



TABLE OF CONTENTS

- From the President: Dr. Ed Vargo
- Member Spotlight: MUVErs
- MUVE News Briefs
- Volunteer and Leadership Opportunities
- Policy Corner
- Humor Section: Jest Management
- Student Section: Ask Clary Fly
- Other Announcements



Dr. Ed Vargo, President

Dr. Rebecca Trout-Fryxell, Vice President

# FROM THE PRESIDENT

I hope everyone's summer is off to a great start. As the heat of summer sets in, we are reminded that the <u>Joint Annual</u> <u>Meeting</u> is just around the corner. The deadline for paper and poster submissions has already passed,

and <u>registration</u> and <u>hotel reservations</u> are now open. Don't forget that early bird registration ends **September 19**, and hotel reservations need to be made by **October 14** to assure the conference rate (and you should consider making reservations earlier to ensure availability).

If you take a quick look at the <u>Joint Annual Meeting site</u>, you will see that the Meeting will include

some virtual content, and there is an option to register for virtual content only.

The virtual content will be limited to virtual poster and presentation submissions and recorded plenary talks, all of which can be viewed on demand (in-person registration includes access to virtual content). The bottom line is that the Meeting is



still a hybrid meeting, although there is less emphasis on virtual content now than during the peak of the pandemic. This gives me cause to consider what the future of scientific conferences will be.

I think it's clear that some form of a hybrid format at ESA and other conferences is here to stay. But how much of the content will be virtual and what will the virtual content look like? It will depend on a number of things. First and foremost, we need to consider why we have conferences? What do we want to Dr. Kyle Jordan Vice President-Elect

Dr. Christopher J. Geden, Secretary

Dr. Sonja Swiger, Treasurer

Dr. Michael Reiskind, Past President

Dr. Mustapha Debboun, BCE, Governing Board Representative accomplish by meeting? For most of us, the answer will include a combination of sharing ideas and research results; seeking feedback on projects; networking opportunities that lead to new collaborations, job opportunities or industry connections; professional development; and socializing.

Since meetings have gone virtual, we've learned that in-person meetings have some downsides. They are expensive, they leave a large carbon footprint, and they involve a large time commitment. However, we've also learned that most things we want to accomplish by attending scientific conferences, especially when it comes to networking and socializing, are better achieved face-to-face than through a screen.

As the technology improves, we can expect that some of the limitations of virtual meetings will be eased—face-to-face interactions will become more lifelike, and the cost of synchronous formats will decrease. So, what will the future hold? Could we see "flipped" meetings, where the scientific content is presented virtually, and the in-person interactions focus on discussions and networking? Will there be discussions or social events that take place in the metaverse? Will poster sessions become completely virtual?

We may not know what the future of scientific conferences looks like, but we can be reasonably certain that it will contain some hybrid content. The balance between virtual and in-person content will be driven by technological improvements that will make virtual content more accessible versus our desire to retain face-to-face interactions. We are at a watershed moment in the organization of scientific conferences. In the end, it will be up to us as ESA members to determine the conference format that works best for us.



Help us highlight MUVE members and bring their work into the spotlight! Please send any MUVErs news to be included in future newsletters and tweets to <u>Bethany McGregor</u>.



Jonathan A. Cammack, Ph.D., D-ABFE. Jonathan received the <u>Outstanding Early Career Alumni Award</u> from the College of Agriculture and Life Sciences at Texas A&M University. This award recognizes graduates who are 15 years or less post-graduation and have made significant contributions early in their career, public service, and volunteer opportunities. Dr. Cammack is cofounder and chief operating officer of <u>EVO Conversion Systems, LLC</u>, a College Station, TX based company that uses black soldier flies to upcycle organic waste streams and reduce their impact on the environment.



**Chow-Yang Lee, Ph.D.,** professor & endowed presidential chair of urban entomology, University of California, Riverside. Chow-Yang received the Distinguished Achievement Award in Urban Entomology at the National Conference on Urban Entomology in Salt Lake City, Utah. The award honors an individual from academia, government, or industry who has made significant contributions to the field of urban entomology. Dr. Lee is internationally recognized for his research on the biology and management of insect pests that impact commercial, industrial, and residential settings in urban environments.



