

Volume 41, Number 5

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#### MARYLAND ENTOMOLOGICAL SOCIETY FEBRUARY 2021 MEETING

## Title: Despicable Mites: Recent Findings in the Study of *Tropilaelaps mercedesae* and *Varroa destructor* Speaker: Dr. Samuel Ramsey, Researcher, USDA ARS

**Speaker Bio:** The infamous parasitic bee mite *Varroa destructor* can now be found nearly everywhere that honeybees can, making it the most widely distributed bee pest in the world. *Tropilaelaps mercedesae*, a closely related mite, seems to have similar aspirations for world domination as it expands both its geographic and host range. For the last 4 years, Dr. Ramsey's work has focused on correcting a more than half-century old error in our understanding of one of the most fundamental aspects of Varroa's lifecycle, namely, what it eats. His award-winning research on Varroa biology has changed the standing paradigm on how this parasite ultimately kills honeybees leading to opportunities to share his work nationally and internationally.



His work now centers on the poorly understood *Tropilaelaps* mite which is rapidly establishing itself as the next great threat to apiculture globally. Prior to the pandemic he was based in Thailand documenting the behavior, lifecycle, and vulnerabilities of this parasite, ensuring that in the event of its arrival in the US, we'll have the knowledge and resources to respond effectively.

Dr. Ramsey maintains a focus on how insect research can benefit the public through the development of IPM strategies and STEM-based outreach initiatives.

#### When: February 19th, 7:00 PM

Where: https://us02web.zoom.us/j/82154464108?pwd=bmJZWjdqbHh6SVIzZ3M0TW82ZkZnZz09 Meeting ID: 821 5446 4108 Passcode: 855654 Dial in: +1 301 715 8592 US (Washington DC)

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#### 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*.

> Frank G. Guarnieri Harry H. Pavulaan David W. Webb

## MINUTES OF THE 334th MEETING OF THE MARYLAND ENTOMOLOGICAL SOCIETY

#### 20 NOVEMBER 2020

The 334th general meeting of the Maryland Entomological Society convened via "ZOOM". At least 23 people were in attendance; it was difficult to determine an exact count due to people joining and leaving during the meeting. It was also difficult to obtain a precise member/guest tally, but at least 18 members attended. A brief business meeting followed the lecture, after many members had left the meeting. Treasurer Ed Cohen reported a balance of \$5,526.06 in the Society's account. He reported that he had recently received two membership renewals and dues payments. President Fred Paras discussed potential speakers and topics for future meetings. Gene Scarpulla, editor of The Maryland Entomologist, reported that two submissions are out for review, and one is ready for publication.

#### 20 NOVEMBER 2020 MES LECTURE

Speaker: Sam Droege, Native Bee Lab, Wildlife Biologist, Patuxent Wildlife Research Center, USGS

Title: Status of wild native bee populations in Maryland

Our speaker for the evening was Sam Droege, MES member and Wildlife Biologist at the Patuxent Wildlife Research Center. His biography appeared in the November 2020 issue of the Phaëton. As discussed in that profile, Mr. Droege is conducting a population survey of North American bees.

The focus of his talk revolved around how little is known of the species diversity, population numbers, and ranges of many species of North American bees. He showed slides depicting some of this data, which were obtained from his studies. He discussed the fact that many species are undercounted, due to the scarcity of individuals collecting and identifying bees. He contrasted this lack of data with that of ornithology, in which population surveys have occurred over more than 100 years. He also mentioned that museum records and collections do not provide numerically accurate historical data, as many museum collections focus upon rarities.

As already mentioned, this historical lack of observations leads to a lack of information about species numbers, ranges, and habitats. The proliferation of development in recent decades has resulted in altered habitats and a loss of biodiversity of plant species. Mr. Droege showed slides and data to illustrate this. He discussed the status of bee populations in Maryland and showed area maps depicting population numbers, as derived from his studies.

He commented that the American chestnut tree blooms later in the spring than many other flowering species and produces much pollen and nectar. The impact of that species crash, due to chestnut blight, upon the bee populations prevalent at that time is unknown.

He concluded his talk with commentary that the wildflower mixes planted by many homeowners attract common bee species just as bird feeders attract the common birds. We need to conserve plants to conserve bees, and we need more studies and observers to obtain more population data.

