



Volume 27 | Issue 1 | June 1, 2022

ENTOMOLOGICAL SOCIETY OF ONTARIO

SPRING NEWSLETTER

Photo: Jon Moore
(BugEye 2021 People's Choice)

From the board

Officers of the ESO 2

ESO Communications 3-4

President’s address 5

Board nominations 6-11

Annual meetings

2022 ESO AGM (virtual) 12

Outreach & BugEye

Guelph Bug Day 13

BugEye photo contest 14-15

Postings & events

CWF Gardening webinar 16

Student opportunities 17

Job postings 18

Society

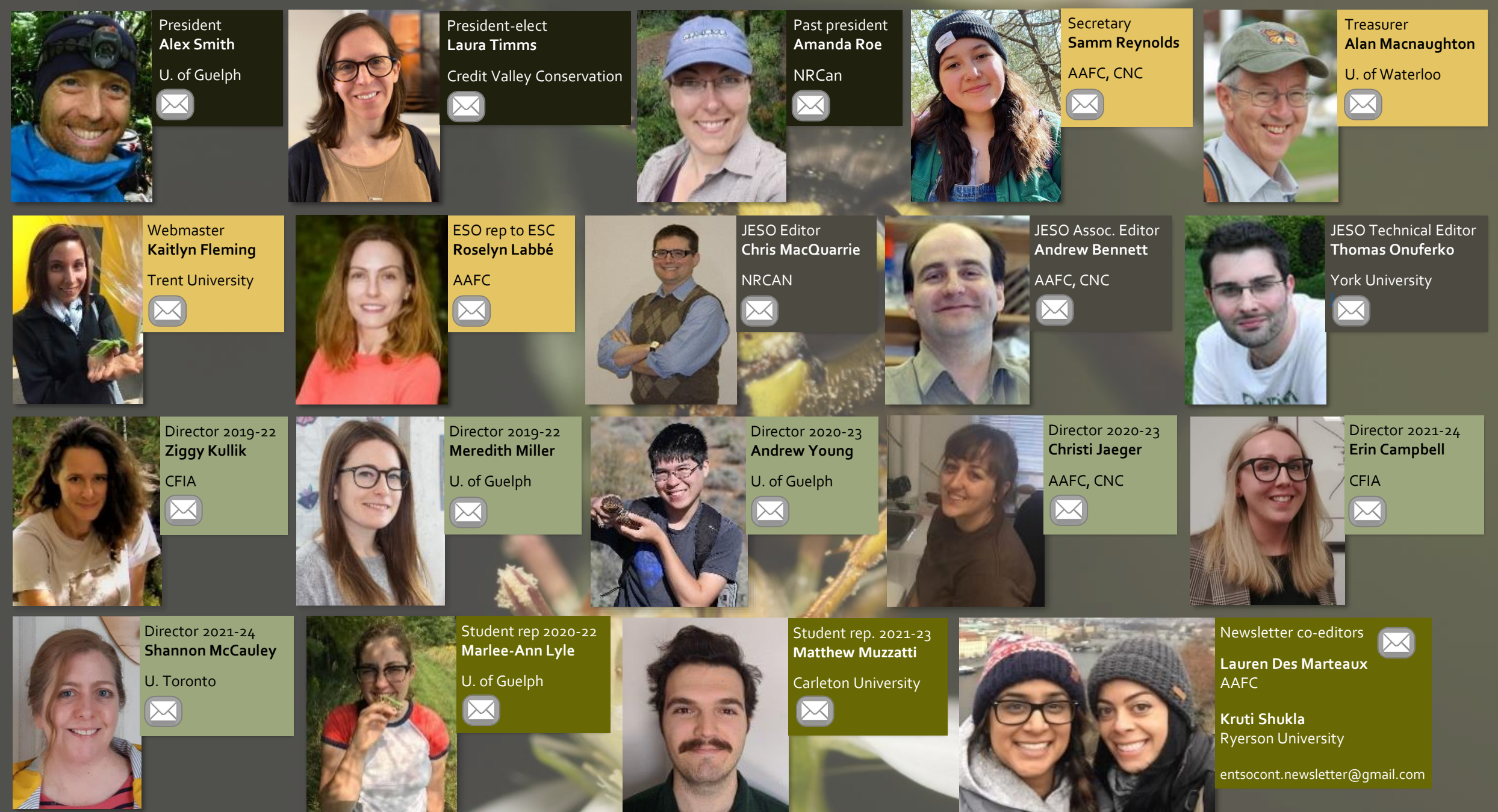
Join the ESO board 19

Wanted: JESO editor 20

Wanted: ESO Comms. Committee chair 21

Publish in JESO 22

ESO membership info 23



**President
Alex Smith**
U. of Guelph



**President-elect
Laura Timms**
Credit Valley Conservation



**Past president
Amanda Roe**
NRCan



**Secretary
Samm Reynolds**
AAFC, CNC



**Treasurer
Alan Macnaughton**
U. of Waterloo



**Webmaster
Kaitlyn Fleming**
Trent University



**ESO rep to ESC
Roselyn Labbé**
AAFC



**JESO Editor
Chris MacQuarrie**
NRCAN



**JESO Assoc. Editor
Andrew Bennett**
AAFC, CNC



**JESO Technical Editor
Thomas Onuferko**
York University



**Director 2019-22
Ziggy Kullik**
CFIA



**Director 2019-22
Meredith Miller**
U. of Guelph



**Director 2020-23
Andrew Young**
U. of Guelph



**Director 2020-23
Christi Jaeger**
AAFC, CNC



**Director 2021-24
Erin Campbell**
CFIA



**Director 2021-24
Shannon McCauley**
U. Toronto



**Student rep 2020-22
Marlee-Ann Lyle**
U. of Guelph



**Student rep. 2021-23
Matthew Muzzatti**
Carleton University



**Newsletter co-editors
Lauren Des Marteaux**
AAFC



Kruti Shukla
Ryerson University

entsocont.newsletter@gmail.com



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"

The ESO 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:

esocomms@gmail.com.

Entomological
Society of Ontario
Public group

About

Discussion

Rooms

Members

Events

Videos

Photos



[ESO Facebook](#)



We would like to extend our sincerest gratitude to Jennifer Grixti for her service as the Chair of the ESO Communications Committee. Through her leadership, our society's social media accounts (Facebook and Twitter) were revitalized through increased engagement; we saw drastic growth in membership, reactions, shares, and likes. We want to thank Jennifer for all her hard work in leading an amazing team, and for her overall contribution to our society.

Thank you Jennifer!





