Phaëton

The Official Newsletter of the
Maryland Entomological Society

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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

Meeting Announcement

The **M**aryland **E**ntomological **S**ociety's **291st** regular meeting will be held **Friday, 15 March 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.

Speaker: **Timothy Foard, MS, BCE, Entomologist, Senior Study Director, i2LResearch USA Inc, Baltimore, Maryland**

Title: **Ants of Maryland: A Statewide Survey**

Unlike butterflies and dragonflies, ants lag far behind in generating public interest. While state or regional field guides are available for the charismatic butterflies and dragonflies, no comprehensive ant guide is available for most states, although checklists for many states do exist. Many of these published checklists are outdated. To date no accurate comprehensive checklist exists which covers the entire state of Maryland, which has a very diverse topography for its size. Published monographs were formerly confined to ants occurring in the western United States; although this trend is slowly changing as interest in these insects continue to increase. The goal of the survey is to identify and record all of the ant species which occur in Maryland, with the intention of generating a monograph based on extensive field collection, examination of museum and university specimens, and published records. Such a monograph with keys, when published, will provide useful coverage not only for Maryland, but for the mid-Atlantic ant fauna as well.

Only the results of the field portion of the survey will be presented tonight. In addition, Timothy will present ant assemblages from several forested sites throughout Maryland.

Timothy Foard received a Bachelor of Science in Biology from Armstrong Atlantic State University in Savannah, Georgia in 1984. After graduation, he worked for 7 years as a laboratory technician for the United Sates Department of Agriculture before entering the graduate program at the University of Georgia, where he received a Masters in Entomology in 1995. Since then he worked at state and federal labs before accepting a position at i2L Research USA Inc. (formerly ICR, Inc.) in Baltimore in 2000, where he currently works as a Senior Study Director. Timothy became a Board Certified Entomologist (BCE) in 2012. Although ants are currently his main interest, in the past Timothy conducted surveys of other insect groups such as Mutillidae (velvet ants), Tachinidae (tachinid flies), and parasitoids in general.

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.**

For more information concerning upcoming lecture/meetings, 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) 997-0890 (Home)	hanson@umbc.edu
Bowie Area:	**Gene Scarpulla**	(301) 464-3170 (Home)	ejscarp@comcast.net
Southern MD:	**Bob Platt**	(410) 586-8750 (Home)	platt@umbc.edu

15 FEBRUARY 2013 MES MEETING MINUTES

The 290th general meeting of the Maryland Entomological Society was held on Friday, 15 February 2013 at UMBC and began at 8:23 p.m. with a welcome by MES President **Fred Paras**. The meeting turnout was exceptional with 17 MES members in attendance. The meeting launched immediately into the main program with an introduction of our speaker, Dr. **David Adamski**. His talk is summarized below. The program was followed by discussion and generous refreshments, provided by MES Vice President **Phil Kean**, and then an MES business meeting was convened. Minutes from the 16 November 2012 meeting were read and approved, and the Treasurer's report was given, citing an MES funds total of $3161.88. This represented an increase of $460 since November. More discussions ensued regarding future meetings. Biological and entomological faculty contacts at local universities were cited as sources for a prospective student presentation opportunity for our April or May meetings. This program option was proposed by Fred Paras at our November 2012 meeting. MES Treasurer **Ed Cohen** mentioned that new MES member **Thomas Henry**, Hemiptera specialist at the Smithsonian, has taken a special interest in our Society journal. MES member **Gaye Williams** kindly brought in another selection of free entomology books from her office holdings for disbursement to interested MES members. The main speaker provided slides of microlepidoptera genitalia for viewing with a binocular microscope. He also displayed a large drawer of numerous mounted microlepidoptera specimens and showed mounting boards and equipment used in their preparation.

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

15 FEBRUARY 2013 MES LECTURE

"Aspects of a Changing Classification: a Nightmare for Those Outside Systematics" – David Adamski, Ph.D., Entomologist, United States Department of Agriculture, Agricultural Research Service, Systematic Entomology Laboratory, c/o National Museum of Natural History, Smithsonian Institution, Washington, DC

