

Phaëton

The Official Newsletter of the
Maryland Entomological Society

EDITOR: Harold J. Harlan
FACULTY SPONSOR: Frank E. Hanson and Austin P. (Bob) Platt
Department of Biological Sciences, UMBC
1000 Hilltop Circle
Baltimore, MD 21250

October 2009
Volume: 30, Number 1

Meeting Announcement

The Maryland Entomological Society's 270th regular meeting will be held **Friday, October 16, 2009**; beginning at 8:00 P.M., in **Room 004** (one floor below the street level), Biological Sciences Bldg., University of Maryland, Baltimore County (UMBC). Bring a friend and specimens/observations to share. Refreshments will be provided. Presentations are scheduled to begin about 8:15 P.M.

Speaker: Dr. Joseph Bischoff, National Mycologist, APHIS, PPQ, USDA

Title: "Dropping like flies: Fungal insect pathogens of the order Hypocreales (Ascomycota)."

Dr. Bischoff grew up in New Jersey, just outside of Manhattan. He earned a B.S. in Forestry from Rutgers in 1996. He worked for three years before returning to Rutgers, where he earned his Ph.D. in Mycology in 2004. He worked as a fungal taxonomist for the National Institutes of Health (NIH) until the Spring of 2008, when he accepted his current position of National Mycologist, for the USDA's Animal and Plant Health Inspection Service (APHIS).

The main topic of his research has been the systematics and taxonomy of fungal insect pathogens in the order Hypocreales with particular focus on the biocontrol fungal group ***Metarhizium***. Recently, his research has shifted toward plant pathogens on commonly imported plants and plant products.

He has authored more than 20 publications, including four book chapters, in various scientifically peer-reviewed journals, including Insect Systematics and Evolution, Mycologia, Mycological Research, Mycotaxon, Studies in Mycology, and Symbiosis.

This evening Dr. Bischoff will give an overview and then mainly discuss fungal insect pathogens of the order Hypocreales, drawing on his own research and including many remarkable images.

If you want more information concerning this meeting, contact one of the following people:

Annapolis Area -	Harold Harlan	(410) 923-0173 (Home)	"haroldharlan@comcast.net"
Baltimore Area -	Phil Kean	(410) 944-4630 (Home)	
	Fred Paras	(410) 374-0425 (Home)	"bugandrockman@msn.com"
	Bob Platt	(Biol. Sci., UMBC x-2261)	"platt@umbc.edu"
	Frank Hanson	(Biol. Sci., UMBC x-2265/-2228)	"Hanson@umbc.edu"

Minutes of the May 2009 MES Meeting

The 269th general meeting of the Maryland Entomological Society was held on Friday, May 22, 2009 at UMBC and was begun at 8:35 p.m. with a welcome by Vice President Phil Kean (Fred arrived later) and then a short business meeting. The April 2009 meeting minutes were read and approved, and then the treasurer's report announced no change in the MES Funds total of \$2378.32. Treasurer Ed Cohen was still working on a state taxation exemption certificate for the society. Dr. Platt announced an open house to be held by the Natural History Society of Maryland on June 6 at their new Naturalists Center at 6908 Belair Road in Baltimore. At this point, the three speakers for the main program were introduced one by one, and their presentations were delivered. These are summarized below. Between the second and third talk, we partook of some fine refreshments and had discussion and examination of a number of boxes of displayed specimens. Fred then reconvened the meeting, delivered the third talk, and conducted the MES election of officers for the fiscal 2010 society year. With unanimous approval, current officers will continue in their present posts. In closing it was announcement that a new bioblitz will be conducted at the Jug Bay Wetlands Sanctuary (Anne Arundel Co.) during the weekend of June 13-14. The Jug Bay, Patuxent River Park (Prince Georges Co.) bioblitz is scheduled for the weekend of May 30-31.

The May program was our annual "members' meeting" consisting this time of presentations by three MES members. The first program entitled "Rare and seldom encountered Maryland moths, beetles, and insects" was presented by Bob Gardner, who has been successful in observing and obtaining collection records of rarely encountered insects in Maryland and many other states for decades. Some of the species he displayed and discussed included:

Clouded Underwing (*Catocala nebulosa*)
Sad Underwing (*Catocala maestosa*)
Consort Underwing (*Catocala consors*)
Hydrangea Sphinx (*Darapsa versicolor*) – very rare in Maryland
Galium Sphinx (*Hyles gallii*)
Huckleberry sphinx (*Paonias astylus*)
Glenurus gratus (a very large, pink wing-tipped antlion) – larvae live in dry tree holes; adult taken at mercury vapor lamp
A giant waterbug (*Belostoma* sp.)

