

Phaëton

The Official Newsletter of the Maryland Entomological Society

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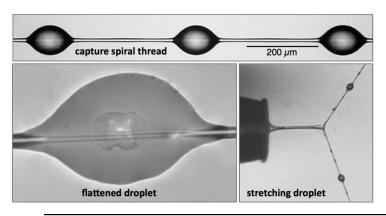
WEBSITE: http://www.mdentsoc.org/

April Meeting Pre-Announcement

The Maryland Entomological Society's 316th regular meeting will be held **Friday**, 21 April, 2017, at 8:00 pm, in Room 004 (one floor below the street level), **Biological Sciences Building**, University of Maryland Baltimore County (UMBC). Bring a friend, specimens, observations, or books to share. Refreshments will be provided. Presentations are scheduled to begin at 8:15 pm.

Speaker: Sarah Stellwagen, Ph.D. Postdoctoral Fellow, Army Research Laboratory, ORAU (Oak Ridge Associated Universities)

Title: "Mechanical and Molecular Structure of Orb-Weaving Spider Capture: Spiral Glue Droplets and Their Relationship to Web Architecture"



Abstract. Many orb-weaving spiders deposit a sticky glue onto the silk spiral threads of their webs. The glue aids in prey capture and is responsive to environmental conditions, instantly adapting to humidity and temperature. Spiders also differentially deposit the glue across the web's area, increasing glue amounts in some regions, while reducing it in others. The repetitive silk-family gene responsible for the glycoprotein composing the glue is not fully sequenced or understood.

Bio. Sarah received her Bachelor of Arts in Biology and Master's in Entomology from Clemson University in Clemson, South Carolina. She received her Ph.D. in Biology from Virginia Tech in Blacksburg, Virginia. She is currently investigating spider silk glues at the Army Research Laboratory in Adelphi, Maryland, as a postdoctoral fellow.

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 the Chef Paolino Café located at **726 Frederick Rd**, Catonsville, MD 21228. If you plan to go to dinner, please email Fred Paras at bugandrockman@msn.com by noon on the day of the lecture. Fred will make a reservation for the group. Please meet at the restaurant promptly at **6:00 p.m**.

VACANCY FOR MES SECRETARY

We are requesting members to consider filling the vacant post of secretary of the MES. Primary responsibilities include taking and preparing meeting minutes, including summaries of lectures. If you are interested, please contact society president Fred Paraskevoudakis at bugandrockman@msn.com

WELCOME TO NEW MEMBERS

MES welcomes the following new members to the Society:

Terry L. Erwin Jeanna Hoffman Thomas M. Onuferko **Daniel Perez-Gelabert** Laura A. Russo Gary D. Ouellette

Washington, DC Baltimore, MD Ottawa, ON, Canada Rockville, MD **Dublin, Ireland** Takoma, WA

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.

Hanna M. Kahl

17 MARCH 2017 MES MEETING MINUTES

The 315th regular meeting of the Maryland Entomological Society was held on Friday, 17 March 2017, and began at 8:25 p.m. with the scheduled lecture, summarized below. There were 12 members present and 14 guests attending. MES Treasurer, Ed Cohen, reported that the current general funds balance was \$5,168. The members also briefly discussed the possibilities of a spring field trip, which will be discussed further and voted on during the April meeting. Respectfully submitted, Fred Paraskevoudakis- MES President

17 MARCH 2017 MES LECTURE

Speaker: Daniel E. Perez-Gelabert, Ph.D. Research **Biologist, Integrated Taxonomic Information System** (ITIS) and Research Collaborator, Department of Entomology, National Museum of Natural History, Smithsonian Institution, Washington D.C. Title: "Entomological Adventures in the Caribbean"

Dr. Perez-Gelabert spoke about the Caribbean Orthopterid fauna with particular regards to those in Hispaniola. As an introduction he gave a brief geographical orientation of the various islands which constitute the Greater Antilles, the Bahamas and the Lesser Antilles describing their land masses and geological origins. While the Bahamas lie on a Karst platform, Cuba, Jamaica, Hispaniola and Puerto Rico are of volcanic origin. The geology of Hispaniola which consists of North, South, Central and Eastern major mountain chains and varied coastal regions create a mosaic of numerous distinct ecological biomes and specialized habitats. As a result there is a high degree of endemism seen in the insect taxa there. These biomes include: wet forest, karst forest, mountain, dry, pine, and mixed wood forests, as well as coastal scrub.

