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# ENTOMOLOGICAL SOCIETY OF ONTARIO

**FALL NEWSLETTER**



Photo: Aleksandra Dolezal

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The communications committee is always looking for more photos and opportunities to promote Ontario scientists studying entomology. If you have questions, photos, or social media post ideas, please email them to Jennifer Grixti at [esoconds@gmail.com](mailto:esoconds@gmail.com).



**Jennifer Grixti**  
Science communicator

Favourite insect:  
"Cuckoo bees, especially *Epeolus*."



**Alexandre Loureiro**  
Grad student, U Guelph

Favourite insect:  
"Without question, the leaf-cutter ant."



**Kathryn Galang**  
Grad student, York U  
Favourite insect:  
"Bumble bees  
(fuzzier the better)."



**Simran Bahia**  
Grad student, York U

Favourite insect:  
"*Bombus* (bumble bees)!"



**Alyssa Stephens**  
Grad student, U Waterloo

Favourite insect:  
"Fuzzy bumble bees"



**Facebook**

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**Twitter**  
[@EntSocOnt](https://twitter.com/EntSocOnt)





Hello fellow Insect Enthusiasts,

First things first – thanks and appreciations! An enormous thank you and much appreciation to Past-President Amanda Roe for all your work and enthusiasm over this past crazy year. Our Society will bear the lasting effect of your efforts to better understand and codify the roles and responsibilities of our Board! Thank you to our JESO editor Chris MacQuarrie who, after many years of service, has indicated his decision to move on. We are all grateful for how you shepherded our society journal into its snazzy digital home and ushered the reviewing and editorial process into the 21<sup>st</sup> century. If you are interested in the emerging role with JESO, please watch our digital space for the application call.

Thanks to departing Directors Jeremy deWaard and Tracey Baute and to past Secretary Michelle Locke for all the many many appreciated (and unappreciated) things you have given the ESO through the years. Giant thanks to Samm Reynolds and Meredith Miller who have stepped into the Secretary and Membership roles.



ESO virtual board meeting 2021



Welcome and thank you for taking a step forward to give back to our community to our incoming President-Elect Laura Timms and Directors Shannon McCauley, Erin Campbell, and Matt Muzzatti. Thanks to Miriam Richards and Amro Zayed for organising an amazing JAM/ESO annual general meeting. The world kept throwing you curveball after curveball, but the meeting you gave us was warm, well attended and appreciated! Kudos! Fingers crossed that we will be able to make our provisional plans work for a face-to-face meeting at the Bark Lake Leadership Centre in Irondale next fall (watch our digital space for updates as we are able to confirm details!).

I look at this upcoming year with cautious optimism. While I write, we are learning of the COVID variant omicron being uncovered around the world; and we are also celebrating the opportunity for children under 12 to be vaccinated and generally high rates of vaccination across Ontario. What will 2022 bring to ESO? We are hopeful for a face-to-face meeting at Bark Lake in the fall if we can do it in a safe and welcoming fashion. At this year's Fall Board meeting, we created a committee of Equity Diversity and Inclusion (EDI). I am excited to listen to the options and opportunities that this committee will bring to us in 2022. We need to actively take the steps necessary to ensure that our society resembles the greater society within which it sits; to work towards actively including people who have not been able to celebrate insects, who have not had the advantages and privileges as someone like me has had; and to listen and learn as to why this has been. If you, or someone you know, are interested in serving on this committee, please let me know (remember you don't have to be on the board to volunteer on a committee)! One method to encourage new members (and renewal), that I am investigating for 2022 are virtual seminars that feature diverse and engaging members of our entomological community to be available for ESO members periodically throughout the year. Watch our digital space for details in the coming months.

I remain thankful for this society and what it brings to the entomological community of Ontario.

I'm honoured to be able to serve as President and I look forward to working with you over the next year.

- Alex Smith



## Laura Timms

### President-elect

I am Senior Specialist in the Ecology & Monitoring division at Credit Valley Conservation in Mississauga, ON – one of Ontario's 36 Conservation Authorities. In my job I analyze data from CVC's monitoring and inventory programs to develop tools and strategies for biodiversity conservation and management. This includes projects such as evaluating the influence of landscape context and patch size on ecological integrity, identifying forested areas of high and low climate vulnerability, and assessing and ranking local species of conservation concern. I also co-developed and am the scientific coordinator of the CVC Butterfly Blitz – currently running in its third year.

