sesioidea) – SU ->SX

APPENDIX III – UNDER REVIEW FOR INCLUSION ON RTE MOTH LIST

Geometrids

1. *Iridopsis* (= *Anacamptodes*) *pergracilis* – Cypress Looper
2. *Caripeta aretaria* – Southern Pine Looper
3. *Cyclophora nanaria* – Dwarf Tawny Wave
4. *Erastria coloraria* – Broad-lined Erastria Moth
5. *Hypagyrtis esther* – Esther Moth
6. *Idaea eremiata* – Straw Wave Moth
7. *Macaria* (= *Semiothisa*) *aequiferaria* – Woody Angle

Saturnids

1. *Anisota stigma* – Spiny Oakworm Moth

Noctuids

1. *Xestia* (= *Anomogyna*) *elimata* – Southern Variable Dart
2. *Argyrostromis quadrifilaris* – Four-lined Chocolate Moth
3. *Cisthene packardii* – Packard's Lichen Moth
4. *Dasychira atrivenosa* – (no common name) (Lymantrinae – a tussock moth)
5. *Euxoa immixta* – Mixed Dart
6. *Hemeroplanis scopulepes* – Variable Tropic Moth
7. *Virbia* (= *Holomelina*) *immaculata* – Immaculate Holomelina Moth
8. *Virbia* (= *Holomelina*) *laeta* – Joyful Holomelina Moth
9. *Lithophane lemmeri* – Lemmer's Pinion
10. *Macrochilo hypocritalis* – Twin-dotted Macrochilo
11. *Metaxaglaea semitaria* – Footpath Sallow Moth
12. *Pachypolia atricornis* – Three-horned Moth
13. *Papaipema araliae* – Aralia Shoot Borer Moth
14. *Papaipema marginidens* – Brick-red Borer Moth
15. *Parapamea buffaloensis* – Buffalo Moth ("*Parapema*" is a misspelling)
16. *Ptichodis bistrigata* – Southern Ptichodis
17. *Ptichodis herbarum* – Common Ptichodis
18. *Renia nemoralis* – Chocolate Renia Moth
19. *Pyrrhia* (= *Rhodoecia*) *aurantiango* – Aureolaria Seed Borer or Orange Sallow Moth
20. *Xylotype capax* – Barrens Xylotype or Broad Sallow Moth
21. *Zale curema* – Black-eyed Zale or Northeastern Pine Zale
22. *Zale squamularis* – Gray-banded Zale Moth
23. *Zale submediana* – Gray Spring Zale
24. *Zanclognatha martha* – Pine Barrens Zanclognatha or Martha's Zanclognatha

Lasiocampids

1. *Artace cribrarius* (= *cribraria*) – Dot-lined White

Zygaenids (Megalopygidae – Flannel Moths)

1. *Lagoa crispata* – Black-waved Flannel Moth

Submitted by MES member **Jen Frye**, Natural Heritage Program, Maryland Department of Natural Resources

**THE BEES OF THE WORLD (2ND EDITION)
CHARLES D. MICHENER**

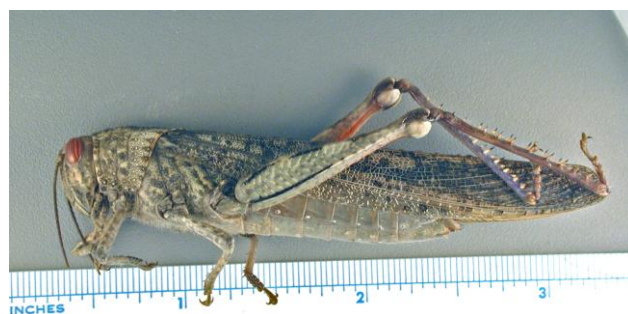
The Johns Hopkins University Press currently has Charles D. Michener's *The Bees of the World* (2nd Ed.) on sale for \$75 (59% off the \$185 list price). Details can be found at: http://www.press.jhu.edu/books/sale_books.html.