Dr. **David Adamski** started his talk by pointing out how recent changes based on molecular (mtDNA) studies alone have led to fluidity in the phylogenetic status of several moth groups, an example being the large family of noctuids. In Zahiri et al. (2011), the noctuids are now arranged into the superfamily Noctuoidea with six major families, Oenosandridae (snub moths), Notodontidae (prominents), Erebidae (quadrifine owlets), Nolidae (nolas and punkies), Euteliidae (elves), and Noctuidae (trifine owlets). The family Noctuidae itself is reduced to one-third its former size in species number due to this development. Dr. Adamski then entered into a discussion of the history of classification schemes for the Gelechioidea, a superfamily of microlepidoptera with which he is especially familiar. Dr. Adamski mentioned that 80-90% of the gelechiids he encounters in the tropics are undescribed species. Much of Dr. Adamaski's work has been devoted to the subfamily Blastobasinae within this superfamily. For living organisms in general, Carl Linnaeus initiated the study of classification schemes by grouping species according to shared physical characteristics. Charles Darwin added the feature of a phylogenetic tree structure to classification based on his principle of common descent over an evolutionary time-scale. The importance of a geographic component to common descent was added by such biological pioneers as Hewitt Watson and Alfred Wallace. Early studies of the Diamesinae (Diptera: Chironomidae [midges]) indicated that they had a strong geographic component to their worldwide variations. For microlepidopera species, some British entomologists, such as Sir Francis Walker, used very superficial characteristics such as mere color to distinguish species. Dr. Adamski showed some amusing slides of Tortricidae (leaf roller moths) in which one species showed at least 12 dramatic wing morphology variations whereas 12 other species showed great similarity in wing morphology. Clearly other features beside wing morphology had to be considered for many Lepidoptera. Starting in the early 20th Century, the British entomologists F. N. Pierce and J. W. Metcalfe published several volumes that based Lepidoptera classifications primarily on genitalic features, and many of their keys are still in use. For gelechiids, British entomologist Edward Meyrick described many species based on genitalia, but even genitalia have not been found to be universally definitive. In a comical turn, American entomologist William Kearfott named many tortricid species in an alphabetical fashion, resulting in species names such as: *Eucosma bobana*, *E. cocana*, *E. dodana*, etc. Meyrick complained bitterly about this, but Kearfott's names survived. Since genitalia often proved insufficient for microlepidoptera species distinctions, British entomologist Lord Walsingham (Thomas de Grey, 6th Baron Walsingham) sought to base classifications on characteristics of palps and wing venation. In a publication by William G. Dietz (1910), the classification of blastobasids was revised based on Lord Walsingham's keys. In a paper by Adamski and Richard L. Brown (1989) nearly 80 years later, the authors provided a generic analysis of North American Blastobasidae using morphological characters, including structure of the genitalia. Later, Adamski and Ronald W. Hodges (1996), following the work of R. W. Hodges (in press until 1999), placed the blastobasids in a subfamily of Coleophoridae (casebearer moths) and revised the generic assignments and/or taxonomic rankings of quite a number of species relative to the earlier Adamski and Brown (1989) paper. Species numbers were incredibly reduced from 108 to 54 in the Adamski and Hodges (1996) paper. Dr. Adamski indicated that over 100 morphological characteristics were considered in this latest classification scheme including an antennal notch, labial palps, aedeagus structures, scale shape, and larval structures. Wing venation was not found to provide sufficient distinctions for species separations. However, genitalic characteristics are still the major features used in distinguishing most species. Molecular studies on gelechiids have begun, and many results are still being interpreted. Dr. Adamski believes that a complete phylogenetic representation must combine both molecular and morphological findings. Dr. Adamski next described various host plant utilization studies in

which he has been involved for the Blastobasinae. These included: 1) collections of large quantities of acorns in Mississippi to study how blastobasid and tortricid species enter acorns as hosts, and 2) life history studies of a *Holcocera* Clemens (Blastobasinae) species that feeds on nymphs of the lac scale insect *Kerria lacca* (Kerr) (Hemiptera: Kerriidae). Worldwide, blastobasid species total about 900. Collecting experience has accumulated the following approximate species numbers among the various continents: North America – 300, South America – 300, Europe – 100, Africa – 100, Asia – 50, and Australia – 50.

Literature Cited

Adamski, D., and R.L. Brown. 1989. *Morphology and systematics of North American Blastobasidae (Lepidoptera: Gelechioidea)*. Mississippi Agricultural and Forestry Experiment Station Technical Bulletin 165 (Mississippi Entomological Museum [Series] No. 1). Department of Information Services, Division of Agriculture, Forestry, and Veterinary Medicine, Mississippi State University, Mississippi State, MS. 70 pp.