Respectfully submitted, Janet A. Lydon, MES Secretary

#### BRENT W. STEURY NAMES A NEW SOLDIER BEETLE

MES member Brent W. Steury has named a new soldier beetle species in honor of James L. Sherald, former Chief of Natural Resources and Science for the National Capital Region which manages National Parks in the Washington metropolitan area. The soldier beetle has been named Cantharis sheraldi Steury (Cantharidae). Details can be found in the 5 January 2021 issue of The Connection, available at:

http://www.connectionnewspapers.com/news/2020/sep/26/ne w-beetle-species-named-after-alexandria-resident/

The description of the new species was documented by Brent in "Cantharis sheraldi Steury (Coleoptera: Cantharidae: Cantharini), a New Species of Soldier Beetle from Virginia, USA" published in the 9 September 2020 issue of The Coleopterists Bulletin 74(3):601–604.

#### 'NEW SPECIES' PODCAST

Check out 'New Species', a new weekly podcast hosted by Brian Patrick, Professor of Biology at Dakota Wesleyan University, where he interviews authors of very recent papers in which new species are described. They talk about the new species themselves, how they got their names, and why the general public should care. The goal is to get a new episode out every Tuesday morning.

The podcast is available on nine platforms, and you can go to this one place to get to any of the nine (under Where to Listen): https://anchor.fm/brian-patrick30. For those interested in a more direct link, you can listen on Spotify here: https://open.spotify.com/show/56HiGeptNrDsP2mHdkLoAJ

- Episode 1 is about a new genus of microhylid frogs from Southeast Asia. The guest is Dr. Mark Scherz, a postdoctoral researcher at the University of Potsdam, Germany.
- Episode 2 is about several new species of opilionids (harvestmen or, to some, "daddy long legs") from New Caledonia. The guest is Dr. Gonzalo Giribet of the

#### Phaëton, the Newsletter of the Maryland Entomological Society

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Museum of Comparative Zoology at Harvard.

- Episode 3 is about a new species of fossil "alligator" from Texas. The guest is Dr. Adam Cossette, of the College of Osteopathic Medicine at the New York Institute of Technology in Jonesboro, Arkansas.
- Episode 4 is about new species of Happy Face spiders from Hawaii. The guest is Dr, Rosemary Gillespie, Director of the Essig Museum of Entomology and a professor at the University of California Berkeley.
- Episode 5 is an interview with Dr. Michael Sharkey about his paper in which he describes 403 new species of braconid parasitoid wasps. The episode will be available on Tuesday, February 16.



#### 2021 VIRTUAL ESA EASTERN BRANCH MEETING REGISTRATION NOW OPEN

The Eastern Branch Executive Committee is pleased to announce that this year's Virtual Eastern Branch Meeting, taking place March 22-24, is being offered free of charge to all ESA members.

Registration provides you with access to all live sessions and on-demand content for the Eastern, Southeastern, and Pacific Branch meetings.

View the Schedule-at-a-Glance for the Eastern Branch Meeting. Full schedule coming soon!

#### Eastern Branch Meeting: March 22-24 Southeastern Branch Meeting: March 29-31 Pacific Branch Meeting: April 5-7

Register now, here: https://online.entsoc.org/esassa/f?p=EVTSSA%3A4010%3A %3A%3A%3A%3AP0\_EVENT\_ID%3A1166%3A

For more information, visit: https://www.entsoc.org/eastern/2021-branch-meeting



#### UNIVERSITY OF MARYLAND DEPARTMENT OF ENTOMOLOGY COLLOQUIA

#### Fri, 19 February 2021, 12:00 p.m. Through Eight Eyes: Using Spiders as Bio-Indicators for Conservation and Environmental Studies

Dr. Chris Hawn (Assistant Professor of Geography and Environmental Systems, UMBC)

#### Fri, 26 February 2021, 12:00 p.m. Intricacies of the Soybean Stem Borer: Biology,

Management, and Effects on Yields

Dr. Raul Villanueva (Assistant Professor, Extension, University of Kentucky)

#### Fri, 5 March 2021, 12:00 p.m.

#### Macroevolution to Microbiomes: Piecing Together the Puzzle to Understand the Evolution of the Ants

Dr. Corrie Moreau (Moser Professor of Biosystematics and Biodiversity & Director & Curator of the Cornell University Insect Collection, Cornell University)

#### Fri, 12 March 2021, 12:00 p.m. TBA

Dr. May Berenbaum (Professor, Department of Entomology, University of Illinois)

Entomology colloquia can be accessed through this zoom link: https://umd.zoom.us/j/92018210735?pwd=L3VWcXZDUXBz NzIzWEVXbjd4RkdLdz09.