Of all the Caribbean islands, the insect fauna on Hispaniola has the greatest diversity and highest degree of endemism, particularly seen within the Central Cordillera mountain range. Dr. Perez-Gelabert provided data indicating the percentages of endemic species for all animal taxa found throughout Hispaniola. For reptiles 83% of the 147 species were endemic whereas it was 97% endemic for the 67 species of amphibians. Bird and plants species were approximately

about one-third endemic. The arthropods on Hispaniola have likewise diversified and currently 37% of known species are endemic. The Hispaniolan Arthropod checklist published the number of overall known insect species as 5,676 in 2008 and this number rapidly increased to 6,355 by 2013. Among these the Coleoptera have a greater than 50% endemism including

Similarly, the research work done by Dr. Perez-Gelabert has yielded numerous new and endemic species of Orthopterids. He provided many examples of his discoveries including a Pyrgomorphid grasshopper Jaragua serranus (1995), 2 species of wingless Episactidae (1997 & 2001), over a dozen new Tetrigidae and many new genera of Acrididae. Of the latter group, a particularly interesting species in the genus Tergoceracris was found to have a furcula or a "sex ornament" found on the males. Dr. Perez-Gelabert stated that the Caribbean cricket fauna, which had been historically understudied, now numbers at about 585 species of which 539 are island species, with 221 occurring in Hispaniola. Of these, 458 are recently discovered new species within 53 genera. Likewise many additions have been made to the known fauna of the Tettigoniide, or katydids.

The research into other orders has yielded numerous new species as well and among these Dr. Perez-Gelabert mentioned that 53 new species of robber flies (Asilidae) have been documented in the Caribbean and Hispaniola. Interestingly, some of this work was conducted by former Towson University professor and MES member Aubrey Scarborough.

As previously mentioned, the species richness in Hispaniola is due to numerous specialized and biologically isolated biomes which occur on the island. Some of these locations were featured in the presentation and included Pico Duarte (the highest mountain), La Pelona, Beata Island, and the Ebano Verde Reserve. Faunal surveys in the Ebano Verde reserve alone has yielded 350 species in 12 orders, a loud testament to the species richness of Hispaniola.

Several conservation issues, which contribute to the decline in the biota of Hispaniola as well as elsewhere in the world, were brought up in the lecture. Since landmass is more limited, island biota tend to suffer losses more significantly than mainland biota. These problems stem from anthropogenic activities such as habitat destruction and deforestation, illegal agriculture in protected areas, illegal mining, particularly mining of gravel and sand from rivers and beaches, charcoal production, and pesticide use.

Future work that Dr. Perez-Gelabert will conduct includes more taxonomic work on Orthopterids and Phasmids (stick insects), an inventory on the Heteroptera (stink bugs, etc.), and an update on the Arthropod checklist previously mentioned. He also plans to further survey the specialized forest and biomes of Hispaniola such as Ebano Verde. Through his prodigious efforts, to date he has cataloged several hundred new species and will undoubtedly contribute many more in the future. MES members extend their thanks and gratitude for the informative lecture he gave.

Respectfully submitted, Fred Paraskevoudakis- MES President

April 2017

IN MEMORY OF JEAN WORTHLEY

Jean Worthley, born in Pasadena, California, on February 23, 1925 died of natural causes in her sleep at her Finksburg home on Sunday night April 9. Jean was the mother of 6 children, the wife of botanist Dr. Elmer George Worthley, author of the Complete Family Nature Guide, producer and star of Maryland Public Television's Hodgepodge Lodge (1970-1977), a conservationist, and a lifelong advocate of outdoor education.

Jean was home-schooled by her mother using the Calvert School System at Lone Hickory, the Reese family farm in Owings Mills. She was secretary of the local Shakespeare Society and president of her 4-H club. Jean graduated from Franklin High School before entering Goucher College at the age of 15.

Graduating from Goucher College with a degree in biology on D-Day, June 6, 1944, Jean joined the WAVES (Women Accepted for Volunteer Emergency Service) on V-E day. She attended officer candidate school and was a cryptographer. After her stint in the WAVES, Jean enrolled in the Master's program at University of Massachusetts, Amherst on the G.I. Bill. There she met her future husband, Elmer, and obtained her master's degree in zoology and entomology. Later, she and her husband were graduate students at the University of Maryland before moving back to Lone Hickory Farm in Owings Mills.