FREE DOWNLOAD OF ANT BOOKS

Dr. Eleanor Spicer Rice has made two ant books available for free download. The books are used with the [School of Ants](http://ants.yourwildlife.org) project. *Dr. Eleanor's Book of Common Ants* is available at: <http://ants.yourwildlife.org/dr-eleanors-book-of-common-ants/> and *Dr. Eleanor's Book of Common Ants of New York City* is available at: <http://ants.yourwildlife.org/dr-eleanors-book-of-common-ants-of-new-york-city/>.

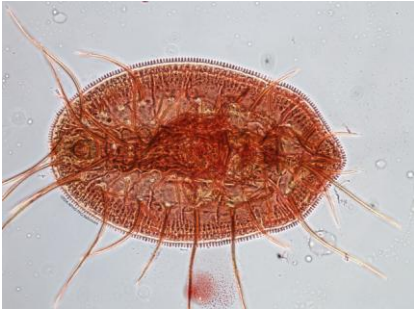
RECENT CBP / USDA-APHIS-PPQ INTERCEPTIONS

***Anacridium aegyptium* (Linnaeus) (Orthoptera:Acrididae) – Egyptian Locust**



For the first time in several years, the Egyptian Locust, *Anacridium aegyptium* (Linnaeus) (Orthoptera:Acrididae) was intercepted at Norfolk International Terminals (Port of Virginia).

***Aleurocanthus mvoutiensis* Cohic (Hemiptera: Aleyrodidae)
– a whitefly**



A whitefly, *Aleurocanthus mvoutiensis* Cohic (Hemiptera: Aleyrodidae), was intercepted for the second time in the nation and the first time at Baltimore/Washington International Thurgood Marshall Airport. The specimen was collected from date palms, *Phoenix L. sp.* (Arecaceae), from Nigeria.

***Aleurocanthus zizyphi* Priesner & Hosny (Hemiptera:
Aleyrodidae) – a whitefly**



A whitefly, *Aleurocanthus zizyphi* Priesner & Hosny (Hemiptera: Aleyrodidae), was intercepted for the first time in the nation at Baltimore/Washington International Thurgood Marshall Airport. The specimen was collected from bananas, *Musa L. sp.* (Musaceae), originating from Nigeria.

***Pallifera* E. S. Morse sp. (Mollusca: Gastropoda:
Philomycidae) – a mantleslug**



A mantleslug, *Pallifera* E. S. Morse sp. (Mollusca: Gastropoda: Philomycidae), was intercepted in a shipment of mint from Mexico for the first time by Dulles International Airport Customs and Border Protection agriculture specialists. According to the National Specialist, historically *Pallifera*

intercepted from this origin were thought to be *P. costaricensis* (Morch) (Costa Rica Mantleslug), however recent studies suggests that there may be several species.

Submitted by MES member **Jim Young**, Entomologist Identifier, USDA-APHIS-PPQ- Baltimore

**ENTOMOLOGY WORKSHOPS HOSTED AT THE
SOUTHWESTERN RESEARCH STATION
SUMMER 2014**

Ants of The Southwest: 26 July-5 August 2014.

This workshop is designed for students, biologists, and other individuals who have some background in biology at the college level. This course is designed with curriculum that complements rather than competes with the California Academy of Sciences Ant Course. Although we will cover basic taxonomy and systematics, the major focus of this course will be on the ecology and behavior of ants. For the full announcement click here: <http://research.amnh.org/swrs/ants-southwest>

Lepidoptera Course: 14-23 August 2014.

Designed for students, amateur naturalists, conservation biologists, and other biologists who have an interest in learning more about butterflies and moths, the course will emphasize taxonomy, ecology, and field identification of lepidopterans in southeastern Arizona. Lectures will include background information on the biology of animals and their importance in pollination biology. Field trips will provide participants with collecting, sampling, and observation techniques and lab work will provide instruction on specimen identification, preparation, and labeling.