An owlfly (*Ascalaphidae*) – larvae are predaceous and inhabit leaf litter
American Rubyspot Damselfly (*Hetaerina americana*) – taken along Gunpowder Falls, MD
A mantisfly (*Mantispidae*)
Eastern Hercules Beetle (*Dynastes tityus*)
Great Dung Beetle (*Dichotomius carolinus*) – very large dung beetle
Fancy Dung Beetle (*Bolbocerosoma farctum*)
Goldsmith Beetle (*Cotalpa lanigera*)
Robust Ground Beetle (*Geopinus incrassatus*) - a burying Carabid beetle that resembles a mole cricket
Calosoma wilcoxi – a Carabid beetle
A large leafhopper (*Fulgoridae*)

The second talk "Brief notes on the resurgence of the Common Bed Bug (*Cimex lectularius* L.)" was presented by Dr. Harold Harlan, a medical, veterinary, and urban pest management professional entomologist. There has been a dramatic resurgence (from almost none in 1997 to an epidemic by 2008) of the Common Bed Bug in North America. Problems have been reported in every state and the EPA held a National Bed Bug Summit in Arlington, VA in April 2009. The species has not only become a problem among the homeless and in shelters but also in fancy metropolitan hotels as well as in travel hostels. Many hotels in New York, New Jersey, Illinois, Ohio, California, and DC have endured bed bug invasions and have undertaken eradication efforts. The species feeds on mammalian and bird blood and needs blood to nurture developing eggs. They are found naturally in bat caves, but they can quickly adapt to human dwellings. Their peculiar means of mating is by "traumatic insemination" wherein the male injects semen by penetrating the body wall of the female. Sperm migrates to eggs through the hemolymph. Bed bugs can hide in a variety of locations during the day, such as in picture frames and bed posts, and they crawl to feed at night. Dogs have recently been trained to sniff out bedbug locations in bedroom problem cases, and this recourse has proven to be 95% successful. Adult bed bugs can crawl up to 20 feet to and from hiding areas to reach their victims (bloodmeal hosts). Feeding, which lasts three minutes for the youngest nymphs and 10-15 minutes for adults, will usually leave an itchy red welt on a host. Incredibly, nymphs can go 1-6 months and adults can go 500 days without feeding. Some reasons for the dramatic increase in bed bugs in recent years include (1) the lack of tight seals in current-day houses and furniture, (2) current residual poisons are less

potent and less persistent than those used 10 years ago, (3) insecticide baits are used almost exclusively now for insect pests such as roaches and ants, but these have no effect on bed bugs, and (4) foreign travel to countries where bed bugs were always common is much more frequent and conducted by a much larger segment of the population compared to years ago. Harold brought in several containers of live bed bugs for display and inspection.

The final talk entitled “Basimentos Island, Panama – Paradise Lost?” was presented by Fred Paras, who made a return visit to Panama in early 2007 after his earlier visit in 2006. Fred first told of his visit to Panama City on the Pacific Ocean side, and he reviewed some of the city’s historical facts. Panama was first crossed in 1510 by Balboa who claimed the Pacific Ocean for Spain. The site of Panama City was settled by the Spanish in 1519 but was sacked by the British privateer Henry Morgan in 1570. Fred then told of some of the scenic attractions he visited. These included downtown areas, the Manuel Noriega palace, Panama Viejo the site of the Old City, the monument and tourist area Casco Antiguo, and the Bridge of the Americas. Climbing cacti (*Epiphyllum* sp.) were common in trees in the city. Near the city are several scenic islands connected by a causeway constructed from dredge material during the canal construction. The Panama Canal construction was started in 1880 by the French, who had to withdraw due to mosquito-borne diseases among its workers. The construction was completed later in the early 1900’s by the United States, after learning to use quinine successfully to combat malaria and also to implement effective mosquito control measures in worker areas. The first ship passage through the canal was in 1914. The canal is 51 miles long and includes a series of three locks that rise up to and down from Lake Gatun, a 32-mile-long lake in the Panamanian interior. On the Caribbean side, Fred visited an archipelago of mainly uninhabited islands in the western province of Bocas del Toro near Panama’s border with Costa Rica. A couple of these islands have small hotels and other amenities on the water’s edge. The Terminalia tree (*Combretaceae*), with an almond-tasting nut within its fruit, occurs in this area. Between the islands, there are swift water currents, abundant and beautiful coral reefs, and clear fresh seawater. Thus, scuba diving is ideal, and Fred engaged in this activity on several occasions. Basimentos Island occurs here, and Fred visited this and one of its real

estate beach villa ventures call Red Frog Beach. Many units have been constructed and sold here for \$500K to \$700K each in spite of the builder paying the original owner only about \$300K-\$400K for the entire beachfront and land area. A marina has been constructed and more lots are planned. Drinking water is piped in from the mainland. The other side of the island is National Park land which consists of thick lush jungle with a rich diversity of flora and fauna, including beautiful insect species. Of particular interest are the namesake poison dart “Red Frogs,” which can be found with careful searching. Fred informed us that, unfortunately, drainage from the hillside development through the beachfront may inevitably destroy the beautiful coral reefs that occur just off the shoreline here in spite of their significance as a major attraction and natural treasure of this area. The entire venture can be viewed with pictures through their website at <http://www.redfrogbeach.com/> .