I'm also an Adjunct Professor in the Daniels Institute of Forestry and Conservation at the University of Toronto, where I serve on graduate committees and supervise internships. I have spent time at the University of Guelph (BSc Hon 2001), Agriculture and Agri-Food Canada, the University of Toronto (MScF 2005, PhD 2010), and at McGill University as a postdoctoral researcher with the Northern Biodiversity Program. My research has focused on parasitoid diversity, invasive species, biological control, and conservation. I served on the Committee on the Status of Species at Risk in Ontario for one term.

A proud member of the ESO since 2002, I have previously served as Student Representative and as a Director (twice). One of the highlights of my involvement with both the ESO and the ESC was when I was invited to give the Heritage Lecture at the 150th anniversary joint annual meeting in Guelph in 2013. Attending annual meetings is one of my favourite things to do – I love catching up with old friends and colleagues, meeting new ones, and hearing about amazing and inspiring science. I would be proud to be elected as President and would do my best to represent the membership and work to advance entomology in the province.





## Shannon McCauley

### Director

I am an Associate Professor in Biology at the University of Toronto Mississauga and have been at UTM since 2012. I completed my PhD at the University of Michigan where I began working with dragonflies (Odonata: Anisoptera) a group that is still central to my research. I study how freshwater insect communities are structured by both the processes occurring within habitats (primarily lakes and ponds) and by the processes acting to connect habitats especially dispersal. While I work primarily with dragonflies, my students have also worked with aquatic heteropterans, particularly backswimmers (*Notonecta spp.*), and caddisflies (Trichoptera). We use a wide-array of tools including comparative studies, long-term surveys, and experiments, to understand the forces structuring communities and how anthropogenic changes are restructuring these communities.

In addition to research on freshwater insect communities, I have a strong interest in understanding and addressing the barriers people experience in pursuing careers in ecology and entomology. From habitat loss to climate change, we are facing numerous environmental crises and we need all hands on deck. Anything that creates barriers to participation in environmental science fields, including entomology, is not only wrong but short-sighted as we need all the talent that a diverse pool of entomologists can bring to the field. A primary goal I have if elected to serve as a director for ESO is to help develop initiatives that are inclusive and engage a diverse community of entomologists.





## Erin Campbell

### Director

I was always fascinated by insects and evolution, but during my undergraduate degree I got unexpectedly hooked on molecular biology and systematics - particularly as they relate to characterizing the process of speciation. Since then, my research has focused on using new tools in genomics to explore how species form, and also to ask how genomic data influences our recognition of species as fundamental units of biology. Lucky for me that the unparalleled diversity of insects makes them ideal study organisms for such questions!

I conducted my PhD work at the University of Alberta on the molecular systematics of *Speyeria* butterflies, and then as a postdoc I worked on population genetics and genetic profiling of insecticide resistance in agricultural pests. I recently moved to Ottawa from Alberta to take a position as a research scientist in Entomology at the Canadian Food Inspection Agency. Much of my work in this position will be related to the development of genomic resources and molecular diagnostic tools for insect pests. I'm looking forward to exploring Ontario and its insect fauna, and look forward to joining the ESO!



## Matt Muzzatti

### Student representative

Hello ESO! I have been a member of this warm and welcoming society since 2015 when I attended my first-ever conference at the Queen's Biological Research Station AGM to present my undergraduate thesis. My extremely positive experience at my first scientific meeting encouraged me to pursue entomology as a career. Since then, I have earned an MSc at the University of Guelph and have started my PhD at Carleton University. For my MSc, I dabbled in integrated pest management and researched the insect-plant interactions between swede midge (*Contarinia nasturtii*) and canola under the supervision of Dr. Rebecca Hallett. Currently, I am co-advised by Dr. Sue Bertram and Heath MacMillan for my PhD research. I am focused on how to

enhance body size of the mass-reared decorated crickets (*Gryllodes sigillatus*) through macronutrient dietary manipulation and determining the inter-species interactions of crickets with novel pests of cricket farms.