**Bruce Noden, Ph.D.**, associate professor of entomology at Oklahoma State University. Dr. Bruce Noden received a grant from the National Institutes of Health to study the role of invasive, woody plants on the risk of tick-borne infections in Oklahoma. The proposed research, in collaboration with Co-PI Dr. Scott Loss, will fund a graduate student and focus on the invasion of prairie ecosystems by the eastern red cedar, *Juniperus virginiana*. Tick and mosquito communities in the region are using this native invasive plant to establish and potentially increase their distribution. Way to go, Bruce!

### **NEWS BRIEFS**



Photo by Matt Bertone

Blog Post Highlights from Entomology Today

- Snow-Covered Tires Help Invasive Mosquitoes Survive Cold Winters
- New Guide Charts Path to Improved IPM for Fly Pests of Cattle
- Mosquito Management in the Era of Extreme Weather
- <u>New CDC Study Details County-Level Distribution of Seven Diseases Spread by Blacklegged</u>
  <u>Ticks</u>

Remember: For the latest breaking news items related to MUVE, please follow us on Twitter.

**VOLUNTEER & LEADERSHIP** 

#### **MUVE Committee and Representative Positions Now Accepting Nominations**

The following positions within ESA MUVE are currently open for nominations. Unless otherwise noted, the positions will officially turn over as of this year's Annual Meeting in November. If you are interested in putting in a nomination for any of these positions, ESA will soon be circulating a webpage where you can submit your nomination. However, you can also provide a CV, statement of interest, and brief description of your vision for the role to Ed Vargo (Edward.Vargo@ag.tamu.edu) by **August 1**.

- The **Communications Committee Chair** is responsible for organizing meetings of the communications committee, preparing items for the bi-monthly newsletter, writing email blasts to the membership, and assisting with other communications needs of the Section. The new chair will come on in an elect capacity to shadow the current communications chair for the coming year before beginning the 3-year appointment as chair of the communications committee in summer 2023.
- Members of the Nominations Committee are tasked with ensuring that qualified candidates are identified for all open MUVE Positions and that candidates are a balanced representation of the MUVE membership. Nominations committee appointments are on 3-year rotating terms in which each member rotates to being the chair of the committee in their third year. One position on the nominations committee is currently open for nomination.
- The **MUVE Representative to the Entomology Games Committee** contributes to the committee's goals of creating an engaging and high-quality national competition, fostering an inclusive and welcoming environment for all participants and attendees, and supporting the branch-level committees as needed. Core responsibilities include writing, editing, and fact-checking questions (particularly in the medical, veterinary, and urban entomology category, but also others), attending regular committee meetings, and contributing to special projects as they arise.
- The **MUVE Representative to the Awards and Honors Committee** recruits MUVE members to serve on judging panels for ESA level awards. This person serves as a Process Coach for one of the ESA level awards, answering judging panel questions and resolving instances of a tie between award nominees. This representative also engages with other members of the A&H Committee to ensure the Society's awards program is a model of inclusivity.
- The **ESA Student Affairs Representative** is expected to reach out to the student membership of MUVE and contribute to the student section of the MUVE newsletter. To learn more about this position, read this month's "Ask Clary Fly" article.
- The ESA Science Policy Representative is expected to represent MUVE interests concerning the ESA Science Policy Advocacy agenda at the association level, communicate with the MUVE governing council and membership about things that the ESA Science Policy Committee is doing or considering doing, and contribute to the MUVE Newsletter.

#### **MUVE Initiative Seeking Member Involvement**

The MUVE Initiative "<u>MUVE-ing together: Connecting entomologists, wildlife biologists, and ecologists</u> to strengthen One Health approaches focusing on human and animal parasites" is looking for members at any career stage (student, ECP, senior member) to get involved with the initiative. The initiative was born from a desire to create connections among entomologists, wildlife biologists, and ecologists throughout the Entomological Society of America and other Societies to advance the One

Health initiative and improve public, animal, and ecosystem health. Members could be involved with various leadership activities and networking opportunities including, but not limited to, organizing symposia or other events at ESA (National and/or Branch levels) and other related conferences, develop webinars or workshops for members, and promoting an inclusive environment for members interested in learning more about the intersection of entomology, wildlife biology, and ecology. Learn more and contact Dr. Erika Machtinger at etm10@psu.edu.





ESA MUVE is looking for volunteers to assist with one of our new section WIGs, the Grand MUVE Library. This WIG is an effort to

gather MUVE related information, such as the vector emergency response entomologist list, resources, and protocol libraries into a single MUVE repository for use by the section. If you are interested in assisting with this effort or want to learn more, please contact Alexis Kriete (<u>akriete@ncsu.edu</u>).