In southern Ontario, last weekend was 25+°C, sunny and warm and our family was lucky enough to spend these unseasonably warm days at Long Point on the shores of Lake Erie. The nearly Mediterranean blues of the lake were appreciated after another winter living under the effects of COVID. Here in Guelph, I have continued teaching online. This term included the 4000th student I've hosted since the start of the pandemic here in my Zoom office. During this pandemic, I have been impressed with how we can make teaching and learning more active, equitable and personal in the virtual space when compared to the lecture theatre. While this is certainly not all online learning experiences – the virtual classroom (or conference) will remain an important tool for reaching an audience in a dynamic and accessible way. So, I was very pleased when your ESO board voted unanimously to move our Annual General Meeting for the fall of 2022 online. We continue to look forward to seeing everyone face to face when it is safe to do so. In the meantime, we look forward to crafting a meeting in September that will be a welcoming environment for undergraduates, graduates, professionals, and academics to meet, share plans and present research and results.

Though mandates and infrastructural protections begin to be removed, the pandemic continues, leaving many isolated, tired, alone and vulnerable. To the entire board and membership, I want to say thank you for your commitment to this organisation. The fact that for many of you, your commitment to ESO extends deeply and widely beyond your virtual presence is inspirational to me. This has not been an easy time for anyone – some more so than others. I hope that our ESO will emerge from this period with an invigorated focus on inclusion.

I'd like to thank you all once again for supporting your Society this year. I'm hopeful that in 2022 and 2023 we will see opportunities to join with our community and support each other in making it stronger.

Alex Smith
ESO President



Justin Renkema

President-elect

I am a Research Scientist with Agriculture and Agri-Food Canada at the Vineland Campus of the London Research and Development Centre. My research program focuses on applied entomology and improving integrated pest management in fruit crops. I have current projects on testing new controls, such as steam treatment of transplants, for cyclamen mite in strawberry, identifying Hemipteran vectors of grapevine red blotch virus in Ontario vineyards, determining how repellent plants and natural enemies can be used against spotted wing drosophila in berries, and investigating ambrosia beetle communities and new traps for leafroller control in apples.