Jean founded two Episcopal nursery schools, one at All Saints' Church in Reisterstown, Maryland, and the second at St. Thomas' Church in Owings Mills. After 13 years of teaching preschool and inspired by the building of the new Maryland Center for Public Broadcasting right next to Lone Hickory Farm, she applied for a job there. She became executive producer for children's programming and starred in the popular nature show Hodgepodge Lodge (1970-1977) and later in a show for adults, On Nature's Trail, with Elmer. Later in her life, she was honored with a "Star" on the celebrity walkway for her contributions at MPTV. With friends William and Frances Fastie, Jean and Elmer began an informal nature club in the 1950's, often organizing field trips to Soldiers Delight to bird, botanize, and study the serpentine barrens, where she had picnicked as a child. With the Fasties and many others she and Elmer worked hard to help create the Soldiers Delight Natural Environment area. The Worthley Botany Class, which was founded by Elmer in 1971 and continued by Jean after his death, last met only one week prior to Jean's death at "Two Below," Jean's beloved home, discussing "Spring Flowers" in a class session which among things included identification of Arabis sturii, discussion of the role of ants in seed distribution, and a short reading from "A Sand County Almanac". As always, Jean was sharp as a tack.

Jean tirelessly supported Soldiers Delight, the Oregon Ridge Nature Center, Cylburn Arboretum, and the Irvine Nature Center. She was a longtime member of the Natural History Society of Maryland, the Maryland Entomological Society, the Maryland Ornithological Society, the Brooks Bird Club, the Maryland Horticultural Society, the Josselyn Botanical Society of Maine, Maryland Native Plant Society and many other nature-centered organizations.

On a more personal note, Jean was very well known in the area and resource for botany and natural history. Most remarkably, she was a very rare and unique individual who opened her home to a committed group of botany students on Saturdays for 40+ years. Jean was warm, welcoming, and befriending to anyone who wanted to learn. Her home was a focal point for many people who became friends and grew to know each other over decades of informal botany class gatherings. It was a "come as you are" kind of place where folks could wander around the ponds and trails on 18 wooded acres planted with many exotic plants and trees. Large amounts of plants and cuttings would frequently be brought inside, amid all the books, passed around the living room one by one for close examination and study. Her down-to-earth living, wisdom, open mindedness and expertise in natural history will be sorely missed. Those who knew her can all say that she was the kind of person who you meet only once in a lifetime and whose departure leaves a large void. We all take from her many lessons, much learning and a myriad of wonderful experiences and fine memories. She was my teacher and mentor, neighbor, and most of all, my friend. Respectfully submitted, Fred Paraskevoudakis- MES President

INSECTS OF INTEREST

- Cicindela purpurea Oliver (Cicindelidae)
 I collected a single individual of this species on 20
 April, 2016 in Allegany County in the Green Ridge
 State Forest. Although this species has an extensive
 range in the eastern U.S., it is very rare here in
 Maryland. This is only the second specimen I have
 encountered in nearly 40 years of collecting in our
 state. Oddly enough, I collected it in nearly the exact
 same spot where I got my first one some 33 years ago
 (May 14, 1983). It was at the southern end of Piclic
 Road.
- 2) Neoclytus horridus (Leconte) (Cerambycidae) This species was found on 17 April, 2016 in Anne Arundel County at Wayson's Corner near Jug Bay. I suspect this species is in collections since it emerges earlier in the spring than most other longhorn beetles.
- 3) Saperda imitans Felt & Joutel (Cerambycidae)
 I collected this rather uncommon species on 9 June,
 2016 in Allegany County near White Sulphur Pond in
 the Green Ridge State Forest. This species is often
 confused with the closely related and much more
 common species Saperda tridentate (Oliver) to which
 it bears a striking resemblance.

Respectfully submitted, PhilipKean – MES Vice President



ENTOMOLOGICAL SOCIETY OF WASHINGTON PUBLIC MEETING

Thu, 4 May 2017; 7:00 p.m.

Topic: TBA

April 2017

Speaker: TBA

National Museum of Natural History, Smithsonian Institution,

Washington, DC http://entsocwash.org/



Central Maryland Beekeepers Association

Supporting and promoting beekeepers and the viability of honeybees in central Maryland

MEMBERS MEETINGS

Tue, May 2, 2017

Speaker: Hartmut Doebel of George Washington University.

Topic is TBA.

Tue, 6 June, 2017; 7:00 p.m.

Speaker: **Devra Kitterman**, beekeeper, CMBA member, and landscape architect, speaks on how to turn your lawn into a

garden of the best plants for pollinators.

Tue, 11 July, 2017; 7:00 p.m.

TBD

Members meetings are held at the Oregon Ridge Nature Center, 13555 Beaver Dam Road, Cockeysville, MD.

Additional information can be found at:

http://www.centralmarylandbees.org/meetings-3/membership-

meeting-schedule/

AMERICAN ENTOMOLOGICAL SOCIETY PUBLIC MEETING

Wed, 26 April 2017; 7:00 p.m.