Looking for other ways to get involved with MUVE or ESA generally? Always feel free to contact MUVE President <u>Ed Vargo</u>.

## POLICY CORNER

"Interdisciplinary Research Collaborations to Inform Science Policy" by Allie Gardner, Assistant Professor, School of Biology and Ecology, University of Maine

Arthropod-borne zoonotic diseases constitute 30% of emerging infectious diseases worldwide, and recent decades have seen numerous vector-borne pathogens spread at unprecedented rates through unprepared human populations. A variety of different factors contribute to this phenomenon: global trade and travel have moved disease vectors and the pathogens they transmit to new locales, a combination of land use and climate change has facilitated the establishment of vectors within their introduced ranges, and overreliance on conventional insecticides has led to the evolution of pesticide resistance and the failure of many of our longstanding vector-borne disease management strategies. What all the above have in common is that they are related to human activities and behavior, which adds a layer of complexity both to understanding the drivers of the establishment and persistence of vector-borne pathogens and to the development of effective and sustainable disease mitigation policy.

Decision-making by different actors can dramatically alter both individual and collective exposure risk to arthropod-borne disease across spatial scales through diverse pathways. For example, defensive personal protective behaviors, such as using repellents and avoiding certain habitats, can reduce individual risk of disease exposure without altering vector abundance or pathogen prevalence in the environment. In contrast, implementing area-wide preventive strategies, such as municipally managed mosquito abatement programs, genetically modified mosquito releases, or large-scale deer culls to curb tick densities, can protect entire communities from disease at the cost of taxpaver money and often significant controversy surrounding acceptability and efficacy of potential interventions. Moreover, protection of public health through suppression of disease vectors may compete with economic considerations in natural resource (e.g., freshwater and forest) management settings. Psychological variables like personal experience, self and group efficacy, and perceived health risk can modify decision-making and willingness to pay in these scenarios. How people negotiate these trade-offs clearly has vast implications for wellbeing; at large scales, patterns of disease vector abundance even may become spatially decoupled from disease incidence in humans due to behavior. Yet behavior and decision-making theory rarely is applied to vector-borne disease risk assessment and mitigation.

Increased interdisciplinary collaboration between medical entomologists and social scientists is essential to addressing MUVE's policy priorities, promoting the adoption of our applied research findings, and addressing the social and environmental conditions underlying the emergence of vectorborne disease. We already have some examples of successful research efforts that we can use as models moving ahead. Some prior interdisciplinary research in the context of vector-borne disease has examined individual decision-making and disease risk communication (e.g., recent studies of informational videos about ticks as an educational tool1 and likelihood of using personal protective practices against mosquitoes(2) and ticks(3) around the home). Other studies have engaged with the complex socio-environmental systems in which vector-borne disease transmission is embedded (e.g., a Baltimore-based study of the feedbacks between urban decay and mosquito production4 and an ongoing study of tick, wildlife, and human interactions in urban parks(5). Our task is to continue building these collaborations and engaging in research that not only seeks to develop entomological solutions for disease vector management, but to place these solutions in their social context, break down barriers to their widespread adoption and application, and consider social conditions that may facilitate vector-borne disease persistence.

- 1: https://www.nature.com/articles/nature06536
- 2: https://academic.oup.com/jme/article/58/2/857/5934869
- 3: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6553806
- 4: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-09629-x
- 5: <u>https://www.mdpi.com/1660-4601/10/4/1505</u>
- 6: https://academic.oup.com/jme/article/58/4/1546/5936773

### JEST MANAGEMENT

#### The Lighter Side of ESA MUVE

#### Mow, mow, mow you don't! (I hope)

By <u>Matthew L. Aardema</u>, Ph.D; Assistant Professor, Department of Biology, Montclair State University; Twitter: @AardemaMatthew

I don't mean to brag, but I have not cut my front yard once this year. At the moment, the lawn resembles a verdant meadow. Why have I (not) done this? Well, as some of you may know, these past few years have seen the emergence of the 'No Mow May' initiative, an effort to promote pollinator diversity first popularized in the United Kingdom.