Prior to working at AAFC, I was an Assistant Professor of Entomology at the University of Florida, with a research and extension program in strawberry and blueberry. I completed a MSc (2004) and was a post-doctoral researcher at the University of Guelph, completed a PhD (2011) and was a post-doc at Dalhousie University and have a BSc (2002) from Redeemer University. Since my PhD on blueberry maggot in NS, most of my research has focused on biological, chemical and physical control of and sampling for pests in fruit crops, particularly berries.

I have been a member of the ESO in the past, as a student and then as a post-doc, and look forward to joining again and becoming reacquainted with entomologists in the province. I have been active in other entomological societies, being part of the student and early-professional committee of the ESC, judging student competitions and moderating sessions at ESA meetings, and helping to organize a Florida Entomological Society meeting. I would be honoured to be elected President and would make the most of the opportunity to promote entomology in Ontario and serve the diverse membership of the ESO.



Jessie deHaan (they/them)

Director

I am passionate about sustainability and environmental stewardship. After my undergrad, I worked in the horticulture sector for 6 years where I fell in love with biological pest control. For my M.Sc, I studied the physiological consequences of developmental temperature on a native bee (*Ceratina calcarata*). Combining my passion for research and horticulture, I now work as a Research Technician in the Biological Crop Protection lab at Vineland Research and Innovation Centre (VRIC). At VRIC, I conduct research on common greenhouse insect pests and their commercially available predators. I am particularly interested in helping growers maximize the effectiveness of their IPM programs, conducting R&D that directly benefits Canadian growers and the horticulture industry.

Not everyone has the chance to grow up surrounded by nature or learn about it. In my spare time, I host and produce a SciComm podcast called Gamer's Guide to Ecology. My podcast aims to teach the ecological principles found in open-world video games to the people that play and love them. I frequently touch on topics like animal behaviour, evolution and anthropogenic disturbances. Video game designers do their best to recreate the natural world, or even create new planets and ecosystems within their games. Through the common media of video games, I hope to teach people about current topics that affect our own natural world like climate change, pollution and habitat loss.



Lauren Des Marteaux

Director

I became fascinated with the incredible diversity, beauty, and ecological importance of insects as a Zoology major at the University of Guelph. I completed an M.Sc. on diapause ecology of the swede midge at Guelph, then turned to physiology for my dissertation on cold tolerance in crickets at the University of Western Ontario, during which I co-developed and co-taught a new Insect Biology course with Jeremy McNeil. I spent a number of years in the Czech Republic as a postdoc studying extreme freeze tolerance of malt flies (which can survive for many months at -196°C !), then investigated circadian rhythm in bean bugs at Osaka City University as a fellow of the Japan Society for Promotion of Science. I joined the Harrow Research and Development Centre (AAFC) as the field entomologist in 2020. I currently work on a variety of projects related to biodiversity surveying, integrated

pest management, development of novel genetic tools insect monitoring, and development of native biocontrol agents. I am also an adjunct associate professor at the University of Windsor, Ontario.

The ESO AGM was among the first conferences I attended as a student and I have always cherished this welcoming and tight-knit community. I have been a member of the ESO for 12 years and would be pleased to serve on the board as Director. I have served on the AGM Local Organizing Committee (2012), Travel Award Committee (2014), Outreach Committee (2016), as a Student Representative (2013-2015), and as Newsletter Co-Editor (2015-present). I also designed the ESO Info Pamphlet and help to admin the Facebook page. I created the first 'Bug Day' in London, Ontario in 2014 which attracted 300 visitors in its first year and grew to 700 visitors under my direction by 2016, making it the second largest insect-related outreach event in the province at the time. Entomology outreach is my top priority, and my aim as a director is to foster these events across Ontario (pandemic willing!).



Heath MacMillan

Director

I am an Assistant Professor in the Department of Biology and Institute of Biochemistry at Carleton University in Ottawa. I completed my PhD at the University of Western Ontario with Brent Sinclair and Jim Staples. My first postdoctoral fellowship was with Johannes Overgaard at Aarhus University (Aarhus, Denmark), which was followed by a Banting Fellowship with Andrew Donini at York University.