<http://research.amnh.org/swrs/education/lepidoptera-course>

Weevil Course: 5-13 August 2014

The Weevil Course is targeted towards students, postdocs, and other biologists who have a strong interest in understanding weevil diversity and taxonomy. The course will emphasize weevil taxonomy, identification, and natural history, with an emphasis on North American taxa including the southwestern U.S. and Mexico. Lectures will include background information on the diversity and biology of weevils and their ecological relevance. Lab identification practices will introduce key identification resources and focus on recognizing key diagnostic features for weevil families, subfamilies, genera, and (where suitable) species. These practices will draw upon a wide range of reference taxa provided by the instructor team. Field trips to diverse shrub and desert habitats of the surrounding Coronado National Forest will provide participants with specialized collecting, sampling, and observation techniques for weevils.

<http://research.amnh.org/swrs/weevil-course>

Dawn S. Wilson, Director
Southwestern Research Station
P.O. Box 16553

Portal, Arizona 85632

Phone: 520-558-2396

Fax: 520-558-2018

Email: dwilson@amnh.org

Web: <http://research.amnh.org/swrs/>

UNIVERSITY OF MARYLAND
DEPARTMENT OF ENTOMOLOGY COLLOQUIA

Fri, 14 March 2014, 12:00 p.m.

“The Risks of Rising Insecticide Use in Cropland: What pests are we shooting at?”

Dr. Jonathan Lundgren, USDA-ARS

Fri, 28 March 2014, 12:00 p.m.

“Enhancing Habitats for Beneficial Insects in Maryland Fruit and Vegetable Farms with Wildflower Strips”

Dr. Christie Bahlai, Michigan State University

Fri, 4 April 2014, 12:00 p.m.

“TBA”

Dr. Kelly Hamby, UC Davis

Fri, 11 April 2014, 12:00 p.m.

“Symbionts as Modulators of Honey Bee Health; Lactic Acid and Foulbrood”

Dr. Eva Forsgren, Swedish University of Agricultural Sciences

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 AMERICA
EASTERN BRANCH ANNUAL MEETING

Sat-Tue, 15-18 March 2014

Program Overview:

- Sat, 3/15: Welcome reception and movie night
- Sun, 3/16: Opening session, scientific presentations, student paper competitions, games, evening welcome social
- Mon, 3/17: Scientific presentations, awards banquet
- Tue, 3/18: Remaining presentations completed by mid-morning, departure

Fort Magruder Hotel & Conference Center, 6945 Pocahontas Trail, Williamsburg, Virginia 23185

<http://www.entsoc.org/eastern/2014-eastern-branch-annual-meeting>.

USDA WEBINARS: “CAREER INFORMATIONAL SESSIONS FOR STUDENTS & RECENT GRADUATES”

Thu, 20 March 2014, 1:00 p.m.

Wed, 2 April, 2014, 1:00 p.m.

Wed, 9 April 2014, 1:00 p.m.

Topics to be covered:

- An overview of USDA
- An introduction to USDA careers
- Available opportunities
- Basic qualifications and application process
- Mission areas presentations

Additional information can be accessed at:

<http://www.entsoc.org/PDF/2014/USDA-career-webinar.pdf>.

THE GEORGE WASHINGTON UNIVERSITY
ENTOMOLOGY SEMINARS

Fri, 21 March 2014, 3:00 p.m.

“Sperm, Behaviour and Non-genetic Inheritance”

Dr. Susanne Zajitschek (Postdoctoral Researcher, Manier Lab, Department of Biological Sciences, GWU)

Fri, 4 April 2014, 3:00 p.m.

“Sex, Flies and Videotape: Geographic variation in mating behavior and sexual selection in a widespread dung fly, *Sepsis punctum*”

Dr. Nalini Pooniamorthy (Postdoctoral Researcher, Department of Biology, Syracuse University, Syracuse, NY)

Entomology seminars take place in Corcoran Hall 106, 2023 G St. NW, Washington DC. For additional information, go to: <http://departments.columbian.gwu.edu/biology/about/seminars>.