Respectfully submitted,
Richard H. Smith
MES Secretary

Announcements

1. Gene Scarpulla should be congratulated and thanked for successfully compiling, publishing, and distributing the Maryland Entomologist, Vol. 5 (No. 1), Sept. 2009. It includes five very good articles on ants, several groups of beetles and the mosquitoes reported from Maryland.
2. MES member, Steven W. Lingafelter has recently (2007) authored a “An illustrated Guide to the longhorned woodboring beetles of the eastern United States,” Special Publ. No. 3, Coleopterist’s Society. Nomenclature in this guide follows Cerambycidae of the Western Hemisphere by Monne and Hovore (2006). It includes >800 colored images of 377 species. This book can be ordered directly from the Coleopterist’s Society (on demand printing only) at www.coleopsoc.org, or from BioQuip Products, Inc., at: www.bioquip.com .
3. Surplus ethyl acetate. Gene Scarpulla reports that he has more ethyl acetate than he is likely to use in his remaining lifetime. He would like to sell two (2) quarts, at \$5.00 per quart, to the first interest party. If interested, please e-mail Gene at ejscarp@comcast.net and he can bring the ethyl acetate with him to the Friday, October 16, MES meeting.

4. Distributing this newsletter by e-mail saves costs of printing and mailing, and allows rapid distribution of information. Members with no current e-mail address will still be sent hard-copies for the foreseeable future. For questions, please contact any person listed at the bottom of the first page. **Also** please provide your current e-mail address. Dues for 1 Oct., 2009 through 30 Sep., 2010, are **\$10.00/year**. Please send dues & any address or other corrections to:

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

5. Regular MES meetings are held the 3rd Friday of each of 6 months each year: Oct., Nov., Feb., Mar., Apr. & May (parallel to UMBC's academic year). The remaining meetings for the 2009 "MES year" include:

<u>month</u>	<u>date</u>	<u>speaker</u> (if known)	<u>topic</u>
Oct. '09	16 th	Dr. Joseph Bischoff	(See First Page)
Nov '09	20 th	TBA	TBA
Feb. '10,	19th	TBA	TBA
Mar. '10,	19 th	TBA	TBA
Apr. '10,	16 th	TBA	TBA
May. '10,	21 st	TBA	members' pot pourri

6. The **Audubon Naturalist Society** (ANS) offers many nature events & experiences for all ages. They are currently featuring their Green Institute Workshop series. Their latest workshop was an "Introduction to green building materials and products." You can go to <http://audubonnaturalist.org/Images2/registrationform.pdf>, for access via links to most of their offerings. They still offer special school programs, the Naturalist News, and a 40+ page catalog of Nature Activities (as a PDF file). Some events, classes, or bird walks are free, but most require pre-registration & a fee. For more details, or to volunteer or to register for specific events or programs at any of their three wildlife sanctuaries: Woodend, Rust, or Webb, call them at: (301) 652-9188, ext. 10, or go to their website at: "www.AudubonNaturalist.org".

7. The **Washington Area Butterfly Club** (WABC) website still offers a variety of information and links to local resources, but there have apparently been no new postings since late Spring, 2009. Their address and contact points are posted there, but there is nothing new (regarding meetings or activities). That website is now listed as: <http://users.sitestar.net/~jmfarron>. Their address is still listed as: Long Branch Nature Center, 625 South Carlin Springs Rd., Arlington, VA. And a main contact person is still listed as Pat Durkin at:

(202) 483-7965, or at: plusultra@aol.com.

8. The **Maryland DNR** website this month features an on-line nursery, snakes of Maryland, some special (kids') Hallowe'en programs (see posted calendar for dates, sites, *etc.*), & a special program entitled: "Bugs", by Sue Weise, at Elk Neck State Park, Cecil Co., Sat., Oct. 17. For details, go to: www.dnr.state.md.us.

9. Additional websites worth checking include:

- the USDA website, <http://soils.usda.gov/education>

- the National Aquarium (in Balto.), "www.aqua.org"

- the Maryland Science Center, "www.mdsci.org"

- The U.S. Centers for Disease Control and Prevention (CDC) www.cdc.gov (then search by topic)

- The Jug Bay Nature Center, at Jug Bay, Lothian, MD. at: www.jugbay.org, or call (410) 741-9930.

- The Patuxent Research Center, Laurel, MD; go to: www.fws.gov/northeast/patuxent/vcdefault.html, or call: (301) 497-5510 for program details & to register.

10. There are many opportunities to take part in a wide range of "Octoberfest" & Hallowe'en festivities & events in Baltimore, Washington or central Maryland area. For current details on various topics for central Maryland & DC; like sports, restaurants, special events, & ads, check out the "**What's Up? Annapolis**" magazine. They have a live "harbor cam". For a free subscription mailed to your home (limited to Annapolis & surrounding areas), or for specific info., contact them at: What's Up?, Inc., 929 West St., Suite 208A, Annapolis, MD 21401; call: (410) 267-9390; or go to: www.whatsupmag.com.

11. Current (Society Year 2009) MES Officers

President	Fred Paras
Vice-President	Phil Kean
Secretary	Dick Smith
Treasurer	Ed Cohen
<u>Md. Entomologist</u> Editor	Eugene Scarpulla
Historian	Bob Bryant
Faculty Sponsor	Bob Platt
Newsletter Editor ('10)	Harold Harlan

Printed on recycled paper