

Volume 24 | Issue 1 | June 10, 2019

Entomological Society of Ontario Spring Newsletter



rom the board			
Officers of the ESO			
President's address 3			
Board nominations 4-10			
pcoming meetings			
ESO AGM			
Joint CSEE/ESC/AES meeting			
21st ICAIS meeting			
utreach			
London Bug Day 14			

Events & opportunities

BugEye photo contest	16-17
Upcoming events	18
Opportunities	19

Society

Obituary	20
ESO 150 th	21
Wanted: webmaster & social media coordinator 22	-23
Join the ESO board!	24
Publish in JESO!	25
Join the ESO!	26



President **David Beresford** Trent University davidberesford@trentu.ca



Amro Zayed York University zayed@yorku.ca

President-elect



antoniag@rom.on.ca



Secretary Michelle Locke AAFC, CNC michellemlocke@

gmail.com



Shiyou Li AAFC

Treasurer



Webmaster **Trevor Burt** Carleton University CNC, ZFMK



JESO Editor Chris MacQuarrie CFS - GLFC

chritian.macquarrie@ canada.ca



JESO Assoc, Editor Jeff Skevington AAFC, CNC

jhskevington@ gmail.com



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

andrew.bennett@ agr.gc.ca



JESO Technical Editor **Thomas Onuferko** York University



Director 2017-19 Amanda Roe NRCan

trevburt@gmail.com

amanda.roe@ canada.ca



Director 2017-19 **Joel Kitts** AAFC, CNC

joel.kitts@agr.gc.ca



Director 2018-20 Julia Mlynarek AAFC

julia.mlynarek@ canada.ca



Director 2018-20 **Miriam Richards NRCan**

mrichards@ brocku.ca



OMAFRA

Director 2019-21

Tracey Baute

tracey.baute@ontario.ca



Director 2019-21 Jeremy DeWaard Centre for Biodiversity Genomics

dewaardj@uoguelph.



ESC Rep. to ESO **Alex Smith** U. of Guelph

salex@uoguelph.ca



Student Rep. Sarah Dolson U. of Guelph

dolsons@ uoguelph.ca



Student Rep. Kaitlyn Fleming **Trent University**

kaitlynflemin@ trentu.ca



Newsletter Co-editors

Lauren Des Marteaux BCAS, Czech Rep. Idesmart@uwo.ca

Kruti Shukla

Ryerson University kruti.shukla@gmail.com





President's address: A musical commons

The helicopter lifted off and flew back to camp. The two of us watched it leave until it was lost on the horizon. We were on the shore of James Bay, a vast coastal mudflat about three miles wide. We had been dropped off to wait while the helicopter went back to get the rest of our crew, a 90 minute round trip. So, we sat on a beached log and waited while we scanned the horizon for bears. Some horse flies were flying but not biting yet, the omnipresent wind kept them away. The ground was speckled by shore flies as if covered in black pepper. On the horizon, the ice on James Bay shimmered in the distance. The air smelled of rotting vegetation, fish, and mud. The sun was hot, and the wind from the coast had a refreshing coolness. I poured a cup of coffee from a thermos and we chatted in a desultory manner.

As the wind waned I heard a strange low level moaning, a haunting sound barely perceptible.

"Do you hear that?" I asked, "it sounds like keening at an Irish wake."

"Glad you spoke up, I thought I was hearing things," my colleague said. "Know what it is?"

I was about to answer when the wind stopped. Suddenly, we were surrounded a loud wailing which seemed to be coming from the ground. I looked down; my feet were almost hidden from view. Thousands of shore flies were flying, covering my boots and filling the air with the sound of their wings. It was thrilling, beautiful, and terrifyingly lonely. This was one of the moments in my life when the beauty of insects had become palpable. Numbering in the millions, these flies were never going to be listed for protection as rare species. But that is not the point. Their very abundance itself was the event, and we were there to see and hear it. I have heard other ensembles closer to home. Each fall, the cluster flies arrive in my house to overwinter, gathering on my window sills, tumbling and spinning like circus acrobats in miniature. For two weeks their cheerful buzzing fills the air. Maybe not everyone sees it this way, but I do.



The point is simply this: that as entomologists while we are scientists, we are also human beings. Each of us has fallen in love with these animals; each has had moments when we knew that these things we treasure must be protected, mostly from our owns species' ignorance. The best way I know to achieve this is to gently teach people to see insects as if for the first time, to actually look at them. Entomologists understand the fragility of the habitats that surround around us. We know that it is not enough to protect and treasure the rare species — that is a given. We must also protect the habitat of even those common species which create such symphonies in our midst.