The idea is simple. By not mowing, we encourage a greater diversity, abundance, and structural complexity of plant life in our yards. This, in turn, should promote greater insect diversity. Research described in the journal *PeerJ* by Israel Del Toro and Relena R. Ribbons (2021), provides strong support for this hypothesis. While the 'fun' rhyming and alliteration of No Mow May reveals its ephemeral scope, it stands to reason that the less we mow, regardless of month, the greater the benefits for arthropod biodiversity will be. Hence, I have also decided to partake in 'No Prune June'. If only July and August weren't such tricky words to rhyme!

While this is only my first year of not mowing, I would nonetheless like to share a couple observations. First, I suspect for many folks the biggest concern is the classic "what will the neighbors think?" Naturally, I cannot speak to what anyone else may experience, but for me the neighborhood response appears to be overwhelming indifference. My worst-case scenario of an angry mob or local bureaucrat banging on my door and demanding I mow my lawn has not come to pass. The only direct interaction I've had occurred when a lawn maintenance company representative came to the door offering their services. I've now put out a few discreet signs that provide some context for the long grass and 'weeds' in my yard. I hope these signs, combined with the truly bucolic nature of the lawn (in my opinion), may eventually encourage others to follow suit.

This brings me to my second point, and the all-important intersection with MUVE. Another fear many folks have regarding a relaxed approach to lawn maintenance is the potential for increased arthropod vector density, particularly ticks. Superficially it seems reasonable to postulate that taller grasses would support greater numbers of ticks both because their mammalian reservoirs (e.g., mice and deer) may be more likely to frequent such areas, and also because survival of ticks could be higher in denser vegetation. Greater tick abundances are certainly a reasonable concern that cannot be dismissed.

However, I have not observed any apparent qualitative increase in tick encounters yet. My shaggy sheep dog has a wonderful knack for collecting disease-vectoring arachnids, so she is always carefully examined upon returning from an outdoor excursion. So far, the increasing height of the plants in my yard does not seem to correlate with higher tick attachment on my canine friend. There are also properly quantified results to back up my observation. In a 2019 *PLoS* One paper, Susannah Lerman and Vincent D'Amico report that the frequency of lawn mowing in suburban areas "has no detectable effect" on *Ixodes scapularis* presence.

And honestly, even if a positive correlation was found between lawn height (or frequency of mowing) and ticks, does this mean that 'No Mow May' should be scrapped? I don't think so. By this same logic, we shouldn't build parks because the number of muggings in an area might increase. We MUVErs know that sensible precautions to discourage tick attachment and thorough tick checks after spending time outdoors are the best defenses against tick-vectored pathogens. In my opinion, the benefits of maintaining our yards in ways that promote insect biodiversity far outweigh any potential drawbacks. So, this coming weekend when you're getting ready to fire up that lawnmower, why not kick your feet up in a hammock instead? The insects will thank you.

*POSTSCRIPT*: I appreciate that many local ordinances, etc. may legally prevent individuals from maintaining their yards in ways that encourage biodiversity. As evidence that we're experiencing significant declines in insect populations continues to grow, this feels truly reprehensible. Accordingly, I would encourage all of us to promote positive changes to these regulations in our local communities.

## ASK CLARY FLY

#### By Victoria Pickens, ESA MUVE Representative to the Student Affairs Committee

#### Dear Clary Fly,

I am interested in applying for the student affairs representative position in MUVE but I don't know what the position entails. Would you please let me know what some of the roles and responsibilities are so that I may have a better understanding?

Many thanks for your time and help,

Sonny Sandfly

Howdy fellow MUVErs,

Clary Fly here with all the latest buzz on student activities. Thanks, Sonny, for submitting the question above! This is a great time to go over the expectations of the MUVE Section Student Representative to the ESA Student Affairs Committee (SAC), as we are needing students to apply this year to serve as the new representative.

For starters, you must be a student member at the time of election and the position is a two-year term. The representative is asked to attend both the SAC meetings and the MUVE General Council (GC) Meetings. The SAC meetings are once a month, and the MUVE GC meetings are typically every other month. The representative will have duties to fulfill for both SAC and the MUVE section.

MUVE GC expects the representative to attend the virtual GC meetings to provide updates on SAC activities that concern MUVE, as well as attend the MUVE Section and business meetings at the ESA Annual Meeting each year and write a student article for the MUVE newsletter every other month (right now we are calling it Clary Fly Corner).