For additional information, go to: http://entomology.umd.edu/seminar-schedule.html



#### ENTOMOLOGICAL SOCIETY OF WASHINGTON FEBRUARY MEETING

#### Thur, 4 March 2021, 7:00 p.m.

"The Genus is Considered as One of Unusual Difficulty": Lessons from Eight Years Studying Sunflower Flies" Alaine Hippee (Doctoral Candidate) and Andrew Forbes (Associate Professor, Department of Biology, University of Iowa)

#### Zoom link:

https://us02web.zoom.us/j/89087674181?pwd=aU9UZWM4V 1JCdG1BVnRkbjQ5TEdZdz09

## Past virtual meetings of ESW can be found on YouTube at:

https://www.youtube.com/channel/UCb6ZOw1FsjWpN1wWp TLvceQ

#### **'EXPANDING HORIZONS IN LEPIDOPTERA RESEARCH' WEBINAR SERIES**

Please join the McGuire Center for Lepidoptera & Biodiversity at the Florida Museum of Natural History to hear about the latest advances in diverse fields of Lepidoptera research, including evolution, genetics, ecology, biology, and conservation, among others. Volume 41, Number 5

#### Thurs, 18 February 2021, 12:00 p.m. LABBOR: The Lepidoptera Lab at the University of

**Campinas, Brazil** André V. L. Freitas Lab (Universidade de Campinas, Campinas, São Paulo, Brazil)

#### Tue, 23 February 2021, 12:00 p.m.

How Butterflies Make Their Wing Patterns Robert D. Reed & Anyi Mazo-Vargas (Departments of Ecology & Evolutionary Biology, and Entomology, Cornell University)

#### Tue, 2 March 2021, 12:00 p.m.

A reference genome for *Brephidium exilis* (Lycaenidae: Polyommatinae) North America's smallest butterfly Adriana Briscoe (School of Biological Sciences, University of California, Irvine)

#### Tue, 16 March 2021, 12:00 p.m.

#### The genetic basis of color in butterfly wings

Arnaud Martin (Department of Biological Sciences, George Washington University)

#### Tue, 30 March 2021, 12:00 p.m.

## What can butterflies and moths teach us about conserving nature on a warming planet?

Callum Macgregor (Energy and Environment Institute, University of Hull)

Talks are open to all via Zoom at the following link: https://ufl.zoom.us/j/94944480196

For additional information, go to: https://www.floridamuseum.ufl.edu/mcguire/seminar-series/

#### TEXAS A&M EVENT 'THE CONTRIBUTIONS OF BLACK ENTOMOLOGISTS TO INSECT SCIENCES'

#### Wed, February 24, 2021 3:30 p.m. CST (4:30 p.m. EST)

You are invited to a panel discussion featuring Dr. Jessica Ware (AMNH, ESA Vice President), Dr. Alexandra Harmon-Threatt (University of Illinois at Urbana-Champaign), Dr. Alvin Simmons (USDA-ARS, Past ESA President), and Dr. Jared Ali (Penn State University).

The panel discussion will explore the experiences and challenges faced by each panelist throughout their careers and will provide all of us with new perspectives on how to promote equity and fight injustice in entomology and beyond.