Adamski, D., and R.W. Hodges. 1996. An annotated list of North American Blastobasinae (Lepidoptera: Gelechioidea: Coleophoridae). *Proceedings of the Entomological Society of Washington* 98(4):708-740.

Dietz, W.G. 1910. Revision of the Blastobasidae of North America. *Transactions of the American Entomological Society* 36(1):1-72.

Hodges, R.W. 1999. The Gelechioidea, pp. 131-158. In: Kristensen, N.P. (Editor), *Lepidoptera, Moths and Butterflies* Volume 1: Evolution, Systematics, and Biogeography. Handbuch der Zoologie IV(35). Walter de Gruyter, Berlin. 491 pp.

Zahiri, R., I.J. Kitching, J.D. Lafontaine, M. Mutanen, L. Kaila, J.D. Holloway, and N. Wahlberg, 2011. A new molecular phylogeny offers hope for a stable family level classification of the Noctuoidea (Lepidoptera). *Zoologica Scripta* 40(2):158-173.

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

WELCOME TO NEW MEMBERS

MES welcomes the following new members to the Society:

David Adamski	**Washington, DC**
Joshua P. Basham	**McMinnville, TN**

2013 MARYLAND NATIVE BEE SURVEY NEEDS

For the last several years I have been working on a survey of the Maryland bees that will eventually result in publication of a monograph on the bees of Maryland. A lot of progress has been made, but there are still quite a few distributional holes and I would like to fill many of them this coming bee season. We could use your help catching or trapping bees in certain parts of the state and netting bees off of certain types of plants.

Counties in need of greater coverage:

- Western MD: Garrett, Washington
- Central MD: Carroll, Baltimore City, Harford
- Southern MD: Charles, Saint Mary's
- Eastern MD: Cecil, Kent, Talbot, Caroline, Dorchester, Somerset, Wicomico

Trapping: In these counties I will be happy to set you up with either of two types of traps to deploy in woodland sites with strong vernal flower components in the spring and then in fields the rest of the year. The two trap types are:

1. Small painted bowl traps which you can deploy for a day or two anywhere you like (filled with soapy water).
2. Painted beer cups with stands that are filled with propylene glycol (I supply the glycol.) Note: This is not ethylene glycol ... the glycol found in antifreeze, but the stuff used to make the cookies that you eat permanently soft (You eat them ... I don't!).

Netting: Also in these areas you should feel free to net any bees you find and you can place them in a jar of alcohol.

Specimen Handling: We will supply all the necessary equipment and instructions and will likely come by to pick up the specimens or make some other arrangements at the end of the season.

Target Plants to Net Off Of:

- Native Loosestrifes: Whorled, Fringed, etc. (*Lysimachia* spp.) – Attract specialized oil-collecting bees that have not been seen in Maryland for about 100 years.
- Staggerbushes (*Lyonia* spp.) – Attract two or more highly specialized bees that feed on the pollen from this plant.
- Willows (*Salix* spp.) – Attract a whole series of large and very small specialists that rarely go to bowls.
- Woodland Sunflowers (*Helianthus* spp.) – Attract specialized *Paranthidium* spp., *Melissodes* spp.
- Native Thistles (*Cirsium* spp.) – Attract monster *Osmia* spp., *Svastra* spp.
- Maryland (of course) Goldenaster (*Chrysopsis mariana*) – Attracts *Perdita* spp., *Melissodes* spp., sand specialists.
- Native Morning-gloryish Things (*Ipomoea* spp.) – Attract the mysterious *Cemolobus ipomoeae*.
- Blueberries (*Vaccinium stamineum* [Deerberry] and *Vaccinium* spp. in general) – Attract *Melitta* spp. and other oddball *Andrena* spp. and *Habropoda* spp.
- Groundcherries (*Physalis* spp.) – Attract *Colletes* spp. and a specialist *Lasioglossum* sp.
- Mock Oranges (*Philadelphus* spp.), Ironweeds (*Vernonia* spp.), Bellworts (*Uvularia* spp.) – Each attract their own specialist bee.

Target Habitats: Any place with deep sand and lots of blooming native plants.

