



Phaëton

The Official Newsletter of the
Maryland Entomological Society

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May Meeting Pre-Announcement

The Maryland Entomological Society's 317th regular meeting will be held **Friday, 19 May, 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**.

MEMBERS POTPOURRI NIGHT

Speaker: Fred Paraskevoudakis, President -Maryland Entomological Society. Professor -Natural and Physical Sciences department, Baltimore City Community College, Baltimore, MD.

Title: "Cloud Forests and Jungles: A naturalists' travels through Southern Colombia"

Abstract. Southern Colombia has a myriad of mountains and lowland jungles that host an incredible diversity of insect species. It is believed by some biologists that there may be more butterfly species there than any other biological hotspot area in the Neo-tropics. Indeed as further research is conducted, new species are discovered with some regularity. This discussion will show some of the scenic locations and biomes that are found throughout this region as well as examples of the flora and fauna. There will be commentary on cultural aspects, farming, and everyday life as the travelling begins from Bogota and goes all the way down to Putumayo province with various stops along the way.

Speaker: Mr. Philip Kean, Vice President -Maryland Entomological Society.

Title: "Rare Insects from Green Ridge State Forest, Allegany County, MD"

Phil Kean, a long term member of the Society, has been an avid collector of Maryland insects for more than 40 years. Throughout that time one of his favorite collecting sites has been the Green Ridge State Forest located in eastern Allegany County. Many of Maryland's rarest butterflies and a host of other scarce and unusual insects can be found there. For our May meeting' he will review some of his favorite "catches" from the area and give us an update on the current status of some of the rarer species known in the region.

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:

Sarah D. Stellwagen Silver Spring, MD

21 APRIL 2017 MES MEETING MINUTES

The meeting convened on Friday, April 21, 2017 at 8:30 PM. The lecture by Sarah Stellwagen, Ph.D., is summarized below. An abstract appears in the April Phaeton (volume 37, no. 7). In attendance were 11 members and nine guests. Ed Cohen, MES Treasurer, reported the current account balance as \$ 5,228.96. Old business and the March lecture were summarized. New business discussed was the date and place of the annual field trip. Members mentioned and reminisced about prior trips to sites in Garrett County and the Conowingo Dam area. Green Ridge State Forest was decided upon and the date is Saturday, June 17, 2017 (rain date: Sunday, June 18). Phil Keane entered the motion and Ed Cohen seconded.

Also under the heading of new business:

- Gene Scarpulla stated that there are seven submittals for the next issue of Maryland Entomologist (three on beetles, two on bees, one on wasps, and one on moths).
- Fred Paraskevoudakis is assisting Gloria Smith (widow of Dick Smith, MES member) in disseminating Dick's entomology possessions.
- Fred also reminisced about MES member, Jean Worthley, who died on April 9. Fred wrote a memorial article about her in the previous issue of the Phaeton.
- Member Richard Robbins donated Army Entomology Jamboree patches and back issues of the Maryland Entomologist.
- Speakers for the May meeting were sought.

The meeting adjourned at 11:00 PM.

Respectfully submitted, Janet Lydon

21 APRIL 2017 MES LECTURE

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

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

Dr. Stellwagen prefaced her talk with a recollection of her childhood interest in arachnids, and presented a photo of her pet tarantula, Clawdia. Clawdia lived from 1998 to 2015, and was a few weeks shy of 17 years of age at her death.

The speaker then discussed her studies of spider web threads and the glue deposited on them. The glue, originating from the spinnerets in the spider's abdomen, inhibits the escape of prey from the web. She studied the effects of temperature, humidity, and ultra violet (UV) radiation upon the tensile strength and fibroelasticity of orb-weaving spiders' capture threads. In the UV portion of her study, she also examined the effect of habitat (sun, partial sun, partial shade, and shade) on the glue performance and the correlation of habitat and

susceptibility to UVB damage. Throughout the talk, Dr. Stellwagen displayed photographs of her spider subjects and their spinnerets, and explained her collection techniques. She also explored the differences between areas of the web and the glycoprotein content.

She ended her talk with a discussion of amino acid sequencing of spider fibroins.

At the end of her talk, Dr. Stellwagen revealed her dream of creating and selling "spider glue." This could be sprayed on and can trap pest insects on crops or in barns, and since it is water-soluble, it can be washed away easily.

In conversation after her talk, Dr. Stellwagen commented that the strongest spider glue is found in a species in Madagascar.

Respectfully submitted, Janet Lydon

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

- 1) *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, Philip Kean – MES Vice President



ENTOMOLOGICAL SOCIETY OF WASHINGTON PUBLIC MEETING

Thu, 1 June 2017; 7:00 p.m.

Topic: TBA

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, 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, July 11, 2017

Speaker: TBA

Topic: TBA

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/>.

NATIONAL POLLINATOR WEEK 2017

19-25 June 2017

Pollinator Week was initiated and is managed by the [Pollinator Partnership](#).

Ten years ago the United States Senate's unanimous approval and designation of a week in June as "National Pollinator Week" marked a necessary step toward addressing the urgent issue of declining pollinator populations. Pollinator Week has now grown to be an international celebration of the valuable ecosystem services provided by bees, birds, butterflies, bats, and beetles. The growing concern for pollinators is a sign of progress, but it is vital that we continue to maximize our collective effort. The United States Secretary of Agriculture signs the proclamation every year. Additional information can be found at: <http://www.pollinator.org/pollinatorweek/>.