#### Register in advance here:

https://tamu.zoom.us/meeting/register/tJAqcOmhqD0jGNSPG TzgS1Ix46zZA1THFGnD

#### EUROPEAN BUMBLE BEE CONFERENCE

Sat, February 20 & 27, 2021

9:30 a.m. – 12:30 p.m. (Central European Time) 3:30 a.m. – 6:30 a.m. (Eastern Standard Time)

A free online conference hosted by the European Invertebrate Survey (EIS), Kenniscentrum Insecten, Leiden, The Netherlands. This online conference brings together Bumble Bee researchers and enthusiasts from around Europe and beyond to share research findings and insights. For additional information and to register go to:

https://www.bestuivers.nl/hommelsymposium

# CSH Cold Spring Harbor Laboratory

#### BIOLOGY & GENOMICS OF SOCIAL INSECTS VIRTUAL MEETING

#### Tue, March 30 – Thurs, April 1, 2021

Topics:

- Comparative Genomics of Insect Sociality
- Epigenetics, Gene Regulation, and Social Organization
- Molecular Evolution of Insect Societies
- Neurobiology and Physiology of Social Insects
- Novel Techniques and Bioinformatic Advances and their Applications to Social Insect Biology
- Social Insect Microbiomes and Immunity

#### For more information and to register, visit: https://meetings.cshl.edu/meetings.aspx?meet=insect&year=2 1

#### CENTER FOR SYSTEMATIC ENTOMOLOGY ANNUAL CONFERENCE

#### Sat, April 3, 2021, 1:00 a.m.

Scientific presentations will commence at 11:30 am. Presentations will be 15 minutes-long maximum and will be delivered via zoom. We also welcome submissions of shareable digital posters.

Membership is not required to attend the conference, and there is no registration fee. However, joining the CSE permits members and their co-authors to publish free of charge in the peer-reviewed open-access taxonomic journal Insecta Mundi.

A Certificate of Participation will be available to attendees upon request.

For additional information see the attached flyer.

#### AGSX VIRTUAL SYMPOSIUM SPRING 2021

#### Thurs, January 28, 2021, 7:00 p.m. - 8:00 p.m.

You are invited to register for the AGSx Virtual Symposium Spring 2021 at https://tinyurl.com/yyoqruyb.

The AGSx symposium is a series of four separate virtual sections taking place once a month starting on February 9, 2021 and the finale on May 12, 2021. These are organized independent of the annual Arthropod Genomics Symposium (AGS). AGSx symposia section topics are listed below, and more specific details on speakers can be found at http://i5k.github.io/agsx2021 (with additional details forthcoming).

The webinars are free and will run via a Zoom link sent out prior to each session via email to those who have registered.

Session schedule:

## February 9, 2021: 10am CST/11am EST/5pm CET to 11:30am CST/12:30pm EST/6:30pm CET

Insect Genomic Technologies to Improve Food Applications Organized and moderated by Brenda Oppert, USDA-ARS, Manhattan, KS, USA

## March 9, 2021: 10am CST/11am EST/5pm CET to 12pm CST/1pm EST/7pm CET

Arthropod Genomics and Genome Engineering Organized and moderated by Dr. Lindsey Perkin, USDA-ARS, College Station, TX, USA

## April 13, 2021: 10 am CST/11am EST/5pm CET to 11:30am CST/12:30pm EST/6:30pm CET

Application of New Genomic Tools and Techniques in Arthropods

Organized and moderated by Dr. Marcé D. Lorenzen, North Carolina State University, Raleigh, NC, USA

## May 12, 2021: 10am CST/11am EST/5pm CET to 12pm CST/1pm EST/7pm CET

Honeybee Workshop Organized and moderated by Drs. Sonia Eynard & Alain Vignal, INRAE, Castanet Tolosan, France

Posted on behalf of session organizers. An AGS and i5K event hosted by USDA-ARS.



#### NHSM FEBRUARY 2021 RAFFLE

Purchase to win a lifetime membership to the Natural History Society of Maryland PLUS a bromo bonanza!

As an NHSM Lifetime Membership (value \$750) member you will receive discounts on many of our programs—from lectures, workshops, and courses offered in our museum—to

canoe trips, nature walks, and fossil hunts in the great outdoors.

This month we are raffling a valuable collection of antique Bromo Seltzer bottles assembled for us by Ernie Dimler, the curator of Bromo Seltzer Arts Tower Museum. Also included in the raffle prize are a photo and a calendar signed by artist Marianna Mills who has a studio in the Bromo Seltzer Arts Tower, a vintage and a contemporary Bromo related postcard, and a copy of Baltimore County: Celebrating A Legacy 1659-2009 by Barry A. Lanman.