Submitted by MES member ***Sam Droege****, Native Bee Inventory and Monitoring Laboratory, Patuxent Wildlife Research Center*
sdroege@usgs.gov

HART-MILLER ISLAND COLLABORATORS REQUESTED

In 2009, I conducted a year-long "bee bowl" (pan trap) survey of the native bees of Hart-Miller Island (HMI), located in the northern Chesapeake Bay. HMI is made up of the original remnants of Hart Island and Miller Island and the human-created HMI State Park and the HMI Dredged Material Containment Facility (DMCF). The majority (~1100 acres) of the island (~1300 acres) is the HMI-DMCF. The survey involved 18 sampling days (March-December), 6 transects in 6 habitats, and 20 bee bowls per transect. I am near completion of the data analysis and article writing for the bee portion of the project.

In addition to the bees that were attracted to the bowls, varying amounts of bycatch were also attracted. I am seeking collaborators that might be willing to identify specific groups of the bycatch. I think that the flies and possibly the wasps each deserve individual articles and the collaborators could be senior authors, coauthors, junior authors, or just acknowledged if they so desire. The other bycatch taxa would be summarized in one journal article. The majority of the specimens will be new species records for HMI. The approximate number of specimens of bees and bycatch are summarized below. I have named the collaborators that have already agreed to participate.

Insect Group	Number	Curation	Collaborator	Status
Bees	4446	pinned	Scarpulla, Droege	identified
Flies	7235	dry, unpinned		
Wasps (various)	534	pinned		
Butterflies	373	dry, unpinned	Scarpulla	identified
True Bugs	73	ETOH		
Beetles	72	ETOH		
Ants	68	ETOH	Foard	
Spiders	40	ETOH		
Damselflies	13	ETOH	Scarpulla, Orr	partially identified
Grasshoppers	8	ETOH		
Springtails	3	ETOH		
Moths	2	pinned	Scarpulla	identified
Crickets	2	ETOH		
Caterpillars	2	ETOH		

The flies and wasps could be transferred immediately to a collaborator. The other taxa are currently in multi-taxa date/transect vials and I will need to separate them for transferring. For additional information, or if you might be interested in collaborating on this project, please contact me at ejscarp@comcast.net. Thanks.

Submitted by MES member ***Gene Scarpulla***

CHINO FARMS BIOBLITZ 27 APRIL 2013

The Maryland Biodiversity Project (MBP) and the Chester River Field Research Station (CRFRS) of Washington College are co-sponsoring a BioBlitz scheduled for 27 April 2012. The BioBlitz will be held on Chino Farms located in northern Queen Anne's County along the Chester River. As one of the largest privately owned farms in Maryland, its 5000+ acres encompass a wide diversity of habitats including a large warm season grassland, extensive river edge, a large lake, many ponds and Delmarva bays, mixed woodlands, and lots of buffers surrounding the crop fields. The farm has been designated an Audubon Important Bird Area and has received awards for its conservation practices. 99% of the farm is in conservation easements. Just over 700 species have been identified on the property to date.

The goals are to:

- Document as many species on the property as possible
- Promoting MBP and its value as a resource for cataloging biodiversity across Maryland.
- Providing opportunities for interested students to get out into the field with knowledgeable experts and naturalists.
- Getting out in the field with colleagues and having fun.

This is a great opportunity to add to the distribution lists of species on the upper Eastern Shore. This area hasn't been studied as closely as other parts of the state. Numerous county records (and maybe even state records) are possible. For instance, in one season of native bee sampling 14 new Queen Anne's County records were documented.

This initial e-mail is a feeler for interest levels and whether people are free that weekend. We are planning on starting any time after midnight on Friday 26 April and going until the following evening. Once everyone is in from the field we will gather to look over photos from the day, have some food and get a tally of our efforts.

In addition to letting us know whether you are interested, please pass the word along to anyone who you think might be interested in participating.

For more information on BioBlitzes in general see: http://www.pwrc.usgs.gov/blitz/.
To volunteer or for further information on the Chino Farms BioBlitz, contact Dan Small at: daniel_m_small@yahoo.com.

Submitted by Jim Brighton, Maryland Biodiversity Project, http://www.marylandbiodiversity.com/index.php.

"SPRING BEAUTY & THE BEES" VOLUNTEER POLLINATOR MONITORING

Hello Maryland Entomologists!

This spring, I am enlisting the help of interested volunteers to observe local pollinators of spring beauty, *Claytonia virginica* L. and *Claytonia caroliniana* Michx. (Portulacaceae). I thought you might be interested in observing and learning about the pollinators of these native plants.