For ESA SAC, the representative will be expected to attend the monthly meetings, promote student awards and activities, and serve on at least one SAC subcommittee. That is the general requirements, however members typically write a blog post for *Entomology Today* each year and review a student article for submission to the Student Life section of *American Entomologist*. There is also an SAC meeting at the annual meeting that the SAC Branch and Section representatives are asked to attend if available.

If you're interested in applying for the student representative position and would like to hear more about Victoria's personal experience as well as where to find more information, check out her recent blog post, <u>Meet the Committee Working to Grow the Next Generation of Entomologists</u>, at *Entomology Today*. Feel free to send Victoria an email too!

Additionally, the SAC is currently assisting with the development of a webpage on the ESA website for students to have a central hub where they can access all entomology student activities, events and resources. If you believe there is any information that could be useful for entomology students on this webpage, please send your ideas to Victoria and she'll recommend them to the committee. Suggestions might include ESA student volunteering, career and professional development, awards, workshops, and many other opportunities and resources.

Well, MUVErs, that's all I have to share with you for now. If you have any questions or comments you would like for me to address in future newsletters, send a message to <u>vlpicken@ksu.edu</u>.

Stay curious, Clary Fly

### **OTHER ANNOUNCEMENTS**

#### Application Period Open for the ESA Science Policy Fellows Program

The ESA Science Policy Fellows Program is accepting applications through **June 27**. This two-year program is focused on training entomologists in all disciplines and career stages how to advocate for insect science and navigate federal policy. <u>Learn more and apply</u>!

#### New Editor-in-Chief Sought for Annals Journal

The Annals of the Entomological Society of America is now seeking candidates for the editor-in-chief position starting January 2023. Entomologists from all career stages and disciplines are encouraged to apply and applications are due by **July 3**. Learn more.

#### New MUVE Representative to the Diversity and Inclusion Committee Announced

MUVE would like to welcome the new Diversity and Inclusion representative, Dr. Melissa Nolan. Dr. Nolan is an assistant professor at the University of South Carolina in the Epidemiology and Biostatistics department of the Arnold School of Public Health.

#### Looking for the Next Entomology Games Gamesmaster

The application period is open to serve as the new Entomology Games Gamesmaster. This appointment will run for a 4-year term in which the first 2-years the selectee will serve as a trainee and the second half of the appointment will be spent as the national Gamesmaster. ESA members with strong public speaking skills, familiarity with the Entomology Games, broad entomological knowledge, and a commitment to making the Entomology Games an inclusive and welcoming environment are encouraged to apply. Learn more and apply by **August 1**.

#### 2022 Joint Annual Meeting MUVE Section Symposia Announced

The following symposia were selected as MUVE Section Symposia for the 2022 Joint Annual Meeting in Vancouver, BC. Congratulations to the organizers of these symposia on being selected and be sure to check out these symposia at the annual meeting in November!

- Biology and Ecology of Dipteran Pests and Vectors Impacting Livestock
  Organizers: Bethany McGregor, Dana Nayduch, and Barbara Drolet
- Current Development and Research of Insect Repellents
  - Organizer: Mustapha Debboun
- Entomology Careers "Industry" isn't a Bad Word!
  - Organizers: Michelle Hartzer and Ron Harrison
- Risks of Expanding Vector-Borne Disease Transmission in North America

- o Organizers: Kathleen Walker and Michael Riehle
- Testing Cockroaches Could Laboratory Bioassay Results be Used to Infer Field Performance?
  - Organizers: David Cox and Chow-Yang Lee
- Where the Wild Things Are: One Health at the Wildlife-Arthropod Interface
  - Organizers: Karen Poh and Risa Pesapane

#### **Become a Board-Certified Entomologist**

Did you know that ESA offers certification? Certification helps you stay current with the latest industry developments, lends additional credibility when working with non-scientists, and can lead to better visibility, opportunities, and jobs by allowing you to stand out from your peers. There are multiple routes to becoming certified, including as a Board-Certified Entomologist (BCE), Associate Certified Entomologist (ACE), Public Health Entomologist (PHE), and Certified IPM Technician (CIT). Learn more about certification and how to get started!

#### Follow us on Twitter



Inbox overload? Edit your email subscriptions and tell us about yourself to receive only the most relevant content from ESA.

Entomological Society of America (ESA), 3 Park Place, Suite 307, Annapolis, MD 21401-3722 USA (1)-301-731-4535 www.entsoc.org Terms & Conditions | Privacy Policy