

Phaëton

The Official Newsletter of the Maryland Entomological Society

Volume 40, Number 2

November 2019

EDITOR: Aditi Dubey – aditid26@gmail.com

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

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

Meeting Announcement

The Maryland Entomological Society's 331st regular meeting will be held Friday, 15 Nov. 2019, 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.

Title: The Importance and Evolution of Entomology in the United States Military

Speaker: James Butler, Entomologist - US Army Public Health Command

Biography: James Butler completed both a Bachelor's (2002) and Master's (2004) degree in Entomology from Texas A&M University. His Masters research involved predicting secondary pest outbreaks in Texas cotton during boll weevil eradication. He spent one year teaching in Baltimore City and completed a Master's Degree in Education from Johns Hopkins University (2008). James worked as a pest control technician in the Baltimore/Washington area from 2005-2009. Noted accounts included Johns Hopkins Hospital and the Smithsonian Institute where he conducted strict IPM programs. James began working as a Medical Entomologist for the US Army Public Health Command in 2009 where he writes installation pest management plans, conducts pest management program reviews, and conducts entomological training of preventive medicine personnel across a 22 state region. James has conducted numerous quick response pest management and vector-borne disease surveillance consultations. In addition, he serves on the Operations committee of the Armed Forces Pest Management Board, and has been involved in several inter-agency working groups focused on vector-borne disease. Additionally, Mr. Butler serves as a voting board member of the Maryland State Pest Control Association, where he serves to protect the interests of the pest management community.

Abstract: The United States military protects the US population from both international and domestic threats, so military personnel must be in peak health and prevention of disease is essential for military personnel and their families. Modern military entomology involves a variety of missions from disease surveillance to stored product pests through proactive Integrated Pest Management, arthropod-borne disease surveillance, and safe pesticide storage, handling, and application. This presentation will summarize how arthropods have impacted military operations and how military entomology has evolved throughout United States History.

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**.

Volume 40, Number 2 November 2019

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*.

Harold J. Harlan

TREE SQUIRREL BOT FLIES PARASITIZING AN EASTERN GRAY SQUIRREL

Submitted by Annette Allor

I live in Ellicott City, Maryland and have multiple bird feeders on my deck. On 5 October 2019, an Eastern Gray Squirrel, *Sciurus carolinensis* (Rodentia: Sciuridae) showed up at the feeders with what I originally thought were tumors along its shoulder area (Figure 1).



The squirrel was very weak and had trouble walking. I did some research and discovered the "tumors" were actually Tree Squirrel Bot Fly larvae, *Cuterebra emasculator* Fitch (Diptera: Oestridae), a very painful skin parasite. I further read that if

you can get the squirrel through this bot fly parasitic larval phase by providing easily accessible food and water, it should make a full recovery. So, I set up a well-stocked area on the deck for the squirrel. In subsequent weeks, I only saw the affected squirrel a few times at the feeder very late in the evening and was getting concerned about its plight. Then on 20 October 2019, the squirrel came by in the morning during the rain when no other squirrels were on the deck. It was very weak but the bot fly larvae were gone! The hair had even started growing back on the shoulder area (Figure 2). The squirrel was very skittish but that's certainly understandable. So glad this turned out okay for the squirrel. Those botflies are really nasty!



CBP AT NEWARK INTERCEPTS EVASIVE PEST

K-9 Agriculture Specialists Detect insect During passenger inspection

On October 6, CBP Agriculture Specialist K-9 Brodie alerted to a passenger's bag arriving from Bari, Italy via Frankfurt, Germany. CBP Agriculture Specialists performed an

inspection of the passenger's bags revealing four different undeclared, prohibited plant items, including pomegranates. Further examination of the pomegranates led to the discovery of an insect with bee-like wings. The U. S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) identified the insect as Monosteira unicostata, the "Almond bug."



Although now found in Canada, USDA reports that this pest could pose a serious risk to the \$5.3 billion California almond industry (California Dept. of Food & Agric.).

"CBP Agriculture Specialists have once again made a critical intercept of a destructive pest that could potentially cause grave damage to our Agricultural and Economic vitality," said Troy Miller, Director, Field Operations, New York Field Office.



Monosteira unicostata is an important pest almond trees in the Mediterranean region requiring control methods alternative to synthetic pesticides. For more information on this pest, please use the USDA link below

Volume 40, Number 2

https://www.aphis.usda.gov/aphis/home/

NATURAL HISTORY SOCIETY OF MARYLAND UPCOMING EVENTS

2 -23 February 2020; (4 sessions)

Entomology 101

This course is designed as an introduction to insects and their allies in which you will learn morphological and anatomical adaptations, evolution, classification, identification, ecology, social applications, epidemiology and medical applications. Laboratory and field activities include sampling, specimen preparation, and identification investigations.