YOUTH INSECT SUMMER CAMP

The University of Maryland [Entomology Department](#) will be running a **Youth "Insect Camp" this summer!** Campers will

gain experience with insect science both in the field and in the lab, and they will come away with an understanding of the important relationships between humans and insects. The camp is run in two sessions:

Session 1: June 26 - 30, ages 7 - 12

Session 2: July 10 - 14, ages 7 - 12

There are still spots available in either session, but the deadline for registration is approaching fast: [June 10](#).

Additional information can be found at: <http://entomology.umd.edu/insect-camp.html>

**NATIONAL MOTH WEEK 2017
Invites Citizen Scientists to Celebrate Moths**

22-30 JULY 2017

Registration is in full swing for the fifth annual National Moth Week 2017, a global citizen-science project that celebrates the beauty, diversity and ecological importance of moths. This year, National Moth Week will celebrate tiger moths, members of the Arctiinae subfamily of the Erebidae family of Lepidoptera. Events will take place worldwide and anyone can participate in National Moth Week. Moth-ers can [submit](#) their photos and data to NMW's partner organizations, as well as the NMW [Flickr group](#), which now has nearly 70,000 photos of moths from around the world. Anyone can register a public or private event or find one to attend in their area by checking nationalmothweek.org for public events. Registration is free to individuals, groups and organizations.

More information can be found at: <http://nationalmothweek.org/2017/01/15/registration-now-open-for-national-moth-week-2017-july-22-30-celebrating-beautiful-tiger-moths/>.

CHARLESTON CBP INTERCEPTS TWO INSECT PESTS

A 4 May 2017 United States Customs and Border Protection (CBP) news release reports that U.S. Customs and Border Protection (CBP), Office of Field Operations, at Charleston seaport announced the interceptions of a species of long-horned beetles and a species of "globular springtail" insects from a recent shipment into the port. CBP discovered the beetle March 11 in a container of 1,500 cases of fresh pineapples. CBP secured the pineapple shipment for fumigation, and submitted the pest specimen to the local USDA entomologist for identification.

The freight arrived in late April from Italy and the insects, in various stages of growth including larvae and adults, were discovered nestled into wood pallets and plastic wrap in a shipment of wine destined for a South Carolina based distributor.



Larva of the long-headed bore (Cerambycidae).

The long-horned beetle larvae, which belong to the Cerambycidae family, are commonly called "round-headed bores." When introduced to a new environment, they can cause extensive damage to living trees and untreated lumber or wood used in buildings and other structures.



Globular springtail of the family Sminthuridae Intercepted by CBP.

The globular springtails, from the Sminthuridae family, consume native plants, fungi and algae, causing plant damage and stripping environments of food sources usually reserved for native species.

The full news release can be accessed at: <https://www.cbp.gov/newsroom/local-media-release/charleston-cbp-intercepts-two-invasive-pests>

BALTIMORE CBP ENDS DESTRUCTIVE KHAPRA BEETLE'S GLOBE-TROTGING WAYS

U.S. Customs and Border Protection (CBP) agriculture specialists put an end to the globe-trotting ways of one Khapra beetle that arrived in Baltimore May 4 in a shipment of screws from Thailand, a non-Khapra beetle nation.

The Khapra beetle is considered one of the world's most destructive insect pests of grains, cereals and stored foods and remains the only insect in which CBP takes regulatory action against even while the insect pest is in a dead state.



Baltimore CBP specialists intercepted a Khapra beetle like this one.

CBP agriculture specialists discovered four cast skins and one live adult beetle while inspecting the shipping container. CBP submitted the specimen to the U.S. Department of Agriculture (USDA) entomologist who confirmed on Wednesday that the specimen was *Trogoderma granarium* Everts, commonly known as Khapra beetle.

The full news release can be accessed at:

<https://www.cbp.gov/newsroom/local-media-release/baltimore-cbp-ends-destructive-khapra-beetle-s-globe-trotting-ways>

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	<u>Seán Brady</u>	Entomological Collections: New Uses
Nov 18	<u>David O'Brochta</u>	Genetic Technologies
Feb 17	<u>Hanna Kahl</u>	Effects of Living Mulch on Arthropods
Mar 17	<u>Daniel Perez-Gelabert</u>	Entomological Adventures in the Caribbean
Apr 21	<u>Sarah Stellwagen</u>	Insect Glue
May 19	<u>Members' & Students' Presentations & Elections</u>	
TBD	<u>Survey/Field Trip</u>	

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

June 2017 issue of the Phaëton:

Please send member news items by 6 June 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 ASAP.

SPRINGTAIL

By Peter N. Lawrence

Springtail is an erroneous name,
For delightful arthropod, of soil habit fame.
They have no tails but two fused pegs,
That are nothing but a pair of abdominal legs.

Each of the pair has dental hooks,
Endopodites in the Crustacean books.
Certainly some Collembola perform beautiful jumps,
Or springs in the air, over tiny soil humps.

Some of the order have no such ability,
But they wiggle and worm with utmost agility.
Anurida maritima is a springless type,
But seven thoracic segments are marked with a stripe.

On the head of many Collembola are four feelers,
A pair rather longer & post antennal dealers,
With lobes increasingly complex with depth of soil,
Yet once doubtless as antennal apex did toil.

A further pair of abdominal legs are shorter still,
And form a ventral tube, protecting the gill.
So with the Collembola, some spring & some limp.
Morphology suggests they evolved from a "shrimp".

From sea to the land via Amphipod beach,
The gill-breathing, soil-water has much us to teach.
These ubiquitous creatures, with remarkable agility,
May play an important role in Soil Fertility.

The mental patient who advanced these ideas,
Is greeted with boos, is greeted with cheers.
If he is right and you take up his song,
Then Linnaeus, Darwin and Imms, they were wrong!