I am currently serving my first year as co-chair of the Entomological Society of Canada's Student and Early Professionals Committee (ESC SEPAC), and as an ESO Student Rep I will work towards cultivating a deeper relationship between the provincial and federal societies with the goal of improving the student experience at annual general meetings. ESC SEPAC is currently developing a mentorship program between students and faculty, and if successful I believe a similar program could be modeled by the ESO to connect aspiring student entomologists with established experts for guidance in career development. My own positive experience at my first meeting in 2015 is one I hope to replicate for other students to help inspire and encourage them to continue sharing their entomological research in a safe and nurturing environment.

# The 2021 JAM Debrief: Strength in Diversity.

By Amro Zayed

Our first ever virtual 2021 JAM – *Strength in Diversity* - was successful by several metrics. We attracted over 250 attendees and watched 163 fabulous presentations on amazingly diverse topics. We also explored some important topics – how to make entomology more diverse, equitable and inclusive. This started on the first day (Monday, Nov. 15, 2021) with the Heritage lecture, delivered by Prof. Lisa Myers, a York University Research Chair in Indigenous Art & Curatorial Practice. Prof. Myers talked about the work of the late Mi'kmaq artists Mike MacDonald (1941-2006), who created native plant gardens. The first day also featured many excellent graduate student talks in both the President Prize Student Competition and the Graduate student symposium.

The second day featured two keynotes. The first by Dr. Jayne Yack (Carleton University) on how and what insects hear; a very stimulating and thought-provoking lecture that featured wonderful recordings of sounds from various insects, and their ecological significance. Later that day, Dr. Maydianne Andrade (University of Toronto) delivered an excellent keynote on bias and inclusion in entomology. Dr. Andrade's presentation clearly showed how systemic barriers lead to the under-representation of many visible minorities in academia and entomology, and suggested ways to improve equity, diversity and inclusion in our discipline. The second day also featured many fascinating symposia on Insect diversity, community engagement and research, taxonomy, insect genomics, conserving at-risk butterflies, and semiochemical-based pest management. Tuesday also featured a career-panel for MSc students in entomology facilitated by the ESO Student Committee, Marlee-Ann Lyle and Aleksandra Dolezal.



Wednesday featured a Keynote Lecture by Dr. Claire Kremen (UBC), who talked about the importance of diversifying farming systems for enhancing pollinator populations and the pollination services they provide. The day also featured symposia on pest management, ecology and evolution and biological control in Canada, a career-panel for PhD students, and a townhall meeting with the ESC's Equity, Diversity and Inclusion committee.

The day ended with the ESC Award Ceremony. Ontario was well represented here, with Rick Cvasin winning the 2021 Criddle Award, which recognizes the contribution of an outstanding non-professional entomologist to the furtherance of entomology in Canada. Cvasin has been a major force for improving the knowledge of butterflies in Ontario and Québec. Dr. Sheila Colla (YorkU) won the C. Gordon Hewitt Award for making outstanding contributions to entomology in Canada within 12 years of obtaining her doctorate. Dr. Colla delivered a rousing acceptance speech to young researchers from under-represented groups. The award ceremony was followed by the Gold Medal Address by Dr. Michel Cusson.



2021 JAM in session!

The final day featured a Keynote Lecture by Dr. Amanda Moehring (Western University) on the genetics of female choice and aggression in the fruit fly *Drosophila*. Moehring shared impressive experiments that made full use of *Drosophila* genetic manipulation tool kits to reveal the connection between genes, neurons and behaviour in this model insect. Thursday also featured impressive symposia on insect behaviour, insect physiology, and managing of insect pests in Canada. Bill Riel (ESC past president) and Amanda Roe (ESO president) announced recipients of the 2021 JAM President Prizes for best student talks at the closing ceremonies. The ESO was well represented among the winners here with Aleksandra Dolezal (U. Guelph) winning the President's Prize in Agroecology for her talk titled "Re-designing agricultural landscapes: The effect of habitat on arthropod communities", and Kathryn Galang (YorkU) winning the President's Prize in Social Insects for her talk titled "The molecular basis of altruistic and selfish aggression in honey bees". Other President's Prize winners included Allen Bush-Beaupré (U. Sherbrooke), Emmanuel Hung (SFU), Andreas Fischer (SFU) and Ferf Brownoff (U. Alberta).