- Identify terrestrial arthropods to Class by visual inspection.
- Identify insects to Order by inspection, and identify common forms to Family.
- Be able to Identify unknown insects by use of standard taxonomic keys.
- Understand insect adaptation and evolutionary processes.
- Learn the basic internal anatomy of insects,
- Describe the life cycles of important insect
- Understand how insects adapt behaviorally and ecologically.
- Understand how insects affect humans medically, economically and socially.

To register for the course and for more information about pricing and scheduling, go to https://marylandnature.org/events.

MES MEMBER FLOYD SHOCKLEY FEATURED IN WASHINGTON POST KIDSPOST ARTICLE

Floyd Shockley, Ph.D., collections manager in the Department of Entomology at the Smithsonian National Museum of Natural History, was featured in a *Washington Post KidsPost* article about parasitoid insects. Read the article.

UNIVERSITY OF MARYLAND DEPARTMENT OF ENTOMOLOGY COLLOQUIA

Fri, 15 November 2019, 12:00 p.m.

"Untangling pesticide use patterns in US agriculture and their effects on beneficial insects"

Maggie Douglas (Assistant Professor, Environmental Studies, Dickinson College)

Fri, 15 November 2019, 12:00 p.m.

"Why socio-environmental research is so important: the role of UMD's National Socio-Environmental Synthesis Center (SESYNC)"

Margaret Palmer (Distinguished University Professor & Director at SESYNC) and David Hawthorne (Associate Professor & Director of Education at SESYNC)

Fri, 6 December 2019, 12:00 p.m. "TBD

Jian J Duan (Research Entomologist, USDA ARS Newark Delaware)

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

ADVANCED LANDSCAPE IPM PHC SHORT COURSE

Mon-Thurs, 7-10, January 2018 Entomology Department, Plant Sciences Building, University of Maryland, College Park, MD

The annual Advanced Landscape IPM PHC Short Course is a recertification short course for arborists, landscape supervisors, IPM monitors, advanced gardeners, and others responsible for urban plant management.

Each day, the course will include a lecture from 8:00 am to 3:00 pm and an optional lab from 3.30 pm to 5.30 pm (the lab is full).

Registration fee: \$850 for the lecture only option (price quote includes costs of the recommended texts) or \$700 if you do not need to purchase any recommended texts.

Included in this fee are the following lecture topics to be covered in **6 hours per day** of illustrated lectures:

Principles of IPM, Program Implementation, Monitoring techniques, Diagnosing plant problems, Insect and disease identification and control, Borers, Scale Insects, Mites, Defoliators, Stipplers, Immature insects, Sustainable pest management, Alternative pesticides, Biological control, Business aspects of IPM.

Also included in this fee are the following resource materials:

- The latest editions of *Diseases of Trees and Shrubs* by Sinclair, Lyon, and Johnson (\$72.00) and *Insects that Feed on Trees and Shrubs* by Johnson and Lyon (\$72.00)
- The latest edition of *Landscape IPM* by Davidson and Raupp.
- Advanced Landscape Plant IPM PHC Short Course Syllabus.
- Additional bulletins on IPM topics.

REGISTRATION DEADLINE: Wednesday, December 11, 2019

To find additional information and register, visit https://landscapeipmphc.weebly.com/registration.html

2019/2020 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:

Oct 18: The Love Bugs screening

Nov 15: TBA Feb 21: TBA Mar 20: TBA Apr 17 TBA

May 15: Members' & Students' Presentations & Elections

Jul: MES BugBlitz Sep: Member's Picnic

OCT 2018-SEP 2019 MES MEMBERSHIP YEAR OFFICERS

President Frederick Paras
Vice President Philip J. Kean
Secretary Janet A. Lydon
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

SUBMITTAL DEADLINES

December 2019 issue of the *Phaëton*:

Please send member news items by 13th December 2019. Send e-newsletter drafts to Addie at aditid26@gmail.com.

THE CANDLE AND THE MOTH By Allama Muhammad Iqbal

O Candle! Why does the moth love you? Why is this restless soul devoted to you?

Your charm keeps it restless like mercury Did you teach it the etiquette of Love?

It circumambulates the site of your manifestation Is it inspired with the fire of your lightning?

Do the woes of death give it the peace of life? Does your flame possess the quality of eternal life?

If you do not brighten this sorrowful world This burning heart's tree of Longing may not green up

Falling before you is the prayer of this little heart The taste for impassioned Love knows this little heart It has some zeal of the Primeval Beauty's Lover You are a small ñër, it is a small Kalam

The moth and the taste for the Sight of the Light! This small insect and the Longing for the Light!