David Beresford ESO President



Amanda Roe

President-elect

I have always loved insects. Instead of dolls I had a bucket of "squirmies"; my prized possession. My two young daughters have inherited this first collection as well as my passion for bugs, nature, and dirty hands. I grew up on a farm in southern Alberta and only recently moved to Ontario six years ago. While I have always loved bugs I did not fully recognize my passion for insects until I started my insect collection for my Insect Taxonomy course at the University of Alberta. Following my undergraduate degree in Environmental Biology, I completed my PhD with Dr. Felix Sperling at the University of Alberta in 2006. My PhD thesis focused on the molecular ecology of a group of cone and seed pests called coneworms (Lepidoptera: Pyralidae: *Dioryctria*). Since flexibility is paramount as a postdoc, I worked in a wide diversity of systems - three Kingdoms in fact. I have studied higher level systematics in Lepidoptera at the University of Minnesota (2006-2007, NSF AToL project), mountain pine beetle fungal symbionts at the University of Alberta (2008 – 2010,

Genome Canada TRIA project), and popular tree hybridization with the Canadian Forest Service (2010-2013).

Insects, though, are really my true love. Luckily my persistence paid off and I have now been work in the Pest Management Division at the Great Lakes Forestry Centre with the Canadian Forest Service (NRCan) since 2016. I have developed a molecular ecology program which focuses on the genomic and functional diversity of key forest pests, including the spruce budworm, Asian longhorned beetle, and forest tent caterpillar. In addition to this broad research program I am also the scientific lead of the Insect Production and Quarantine Laboratory within our centre. This is a world-class insect rearing facility that produces insects and diet for the global research community.

Education and public outreach have always been an important component of my professional life. I volunteered as an outreach educator at the University of Alberta, bringing bugs into classrooms throughout Alberta. My passion for outreach led me to help found Entomica, an award winning insectarium in Sault Ste. Marie. One of our innovative outreach programs called Science for Seniors received national recognition from the Canadian Association of Science Centres. Building a knowledgeable, scientifically literate public is critical in society. I value the work that the ESO does to share the world of insects (and spiders too!) to the general public. There is nothing more enjoyable than sharing my buggy knowledge with a group of engaged students or seniors. I live for those 'wow' moments, when I can share a piece of my passion with someone new. I would be honoured to serve the ESO as president. I would help grow our society by recruiting new members and spreading our collective entomological passion.



Graham Thompson

President-elect

My love for entomology dates way back to when I was an undergraduate at the University of Guelph in the 1990s. At the time, I travelled to the island of Jamaica for a field course and became enamored with the resident termites that 'infested' the field station. A quarter century later, after pursuing termites from downtown Toronto to the Australian outback, I find myself as Associate Professor in Biology at Western University. I still work on termites - or, technically, social cockroaches (Blattodea). My teaching and research effort incorporates classical aspects of entomology (including field collections and taxonomy / systematics), but my lab's main identity stems from using insects as a model to study evolutionary and genetic aspects of behavior. Specifically, my students and I research the evolution of cooperation and altruism, typically using inclusive fitness theory as a guide, and insects - like, termites, honey bees and Drosophila - as models. My research into pollinating (bees) and pest (termites, fruit flies) insect behavior occasionally generates interest from industry and from the public, as well.

As President of ESO I would draw from my 'social' leadership experience on comparable science-based yet public-oriented communities, including my experience as Group Chair for Canada's Natural Sciences and Engineering Research Council's Scholarships and Fellowships Selection Committee (2014-2018), and from my experience as the sole North American representative on the European Society of Evolutionary Biology Outreach Committee. I would also draw from my role as Editorial Board Member and Associate Editor at Insectes Sociaux, which is an international journal dedicated to social insect research. My approach as President would be first and foremost to preserve and promote the ESO's existing success, which depends highly on its diverse membership of amateur and professional entomologists alike. I would duly 'carry the torch'! If elected, I would further attempt, however, to leverage ESOs success to promote evidenced-based thinking to a science-wary public through outreach and education, as exemplified by events like the highly successful Bug Days. Finally, I would promote inclusive, fun, and diverse meetings that are highly accessible to students.



Meredith Miller

Director

Meredith Miller has always had a keen interest in entomology and has really enjoyed assisting research in a diverse range of insect-related fields. During her summers of her environmental science undergraduate degree, she worked as a field technician collecting and identifying aquatic macroinvertebrates as part of environmental monitoring programming at Quinte Conservation in Belleville Ontario. She graduated from the Bio-Resource Management (honours) program from the University of Guelph in 2012.