The organizing committee, which includes Miriam Richards (BrockU, Co-Chair and Treasurer) and myself (Chair) would like to thank the large number of volunteers who helped make this conference a success. Organizing a conference is no easy task and the pandemic has certainly added an additional layer of stress and complications. We are grateful to the following volunteers who took some time out of their busy schedules to help us out:

- **JAM Scientific Programming Committee:** Amro Zayed, Miriam Richards, Brent Sinclair, Sheila Colla, Amanda Roe, Chis MacQuarrie
- **Career Workshop Organizers:** Marlee-Ann Lyle and Aleksandra Dolezal. Fundraising Committee: Rose Buitenhuis, Geoff Powell, Miriam Richards
- **ESO JAM Webmaster:** Kaitlyn Fleming
- **Logo Design:** Spencer Monckton
- **Program Document:** Carolyn Davies.
- **Volunteer Moderators:** Nadia Tsvetkov, Carolyn Davies, Ida Conflitti, Kathryn Galang, Kathleen Dogantzis
- **President Prize Judges:** Kaitlyn Fleming, Heath MacMillan, Laura Timms, Tracey Baute, Amanda Roe, Cynthia Scott-Dupree, Hume Douglas, Patrice Bouchard, Nadia Tsvetkov, Nigel Raine, Chris MacQuarrie, Nusha Keyghobadi, Olav Rueppell
- **Registration System:** Ryan Jones. Showcare: Zahra Bouchikhi and the fabulous team at Showcare!

Finally, we would like to thank all the symposium organizers for putting together a fantastic set of invited talks for the JAM.



# 2022 ESO ANNUAL GENERAL MEETING



**Location: TBA**  
**Dates: TBA**  
**(It's in the works!)**

We hope to meet everyone in person in 2022, pandemic permitting! You can check the [ESO website](#) for more details soon, or check the next ESO newsletter next spring!



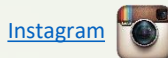
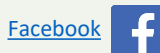
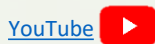
2016 ESO AGM attendees

**Guelph Bug Day** was virtual in 2021, but organizers are preparing for an interactive workshop for 2022. This workshop will be for students and kids to learn how to properly collect and store insects. We have designed a pinning workshop via PowerPoint presentation (available through our YouTube, [here](#)). This year we completed another participation giveaway, which included U of G local honey, insect stickers, dried lavender, and an activity book “The Big Book of Bugs” by Yuval Zommer.

We started a free virtual hands-on event (a BioBlitz community project) through iNaturalist. The community found 124 observations and 77 species in and around Guelph. The event can be found [here](#). We will be continuing this event next year as part of our hybrid Bug Day.

Guelph Bug Day is a student-led project, and we get messages from the community every year thanking us for teaching their children about the wonderful world of bugs! Thanks to everyone for their support!

- Aleksandra Dolezal







Screenshots from virtual events, including the Bug Day 2021 Backyard Bonanza, the Guelph Bug Day photo contest, the YouTube channel, and the twitter take-over teaching the community about insect related facts throughout the day.



**The BugEye photo competition** was tough this year, but we are proud to announce our winners!

**Best photo:**  
Leigh Ayres

"Long horned bee. Found him in my front garden. Temperature went down during an afternoon rain shower. Grabbed my camera and took some snaps.". Durham Region, Ontario.