Throughout my career I have been interested in the physiological and molecular mechanisms underlying stress-related injury in insects. In my lab a wonderful team of people, including undergraduate and graduate students and postdocs, are all busy trying to understand how factors like temperature, microplastics, and diet all act as stressors to impact insect performance and fitness. Together, we build conceptual models of how and why stressors have these impacts and use these models to better understand evolved mechanisms of tolerance.

Beyond the various “hats” I wear as a professor, I am also a father of three kids under ten and have a keen interest in finding ways to help students and early career professionals from all backgrounds navigate work-life balance and feel supported by their research community. Through my work with the Canadian Society of Zoologists in the past, for example, I helped design a new grant in support of parents and caregivers attending the annual society meeting.



Mahmoud El-Saadi

Student representative

During my undergraduate degree at Carleton University, I realized my love for insects after completing a course on insect diversity taught by Dr. Jayne Yack. Following a brief period as a volunteer with Dr. Heath MacMillan, I decided to pursue an Honours thesis in his lab to research the effects of stressful temperatures on insect physiology. I decided to remain in the MacMillan lab to pursue my MSc which I completed in the Fall of 2021. I am currently a PhD student (and still a member of the MacMillan lab!), with research focusing on the effects of low temperatures on the insect immune system.

Outside of my research during my Honours project, I was involved with the Canadian Museum of Nature as a volunteer where I helped organize hands-on activities for visitors to learn more about wildlife in the Canadian arctic. This passion for education and communication has been the driving force behind my involvement in societies such as the Canadian Society of Zoologists, the Entomological Society of Canada, and the Entomological Society of America where I've had the pleasure of meeting many wonderful and enthusiastic people! I am currently involved with the ESC as a member of the social media team where we like to highlight publications by student researchers in Canada, thus allowing the students to showcase what they've been up to.

I believe science communication and networking are very important for researchers, especially in this digital age where it's easy to connect with like-minded peers all over the world! I am running for ESO student representative for the opportunity to foster more connections between students and mentors, and to encourage young scientists to share their research more actively with the wider scientific community, should I be elected. I aim to bring the same positive energy I experienced from those in the CSZ, ESC, and ESA to provide more engagement between peers in the society, especially for undergraduates.



Lamees Mohammad

Student representative

Hello ESO members!

My first experience with the welcoming ESO community was as an undergraduate volunteer for London's Bug Day. From this fabulous experience I developed an interest in science outreach and learned the importance of effective scientific communication. My curiosity in entomology stems prior to Bug Day as an intern in Dr. Brent Sinclair's lab at Western University. For my internship I worked on a collaborative project with the Great Lakes Forestry Center studying the overwintering physiology of Asian longhorned beetles. I then went on an adventure to the University of Calgary to receive my MSc and explore neuroscience. I missed the insect world and pursued a PhD in Dr. Sinclair's lab where I am thrilled to be researching freeze tolerance in the *Gryllus veletis* (cricket) nervous system.

If elected, I would like to work with the ESO team and students on science advocacy. The COVID-19 pandemic has underscored the role of scientists as educators to politicians and the public. Having students meet with local members of Parliament to highlight the importance of their research as *ento*-advocates would lead to stronger support for research in the long term. I am grateful to have worked with many ESO members who have set the foundation for my career, and I would love the opportunity to do the same for other students.

2022 VIRTUAL AGM

Keep on Rolling — Resilience in the Face of Adversity

Date: Friday, September 23 (afternoon) - Saturday, September 24 (afternoon)

Registration: \$15 student members; \$30 regular members

Abstract Submission deadline: August 1st, 2022

Presentation Formats:

- Oral Presentations (Student & Regular): 12 min + 3 min questions
- Lightning Talks (Student & Regular): 3 min (3 slides) + Questions at the end of the session
- Poster Presentations (Student & Regular): presentations in breakout rooms

Student Awards

Student Awards given for 1st and 2nd place in each Presentation category (6 total)

Tentative Schedule

Friday Afternoon

- Opening, followed by Keynote
- Oral talks
- Lightning talks
- Posters during break

Friday Evening

- Social and Networking

Saturday Afternoon

- Oral talks
- Lightning talks
- Posters during break
- Awards Ceremony

KEEP ON ROLLING

ESO VIRTUAL 2022



We're back in person!



Sunday August 21st, 2022

10:00 AM - 5:00 PM

At the UofG Arboretum Centre!