This project aims to document changing pollinator populations – by monitoring the insects that visit spring beauty throughout the eastern United States, we can determine how pollinator communities change depending on the year, the location, and the season. This information will help us better understand the biology of native pollinators, as well as help us determine the best way to evaluate their value for native plant reproduction. At the same time, you will learn more about the native bees and flies visiting our early spring flora, and spend some time

outdoors during the lovely spring weather.

To help, you'll need to locate a patch of spring beauty, *C. virginica* or *C. caroliniana*, which are common in the eastern United States and southeastern Canada. You'll find information on our website on how to distinguish the plants and pollinators and conduct pollinator observations on your own. We ask for about 2 hours of observations over the course of *Claytonia* bloom, which lasts 2-4 weeks in most areas. As you observe, you'll fill out the provided data sheets, which you will then email or mail to us. For more information, visit: http://springbeauties.wordpress.com/. To volunteer, please email: spring.beauty.pollinators@gmail.com with your name and location. We'll get in touch with you soon with more information. Thank you very much.

Submitted by Alison Parker, Department of Ecology and Evolutionary Biology, University of Toronto, 25 Willcocks Street, Toronto, Ontario, Canada M5S 3B2

"BALTIMORE CBP INTERCEPTS FIRST IN PORT SEED BEETLE"

A 26 February 2013 U.S. Customs and Border Protection (CBP) news release reports that a U.S. Department of Agriculture entomologist confirmed on 20 February 2013 that CBP agriculture specialists at Baltimore Washington Thurgood Marshall International Airport discovered a first in port pest in the Baltimore area when they intercepted, *Spermophagus negligens* Pic (Coleoptera: Bruchidae). The agriculture specialists discovered the pest on 29 May 2012 while inspecting hibiscus, *Hibiscus* L. (Malvaceae) seeds found inside a travelers luggage.

***Spermophagus negligens* Pic.** (Image courtesy of USDA-APHIS-PPQ Baltimore.)

The full news release can be accessed at: http://www.cbp.gov/xp/cgov/newsroom/news_releases/local/02262013_3.xml.

"BALTIMORE CBP FINDS SURPRISE IN CELERY SEED SHIPMENT"

A 13 February 2013 U.S. Customs and Border Protection news release reports that a 55,000 pound shipment of celery seed that arrived at the Port of Baltimore was heavily infested with Khapra Beetles, *Trogoderma granarium* Everts (Coleoptera: Dermestidae). The shipment that arrived on 7 February 2013 originated in India and the specimens were confirmed by a U.S. Department of Agriculture entomologist on 8 February 2013.

Khapra Beetle, *Trogoderma granarium* Everts. (Image courtesy of USDA Grain Inspection, Packers & Stockyards Administration [GIPSA] Visual Reference Library.)

The full news release can be accessed at: http://www.cbp.gov/xp/cgov/newsroom/news_releases/local/02132013_2.xml.

"*BUTTERFLY FOOD*": A Poem Revisited

[Editor's Note: MES member Joy Cohen asked if I might reprint a poem that she wrote and that had been originally published in the 2003 issue of The Maryland Entomologist *4(3):22. Joy wished to share the poem with the newer members of the Society. Here is her poem presented for your enjoyment.]*

Butterfly Food

If my terrain you'll surely drench
With urine, I will love the stench.

It's also known that all my species
Make breakfast out of human feces.

As if that's not enough to boot,
We're known to lunch on rotted fruit.

For appetizers, we're most glad
To dine upon your fish gone bad.

And if from me the truth is wrung,
We make dessert from cattle dung.

What we call food, humans call waste,
Be it liquid or be it paste.

Thus think I'm filthy, only meant
To serve as pretty ornament?

The truth is this by God I'm sent
To help clean out environment.

Submitted by MES member ***Joy Cohen***

2012/2013 PROPOSED MES EVENT SCHEDULE

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

Date	Speaker	Topic/Location
Oct 19	Leo Kenefic	Malaria Control: vectors, drugs, vaccines
Nov 16	Stephen Allgeier	Status of Brown Marmorated Stink Bug
Feb 15	David Adamski	Aspects of a Changing Classification
Mar 15	Timothy Foard	Ants of Maryland: A Statewide Survey
Apr 19	College Students	PowerPoint & Poster Presentations
May 17	"Members' Potpourri"	Presentations & Elections
TBA	Survey/Field Trip	TBA
Sep 8	Crab Feast/Meet&Greet	J. KING'S Restaurant (Anne Arundel Co.)