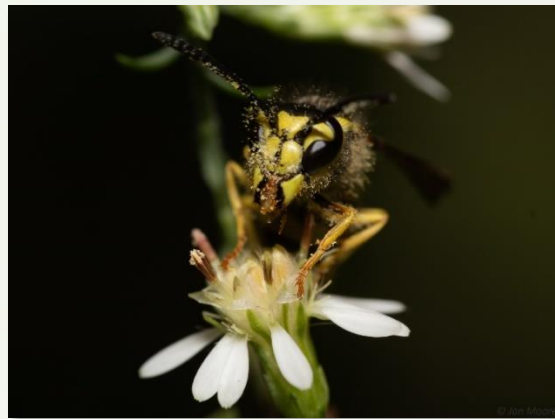
**Best Ontario Insect:** Aleksandra Dolezal

Aleksandra was hunting for spiders to photograph for her upcoming thesis presentation. "This little guy came up and spent some time admiring the camera before this photo was taken.". Preservation Park, Guelph, Ontario.



Thanks to our judges, ESO Communications Committee, and everyone who submitted photos!

Again, we had no junior entries - so please encourage the young folk to submit photos in 2022!



**People's Choice: Jon Moore**

'Wasp Mouth Full' was taken in the forest behind the Streetsville GO station. "I took over 90 pictures of bees and wasps that day. I was terrified of bees and wasps when I was younger. I still am a little, even though I'm in my late 30's. But being able to take picture after picture of these insects feels like a triumph, albeit a minor one. The wasp in the picture is an eastern yellowjacket and an Ontario insect."

# Morphology's Role in Phylogeny Reconstruction:

## Still Relevant in the 21st Century

By: Aleksandra Dolezal

We live in the age of molecular systematics, and the value of morphological data as a source of phylogenetic evidence has been debated. More and more molecular approaches have been used to study taxonomic relationships. However, morphological methods should not be put into the shadows considering most of what we know about phylogeny of life stems from classifications founded on morphological data (Scotland et al., 2003). Although molecular genetics is useful, scientists need not be so one-dimensional. We still need anatomists working on phylogenies. In this essay, I will argue that we still should value morphology's role in the 21st century as it has distinct advantages over molecular approaches. Morphological analyses play an important role in reconstructing relationships of fossil data, and are useful for museum studies. It continues to be the most cost-effective way of reconstructing phylogenies compared to molecular methods and are useful in being a "reality check" to molecular systematics. However, both morphology and molecular genetics are tools, and both should be used in combination with one another to maximize phylogenetic information.

One of the undisputed gains of morphological analyses is the ability to work out phylogenetic relationships among fossil taxa and their relationships to living taxa (Hillis and Wiens, 2000). It is important to note that most of the species that have evolved on this planet are already extinct (estimated to be >99%; Novacek and Wheeler, 1992) and must be included to fill the gaps. Baker and Gatesy (2002) state that if we ignore morphological evidence in tree reconstructions, the phylogeny of over 99% of life is ignored. Taxonomists need to dedicate more time and attention to identifying extant species because knowing how modern species came to be requires the use of fossil morphology. Given that Earth's biota changes dramatically and repeatedly through time, palaeontology will be essential for this work.

Not only does morphological approaches have a more effective application in studying fossil specimens, but also studying preserved museum specimens. Many taxa have become extant but may be challenging to include in molecular studies. Typically, tissues need to become modified and destroyed during molecular analysis. Morphology is a more satisfying solution to this problem because specimens can be readily observed in many cases without handling or dealing any damage. Even during the twenty-first century, morphology remains the easiest and most cost-effective means to identify species (Hillis 1987). Unfortunately, the field of systematics is poorly funded, and the costs to set up a laboratory to use molecular techniques can be a major obstacle. Through morphological approaches, we can better study preserved museum specimens.

A distinct advantage of morphological phylogenetics is that it will always be used as a "reality check" for molecular phylogenies (Doyle, 1992). Molecular sequencing does not come without error when constructing trees, and it is important to implement a backup plan when checking results. The correct identification of species is essential to the execution of ecological and evolutionary research. Wahlberg et al. (2005) suggested that combining molecular and morphological data sets can result in improvements in support greater than the whole support expected from the sum of the individual.

Marvaldi et al.'s (2002) study combined molecular and morphological analysis of Coleoptera and found more supported nodes (47 at 50% bootstrap support) considerably than with molecular data on its own. This study, among many others using combined techniques, shows that phylogenetic analyses of combined morphological and molecular data sets produce significantly higher resolution and support levels than analyses of molecular data alone. Thus, it would be important to combine the two approaches to give more robustness to trees and maximize phylogenetic information.