Want to be a
VOLUNTEER? Contact
guelphbugday@gmail.com
for more information



Search 'Guelph Bug Day'



@GuelphBugDay



@guelphbugday



<https://bit.ly/35Xo5Pt>



ONTARIO
AGRICULTURAL COLLEGE



SUBMIT A PHOTOGRAPH TO THE BUGEYE PHOTO CONTEST!

All Ontario residents, including international students living in Ontario, are eligible

You may submit up to 3 unique images, but can only win one prize plus the People's Choice Award. The best pictures submitted will be selected by judges and entered into the People's Choice Award competition. People's Choice entries will be posted on the ESO website, ESO social media, and/or on a photo sharing website such as flickr for the community to vote on, in addition to being displayed at the ESO Annual Meeting. If you do not wish for your photo to be posted publicly, you can choose to not participate in the People's Choice Award. Copyright for the photo remains with the photographer, but use must be granted for ESO promotional material.



Instructions:

- Images must be of insects or closely related arthropod species (mites, spiders, etc).
- All submissions must be digital files, and may be either 'landscape' or 'portrait' in orientation.
- Submit the image file by creating a digital file that is the equivalent of 7.5 inch by 10 inch (19.5 cm by 25.4 cm), at 300 dpi, formatted as a jpg. Images from film must be digitally scanned and then edited to 7.5 inch by 10 inch, at 300 dpi.
- Create a filename using an appropriate title, underscore, your last name, underscore, first initial (e.g. dragonfly_smith_j.jpg).
- Include a short description of your entries (where they were taken, why you like them, etc.)
- Indicate whether:
 1. your photo is of an Ontario insect
 2. you are a child under the age of 13
 3. you would like to be considered for the People's Choice Award.
- Photographic enhancement is allowed as long as it is something that could also be achieved in a real darkroom with a color or black & white negative (e.g. adjustment of contrast, color enhancement, cropping, etc.). However, very dubious enhancements will be negatively scored.

Judging criteria is based on

- a) image composition
- b) visual impact of image
- c) subject interest
- d) sharpness of subject
- e) difficulty of image acquisition
- f) lighting

BugEye prize categories

- Best photo (\$50)
- Best photo of an Ontario insect (\$50)
- Best photo by a junior entomologist under 13
(1st \$25, 2nd \$20, 3rd \$10)
- People's Choice Award (\$50)



Open to all Ontario residents, no entry fee
Submission deadline: August 31, 2022
Submit photos to: esophotos@gmail.com
Winners announced at the upcoming ESO AGM



2020 Best Ontario Insect & People's Choice:
Rory Wills

A close-up photograph of several yellow and brown orchids, likely Spotted Lady's Slippers, with large green leaves in the background.

Gardening with Native Plants in Ontario

The CWF will hold a webinar on Gardening with Native Plants in Ontario as part of their native plant webinar series. Their special guest will be Lorraine Johnson, a highly respected author and expert in plants, ecology, and sustainability expert. Lorraine will discuss the benefits and versatility of Ontario-native plants and how they can be incorporated into existing gardens to support birds and beneficial insects.



Date: June 15, 2022

Time: 7:00 p.m. ET

Cost: Free

Registry: [Here!](#)

GRADUATE STUDENT POSITIONS

[MSc – Mitigation and management of Cry1F resistance in European corn borer in Canada](#)

School of Environmental Science, University of Guelph

Application deadline: None listed

[MSc – Insect flight aerodynamics](#)

University of Ottawa & Carleton University

Application deadline: None listed (September 2022 start)

[MSc / PhD – Bark beetle pheromone ecology](#)

University of North British Columbia & Canadian Forest Service

Application deadline: None Listed

[MSc / PhD – Insect Freeze Tolerance](#)

Western University

Deadline: None listed (intended start data Dec 2022)

[PhD – Molecular mechanisms of insect thermal tolerance](#)

Department of Biology, Carlton University

Deadline: None listed



Drawing by David Beresford

JOB POSTINGS



Head of breeding & entomology

NRGene Ltd. (Saskatoon, SK)

Application deadline: None listed

Details: [Here \(LinkedIn\)](#)

Lecturer in Insect Biology (ENTO 330)

McGill University (Montreal, QC)

Application deadline: None listed

Details: [Here \(LinkedIn\)](#)



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

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 Samm Reynolds: sreyno08@uoguelph.ca



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



ESO IS LOOKING FOR A COMMUNICATIONS COMMITTEE CHAIR

Want to build your leadership skills, while gaining experience in digital communications and science communication? Then this exciting opportunity is for you! The Entomological Society of Ontario (ESO) is seeking a motivated, strategic and communications savvy individual for the position of Chair, ESO Communications Committee.