ENTOMOLOGICAL SOCIETY OF AMERICA
WEBINAR: “INSIDE OF THE JOURNAL OF INTEGRATED PEST MANAGEMENT”

Wed, 26 March 2014; 1:00 p.m.

The Entomological Society of America’s *Journal of Integrated Pest Management* is an open-access, peer-reviewed, extension journal for an outreach audience. The Co-Editors-in-Chief, Marlin Rice and Kevin Steffey, will join extension entomologist Jeff Bradshaw in a webinar about the journal. The webinar will cover *JIPM*’s three different categories and information about how to submit articles, plus an overview of the benefits of publishing in the journal. For additional information go to: https://www.magnetmail.net/actions/email_web_version.cfm?recipient_id=1457014705&message_id=3793652&user_id=ENTSOC&group_id=1203550&jobid=17370846.

AMERICAN ENTOMOLOGICAL SOCIETY
PUBLIC MEETING

Wed, 26 March 2014; 7:00 p.m.

“Thermal Tolerance in Neotropical Army Ants (Ecitoninae): A Study of Body Size, Microhabitat and Elevational Effects”

Kaitlin M. Baudier (Ph.D. Student, Department of Biodiversity, Earth & Environmental Science, Drexel University)

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>.

ENTOMOLOGICAL SOCIETY OF WASHINGTON
PUBLIC MEETING

Thu, 3 April 2014; 7:00 p.m.

Topic: TBA

Speaker: TBA

National Museum of Natural History, Smithsonian Institution, Washington, DC

<http://entsocwash.org/>.

**MARSHY POINT NATURE CENTER
SPEAKER SERIES**

Tue, 15 April 2014; 7:00 p.m.

“The Bees of Hart-Miller Island”

Gene Scarpulla (MES Publications Editor and Associate at the USGS Bee Inventory and Monitoring Laboratory, Patuxent Wildlife Research Center)

Marshy Point Nature Center, 7130 Marshy Point Road,
Baltimore, MD

<http://www.marshypoint.org/>.

**USA SCIENCE & ENGINEERING FESTIVAL
FREE EXPO**

Sat-Sun, 26-27 April 2014, 9:00 a.m.-6:00 p.m.

The mission of the expo is: “to re-invigorate the interest of our nation's youth in science, technology, engineering and math (STEM) by producing and presenting the most compelling, exciting, educational and entertaining science festival in the United States.”

Walter E. Washington Convention Center, 801 Mount Vernon Place (between 9th and 7th Streets NW on L Street NW)

For additional information, go to:

<http://www.usasciencefestival.org/>.

**THE INTERNATIONAL HETEROPTERISTS' SOCIETY
5TH QUADRENNIAL MEETING**

Mon-Fri, 21-25 July 2014

The Fifth Quadrennial Meeting of the International Heteropterists' Society will be held at the National Museum of Natural History, Smithsonian Institution, Washington, DC.

Additional information can be found at:

<http://ihs.myspecies.info/content/5th-quadrennial-meeting-july-2014>.

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	Harold Harlan	New & Novel Mosquito Control Options
Nov 15	Sam Droege	High Resolution Insect Photography
Feb 21	Andrew Ulsamer	Colony Collapse Disorder
Mar 21	Stuart McKamey	Aliens of the Amazon: Treehoppers
Apr 18	Paul Goldstein	Southern New England Coastal Sandplains
May 9	Members' & Students' 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
Treasurer	Edgar A. Cohen, Jr.
Historian	(vacant)
Faculty Sponsors	Frank E. Hanson & Austin P. Platt
Publications Editor	Eugene J. Scarpulla

SUBMITTAL DEADLINES

APR 2014 issue of the *Phaëton*:

Please send member news items by 4 April 2014.

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.