Photo credit: Aleksandra Dolezal. Butterflies are seen stored in a Schmidt box in the Royal Ontario Museum's archived collection.

Even though molecular systematics has taken over the 21st century, systematics must continue to be trained in morphological systematics as well. Morphological techniques are suitable to a vast collection of museums and fossil material, cost-effectiveness, as a "reality check", and a large portion of the Earth's organisms will continue to be studied primarily from morphological information based on alpha-taxonomic needs. Studies that combine the two approaches can thereby maximize both data content and utility. This will ensure that data set is wide-ranging and should make available a thorough record of the history of life.

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## GRADUATE STUDENT POSITIONS



Drawing by David Beresford

### **MSc – Agricultural Ecosystem Insect Ecology**

University of Northern BC (British Columbia, Canada)

Application Deadline: December 15, 2021

Details (<https://esc-sec.ca/wp-content/uploads/2021/09/MITACS-student-ad.pdf>)

### **MSc & PhD (Canadian Citizens) – Insect Freeze Tolerance**

Western University

Application Deadline: None Listed

Details: <https://publish.uwo.ca/~bsincl7/positions.html>

### **MSc/PhD – Mitigation and management of Cry1F resistance in European corn borer in Canada**

School of Environmental Science, University of Guelph (Guelph, ON)

Application deadline: None listed

Details: [https://esc-sec.ca/wp-content/uploads/2020/10/Grad\\_Assistantship\\_ECB\\_PhD.pdf](https://esc-sec.ca/wp-content/uploads/2020/10/Grad_Assistantship_ECB_PhD.pdf)

### **PhD – Molecular mechanisms of insect thermal tolerance**

Carlton University (Ottawa, Ontario)

Application deadline: Not listed

Details: [https://esc-sec.ca/wp-content/uploads/2021/05/GradstudentAd\\_microRNAs.pdf](https://esc-sec.ca/wp-content/uploads/2021/05/GradstudentAd_microRNAs.pdf)



## JOB POSTINGS



### **Laboratory Manager - Nematology - Natural Insect Control**

Natural Insect Control is recruiting for a Laboratory Manager - Nematology.

Application deadline: None listed

Details: [here](#)

### **Postdoc - New threats from pest insects in the boreal forest of northwestern Quebec**

Concordia University (Montreal, QC)

Application deadline: None listed

Details: <http://www.cef-cfr.ca/uploads/Actualit%E9/Postdocopportunity.pdf>

### **Postdoc: Honey Bee Health**

University of Saskatchewan (Saskatoon, SK)

Application deadline: Open until filled

Details: <https://usask.csod.com/ux/ats/careersite/14/home/requisition/5959?c=usask&source=Indeed>

### **Entomology Lead and R&D Technician**

Spotta (United Kingdom)

Application Deadline: Until filled

Details: <https://www.spotta.co/careers>

For more postings, visit the [ESC-SEC opportunities](#), [ESA careers](#), and [CSEE](#) pages.

## NEW ESO SECRETARY: Samm Reynolds

I am so excited to be the new secretary for the ESO! I am currently a graduate student at the University of Guelph studying conservation of native bees and flower flies on agricultural land. I am being co-supervised in this work by Dr. Andrew Young and Dr. Nigel Raine. I have loved bugs as long as I can remember and even now find myself using my spare time away from the lab drawing insects, making preserved insect art and going for long walks in the Arboretum. I am so excited to be a part of this wonderful community of naturalists and hope to serve you all well in my new role as Secretary.

Please reach out to me if you have any questions!  
@EntoSamm on Twitter or [sreyno08@uoguelph.ca](mailto:sreyno08@uoguelph.ca)



**The ESO would like to thank Michelle Locke for her outstanding work as the society's secretary since 2013, and for her ongoing support as Samm transitions into the role. Bravo, Michelle!**



## JOIN THE ESO BOARD!

The ESO society functions thanks to the help of the board! There are many different positions, and joining is a great way to make a difference to the society, work in a team, and gain public service experience in a relaxed, friendly atmosphere. Within the board you will also get the opportunity to join various committees for outreach, meeting planning, and more. Perhaps you have some new ideas or expertise that you'd like to bring to the society!