Speaker: TBA Topic: TBA

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

UNIVERSITY OF MARYLAND DEPARTMENT OF ENTOMOLOGY COLLOQUIA

Fri, 21 April 2017, 12:00 p.m.

"The Maryland Native Pollinator Survey: combining Citizen Scientists with a specimen collection to determine the floral preferences of Maryland's native pollinators" Olivia Bernauer (van Engelsdorp Lab, Department of Entomology, University of Maryland College Park)

Fri, 28 April 2017, 12:00 p.m.

"Decoding mosquito attraction to humans using genomeengineering"

Conor McMeniman, Ph.D. (Assistant Professor, Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health)

Fri, 5 May 2017, 12:00 p.m.

"Field crop insect pest management in a Bt era"

Dominic Reisig, Ph.D. (Associate Professor and Extension Specialist of Entomology, North Carolina State University)

Fri, 12 May 2017, 12:00 p.m.

TBD

Margarita Lopez-Uribe, Ph.D. (Assistant Professor,

Department of Entomology, Penn State)

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

INSECT CHEMICAL ECOLOGY - SHORT COURSE

Wed, Tue, 31 May – Wed, 14 June 2017 Penn State University, State College, PA

Penn State University's Center for Chemical Ecology is pleased to announce a two-week-long summer course in Insect Chemical Ecology called ICE 17 that will be conducted on the Penn State campus. The course will feature guest lectures by, and discussions with, 24 different chemical ecology experts from around the world.

ICE 17 is a continuation of the highly successful ICE short course series that began at the Swedish Agricultural University at Alnarp (SLU Alnarp) in 2003 and now rotates annually between Penn State, SLU Alnarp, and the Max Planck Institute for Chemical Ecology in Jena, Germany.

Each day, students will hear lectures by different international experts and have small group discussion sessions with them in an informal setting. There will be a field trip to fruit orchards in southern Pennsylvania to see applied uses of semiochemicals in successful commercial-grower IPM settings. Also, there will be laboratory demonstrations with opportunities for hands-on experience with a variety of techniques in semiochemicals research.

The early registration fee will be \$650 US if students register on or before March 31, 2017. After 31 March, the registration fee will be \$750 US. The registration fee covers enrollment in the course, a day-long field trip to Southern Pennsylvania orchards, the farewell banquet, and coffee, tea, and snacks at the coffee breaks. The course will be on a first-come first-serve basis and enrollment will be capped at 50 students. Graduate students will have priority, but post-docs and others will be accepted as well if there is room. Full refunds will be issued to cancellations received by May 15.

TO REGISTER and for further information: Please visit http://agsci.psu.edu/ice

2016/2017 PROPOSED MES EVENT SCHEDULE

Regular MES lecture/meetings are held at the University of Maryland Baltimore County (UMBC) on the 3rd Friday of each of 6 months coinciding with UMBC's academic year. Proposed events for the upcoming MES membership year are:

Date Speaker Topic

Sep 18 <u>Crab Feast/Meet-&-Greet</u> at J. KING'S Restaurant

Oct 21 Seán Brady Entomological Collections: New Uses

Nov 18 <u>David O'Brochta</u> Genetic Technologies

Feb 17 Hanna Kahl Effects of Living Mulch on Arthropods

Mar 17 <u>Daniel Perez-Gelabert</u> Entomological Adventures in the Caribbean

Apr 21 Sarah Stellwagen Insect Glue

May 19 Members' & Students' Presentations & Elections

TBD <u>Survey/Field Trip</u>

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OCT 2016-SEP 2017 MES MEMBERSHIP YEAR OFFICERS

President Frederick Paras
Vice President Philip J. Kean
Secretary (vacant)

Treasurer Edgar A. Cohen, Jr.

Historian (vacant)

Faculty Sponsors Frank E. Hanson & Austin P. Platt

Journal Editor Eugene J. Scarpulla E-newsletter Editors Aditi Dubey & Hanna Kahl

SUBMITTAL DEADLINES

MAY 2017 issue of the *Phaëton*:

Please send member news items by 5 April 2017. Send e-newsletter drafts to Aditi at aditid26@gmail.com and/or Hanna at hkahl@umd.edu

SEPT 2017 issue of *The Maryland Entomologist*:

Please send first drafts of articles and notes to Gene Scarpulla to ejscarp@comcast.net by 1 April 2017.

THE FLY By William Blake

Little Fly Thy summer's play, My thoughtless hand Has brush'd away.

Am not I A fly like thee? Or art not thou A man like me?

For I dance And drink & sing; Till some blind hand Shall brush my wing.

If thought is life And strength & breath; And the want Of thought is death;

Then am I A happy fly, If I live, Or if I die.