In this volunteer role you will:

- Oversee the ESO's social media channels and lead a communications team in the development of daily content representing ESO's values of equity, diversity and inclusivity in science.
- Review and edit social media content prepared prior to posting for accuracy, relevancy, inclusivity, and timeliness.
- Lead biweekly meetings with the communications team to brainstorm and secure upcoming social media content.
- Prepare and present communications committee reports briefly summarizing the committee's business to the ESO officers at the quarterly meetings.
- Provide strategic communications advice and support to the ESO officers on the board, including preparing promotional social media content for entomological events, opportunities and the ESO newsletter, and provide ideas for expanding ESO membership via social media.

Those interested should email us at entsocont.newsletter@gmail.com





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



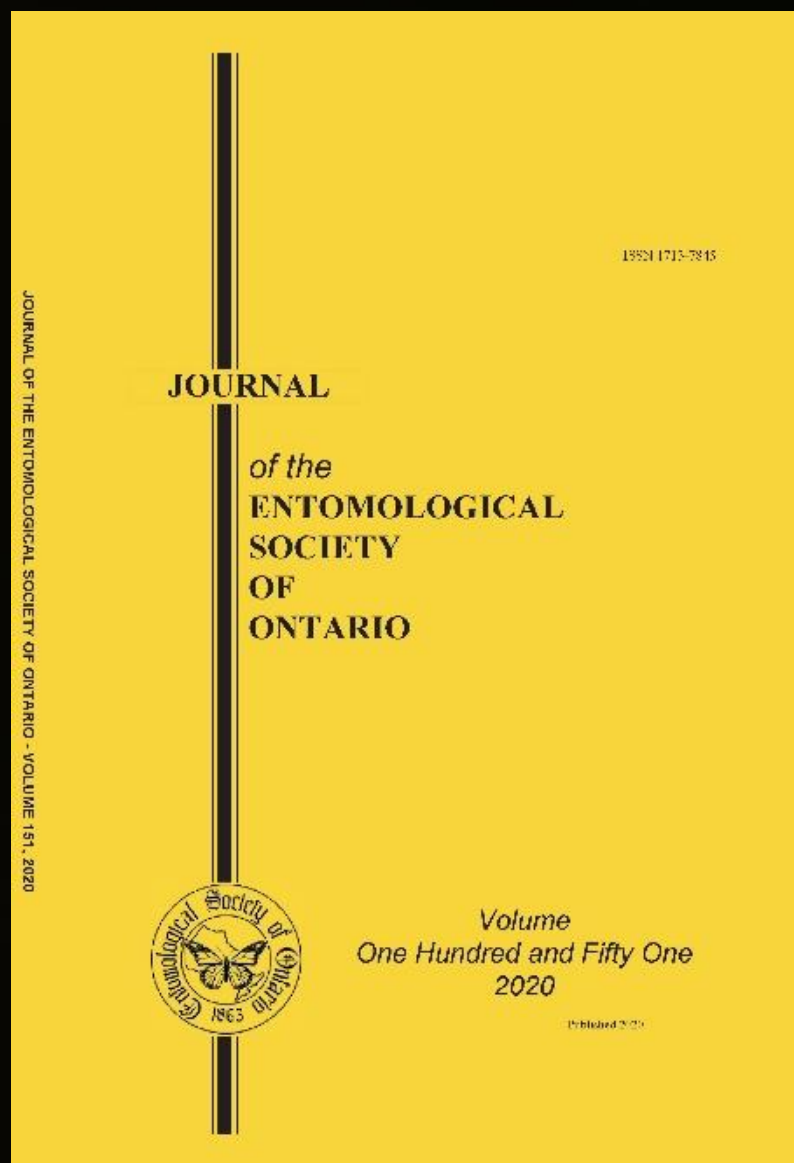
Assoc. Editor
Jeff Skevington



Assoc. Editor
Andrew Bennett



Technical Editor
Thomas Onuferko



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.entsocont.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: entsocont.membership@gmail.com