Each summer, the ESO members elect an incoming president, director, and student representative. The duration of these positions is as follows:

- President: 3 years (incoming, current, outgoing)

- Director: 2 years

- Student representative: 2 years

Interested members can send their photo and a short bio to Michelle Locke: [entsocont.membership@gmail.com](mailto:entsocont.membership@gmail.com)



Some of the current and past ESO board

## JESO IS LOOKING FOR A CO-EDITOR

The Journal of the Entomological Society of Ontario (JESO) is accepting applications for a co-Editor-in-Chief. The successful candidate will join the editorial team and take on the role of reviewing submissions, making editorial and review assignments, assessing reviews, and making final decisions on manuscripts.

JESO is one of North America's oldest entomological journals with a long and proud history of publishing high-quality scientific information of interest to entomologists and naturalists in eastern North America, and beyond.

Interested in applying? Please email Chris at: [Christian.MacQuarrie@NRCan-RNCan.gc.ca](mailto:Christian.MacQuarrie@NRCan-RNCan.gc.ca)





## PUBLISH IN JESO!

The Journal of the Entomological Society (JESO) is the second oldest entomological journal in North America.

Papers on any aspect of entomology are accepted, and do not need to be restricted to Ontario! Both French and English manuscripts are welcome. At least one author must be a member of the ESO. To submit, please see the [Instructions for Authors](#) page.



**Editor**  
**Chris MacQuarrie**

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nrcanrncan.gc.ca



**Assoc. Editor**  
**Jeff Skevington**

jhskevington@gmail.com



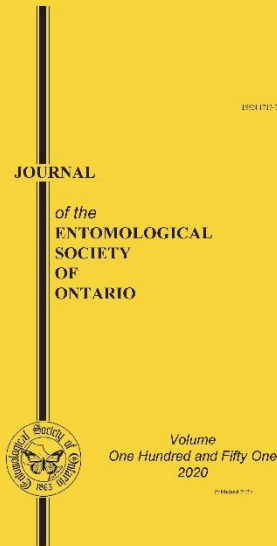
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**Technical Editor**  
**Thomas Onuferko**

onerko@yorku.ca



## MEMBERSHIP FORM

Just fill out this form (+ cheque or  
money order if required) and send to:

**Michelle Locke**  
Entomological  
Society of Ontario

Vista Centre, 1830 Bank St.  
P.O. Box 83025  
Ottawa, ON, K1V 1A3

### Type of membership requested

- |   |   |
|---|---|
| <input type="checkbox"/> Retired (free)         | <input type="checkbox"/> Student / Amateur (free) |
| <input type="checkbox"/> Regular (\$30)         | <input type="checkbox"/> Student / Amateur        |
| <input type="checkbox"/> Regular 5-year (\$150) | (International) (\$10)                            |

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Street Address \_\_\_\_\_

City, Province/State, Country \_\_\_\_\_

Postal Code/Zip Code \_\_\_\_\_ Telephone Number \_\_\_\_\_

Email Address \_\_\_\_\_

### (Optional) Background Information

Employment (Location/Subject area) \_\_\_\_\_

Entomological Interest \_\_\_\_\_

- ☐ Check if you would like to get  
more involved with ESO activities  
If so, how?

\_\_\_\_\_  
\_\_\_\_\_

## JOIN THE ESO!

For ESO membership, complete the [Membership form](#)  
(also available on the [ESO website](#))

**Student, amateur, and retiree memberships are FREE!**

**Regular members:** A one-time payment of \$150 secures  
you a 5 year membership! For payment options,  
including PayPal, please visit [www.entocont.ca](http://www.entocont.ca), or mail  
your invoice and payment to:



### ESO Membership Committee

Entomological Society of Ontario  
Stone Road Post Office, P.O. Box 25021  
17-370 Stone Road W.  
Guelph, Ontario N1G 4T4

Have questions? Email the ESO membership  
committee at: [entocont.membership@gmail.com](mailto:entocont.membership@gmail.com)