February's raffle is for the history buff, bottle collector, and art lover in all of us! (value \$600)



Tickets are \$5 and buying more than one ticket increases your chances of winning. Only 1000 tickets will be sold to benefit the Natural History Society of Maryland. Cut-off date to be entered is February 28, 2021 at noon.

Get more information and purchase your tickets here.



#### Sat, March 6, 2021, 10:30 a.m. – 12:00 p.m.

Title: Monarch Butterfly Community Science Project Sampler Speaker: Michelle Prysby (Director, Virginia Master Naturalist program & Extension faculty member, Department of Forest Resources and Environmental Conservation, Virginia Tech)

#### Thurs, March 18, 2021, 7:00 p.m. - 8:00 p.m.

**Title:** Bonds of Honeydew: Understanding the relationship between Acropyga ants and mealybugs **Speaker:** Dr, John LaPolla (Professor, Department of Biological Sciences, Towson University)

Find more information about NHSM and register for events here.

#### 2020/2021 PROPOSED MES EVENT SCHEDULE

Due to the COVID-19 pandemic, regular MES lecture/meetings are currently being held virtually on Zoom at 7:00 p.m. on the 3rd Friday of each of 6 months coinciding with UMBC's academic year. Proposed events for the current MES membership year are:

Date	Speaker	Topic
Oct 16	Warren Steiner	Insects Associated with
		Local Milkweed
Nov 20	Sam Droege	State of Wild Native Bee
	_	Populations in MD
Feb 19	Samuel Ramsey	Despicable Mites: Recent
		Findings in the study of
		Tropilaelaps mercedesae and
		Varroa destructor
Mar 19	Mike Raupp	Cicadas-Brood X
Apr 16	Mike Turrell	What Makes a Mosquito a
		Good Vector
May 21	Members Presentations	

#### **OCT 2020-SEP 2021 MES MEMBERSHIP YEAR OFFICERS**

Frederick Paras President Vice President Philip J. Kean Secretary Janet A. Lydon Treasurer Edgar A. Cohen, Jr. Historian (vacant) Faculty Sponsors Frank E. Hanson Journal Editor Eugene J. Scarpulla E-newsletter Editors Aditi Dubey

#### SUBMITTAL DEADLINES

March 2021 issue of the *Phaëton*: Please send member news items by 12<sup>th</sup> March 2021. Send e-newsletter drafts to Addie at aditid26@gmail.com.

September 2021 issue of The Maryland Entomologist: Please send first drafts of articles and notes by 1 April 2021. Send drafts to Gene Scarpulla at ejscarp@comcast.net.

#### **RISE LIKE BUTTERFLIES Tim Truzy**

Butterfly flapped feeding on fragile flower, Stalling skyward flight from nectar's Heaven, A peace esoteric to those with wings, My arms upward lifted in tautology.

Diminutive drams driving delusions, Circumlocution express desires, Overruled biological verdict, Standing feet taking me only higher.

Graveyard men marching respectfully by, Garden cemetery harvesting bodies, Gargantuan pasquinade my expense,

Gauche scion of air owed no apologies.

Monarchs gone royalty in flight no more, Nibble flowers digest wild wind with wings, Swallowtails prancing glorious gentle breeze, My hands holding tremble upon these things.

Painted ladies colors' still tingling, Swooping, flitting, floating aloft and aloof, Alarming soft beauty swirling away, Caterpillars returning confirm truth.

Palm massaged by your floating soft tickle, Emperor of empathy extricate, Tremendous transcendent Empyrean, Curve raised replace rains cloudless sulphur.

Worries glide effortlessly through your view, Melancholy flutters to distant meadow, Sadness seeks sacrificial altar, And I ride with monarchs to see His Home.

Tiny blue active with life bowdlerize, Short time to dine and mate before moments gone, Lugubrious in my meditations, Like your brief stay can I fly to meet dawn?

Give me the silver of iridescence. On fritillary happy butterfly, Venturing the globe and across country, Telling troubles season is now denied.

Let Mercy be my nectar and passion, Drinking from a blooming morning glory, Let Gentleness be my fragrant flower, Rising aware beautiful butterflies.

February 2021