NEARBY ENTOMOLOGICAL EVENTS

8 March 2013; 12:00 p.m.
University of Maryland, Department of Entomology Colloquium
"Clash of the kingdoms: interspecific interactions between carnivorous plants, arthropods, and amphibians" – Dr. David Jennings (Department of Entomology, University of Maryland, College Park)
University of Maryland, 1130 Plant Sciences Building, College Park, Maryland
http://entomology.umd.edu/news/events/posts/667.

8 March 2013; 3:00 p.m.
The George Washington University, Department of Biological Sciences Seminar : "Phylogenetic patterns of symbiont fidelity in fungus-growing ants" – Dr. Ted Schultz (Curator of Hymenoptera: Ants, Department of Entomology, National Museum of Natural History, Smithsonian Institution)
The George Washington University, Department of Biological Sciences, Corcoran Hall 111, 2023 G St. NW, Washington, DC
http://departments.columbian.gwu.edu/biology/about/seminars.

14-20 March 2013
Eastern Branch Entomological Society of America Annual Meeting
Eden Resort & Suites, 222 Eden Road, Lancaster, Pennsylvania
http://www.entsoc.org/eastern/2013-eastern-branch-annual-meeting.

15 March 2013; 12:00 p.m.
University of Maryland, Department of Entomology Colloquium
"Climatic extremes as constraints to gypsy moth population growth" – Dr. Patrick Tobin (USDA Forest Service, Northern Research Station, Pennsylvania)
University of Maryland, 1130 Plant Sciences Building, College Park, Maryland
http://entomology.umd.edu/news/events/posts/668.

20 March 2013; 4:00 p.m.
American Entomological Society Public Meeting
"Winging it in Mongolia: The Butterflies of Mongolia" – Stephen C. Mason, Jr. (Curatorial Assistant, Department of Entomology, The Academy of Natural Sciences of Drexel University)
University of Delaware, Allen Biotechnology Lab, Conference Room 101, 601 Sincock Lane, Newark, Delaware.
http://darwin.ansp.org/hosted/aes/mtgSched.htm.

22 March 2013; 3:00 p.m.
The George Washington University, Department of Biological Sciences Dissertation Seminar: "Systematics of Spiders of the genus *Opopaea*" – Daniela Andriamalala
The George Washington University, Department of Biological Sciences, Corcoran Hall 111, 2023 G St. NW, Washington, DC
http://departments.columbian.gwu.edu/biology/about/seminars.

29 March 2013; 12:00 p.m.
University of Maryland, Department of Entomology Colloquium
"The curious promiscuity of honey bee queens: causes and consequences" – Dr. David Tarpy (Associate Professor and Extension Apiculturist, North Carolina State University.)
University of Maryland, 1130 Plant Sciences Building, College Park, Maryland
http://entomology.umd.edu/news/events/posts/669.

4 April 2013; 7:00 p.m.
Entomological Society of Washington Monthly Meeting/Lecture
Smithsonian Institution, National Museum of Natural History, 10th and Constitution Avenue, N.W., Washington, DC
http://entsocwash.org/.

5 April 2013; 12:00 p.m.
University of Maryland, Department of Entomology Colloquium
"Mosquitoes and revolutions in the Americas, 1776-1898" – Dr. John McNeill (Professor, Department of History and the Walsh School of Foreign Service, Georgetown University)
University of Maryland, 1130 Plant Sciences Building, College Park, Maryland
http://entomology.umd.edu/news/events/posts/670.

8-11 April 2013
Imported Fire Ant and Invasive Pest Ant Conference
Sheraton Virginia Beach Oceanfront Hotel, 3501 Atlantic Avenue, Virginia Beach, Virginia
http://www.extension.org/pages/19257/imported-fire-ant-and-invasive-pest-ant-conference.

10 April 2013; 10:30 a.m. - 12:30 p.m.
Audubon Naturalist Society
"Bluebells and Butterflies" Walk – Riverbend Park, Virginia. Leader: MES member **Stephanie Mason**. Free, but registration required.
http://www.audubonnaturalist.org/images/naturalist/spring2013.pdf Page 15.

12 April 2013; 12:00 p.m.
University of Maryland, Department of Entomology Colloquium
"One hormone two functions: Regulation of cuticle tanning and immunity by neuropeptide Bursicon" – Dr. Qisheng Song (Professor, Department of Plant Science, University of Missouri)
University of Maryland, 1130 Plant Sciences Building, College Park, Maryland
http://entomology.umd.edu/news/events/posts/671.