Meredith completed a Masters of Science in entomology (Environmental Science) at the University of Guelph with Dr. Steve Marshall in 2015. Her Masters focused on the taxonomy of *Drosophila* found in Northeastern North America, and included a photographic identification key to species published in CJAI. During her Masters, she had the opportunity to work in the Diptera Unit at the Canadian National Collection of Insects with Dr. Jeff Skevington, visit the American Museum of Natural History to work with Dave Grimaldi, and present her research at local (ESO and ESC) and international conferences (ICD).

After completing her Masters, she worked as a database technician in the Diptera Unit at the CNC, followed by a field technician position in integrated pest management for Dr. Cynthia Scott Dupree at the University of Guelph. She also held a volunteer position working at the Cambridge Butterfly conservatory, where she worked as part of the team that managed and maintained live invertebrate colonies for public display. In 2017, Meredith became a collections technician at the Centre for Biodiversity Genomics at the University of Guelph. One of her primary tasks includes coordinating and implementing tri-annual trips to the Smithsonian National Museum of Natural History, working closely with curators and museum staff to select appropriate specimens for C01 sequencing, thus helping to expand the current BOLD Barcode library.

Meredith loves to be a part of in the entomological community and intends to assist with entomology research and continue her own taxonomic work into the future.



Bryan Brunet

Director

Dr. Bryan Brunet is a new AAFC Research Scientist at the CNC in Ottawa working on the systematics of aphids, psyllids, scale insects, whiteflies, and thrips. He earned his B.Sc. with Honours in Biology from the University of Ottawa in 2007, and his Ph.D. in Systematics and Evolution from the University of Alberta in 2014. During his time as an undergraduate student, Bryan was introduced to the CNC through multiple work placements in the Hemiptera and Hymenoptera units, and quickly developed a passion for entomology (particularly aphids), completing an honours project on aphid morphometrics under the supervision of Dr. Robert Foottit. He switched groups for his doctorate research and used genomic approaches to investigate population genetics and hybrid dynamics in the spruce budworm (Choristoneura fumiferana) species complex.

Prior to his employment with AAFC in 2018, Dr. Brunet worked briefly as a Research Entomologist for the CFIA's Ottawa Plant Laboratory (2017-18), and for several years as the Collection Management Advisor for the University of Alberta's Natural History Collections (2014-17). Dr. Brunet has acted in many volunteer and leadership roles. He gave numerous presentations on entomology to elementary school classes (2011-15), as well as science and engineering camps offered at the University of Alberta (2009 and 2012) while living in the Edmonton area, and has coordinated the Bug Zoo component of the CNC's Bug Day events since 2017. He was part of the organizing committee of the 6th International Congress on the Biology of Butterflies held in Edmonton in 2010. He has been a member of the Entomological Societies of Canada and America since 2008, was a member (2008-2017), Director (2008-09, 2014-16) and co-Web Developer (2014-17) of the Alberta Lepidopterists' Guild, and has been a member of the Entomological Society of Ontario since 2018.



Ziggy Kullik

Director

I have been interested in insects since I was a child, but really got passionate about the topic as an undergraduate student at Trent University. My subsequent graduate studies at the University of Guelph focused on the phenology and integrated pest management of the black cutworm. During my time in Guelph I developed a particularly keen interest in soil invertebrates and decomposition ecology which I pursued as a postdoctoral researcher. In 2010 I joined Health Canada to develop tools and regulations to assess potential environmental impacts of human and veterinary drug products on soil and aquatic ecosystems. I now work for the Canadian Food Inspection Agency, where I am engaged in evaluating a wide variety of programs, including those aimed at ensuring Canada's animal and plant resource base is safe from invasive pest species and pathogens.

I first joined the Entomological Society of Ontario as a graduate student in 2001 and have been an active member ever since. As a graduate student I benefited greatly from participating in annual meetings. Particularly striking was the welcoming and supportive atmosphere and the opportunities to interact with the ESO's committed and active membership. I have since been involved in organizing several annual meetings in various roles, including local arrangements and program committee, meeting co-chair and deputy chair and have also served as an ESO director in the past. I would be very happy to once again serve as a member of the ESO board.



Carolyn Thickett

Student representative

I am a bug lover, educator and now a student... again! At the University of Guelph, I completed an undergraduate degree in Zoology and was captivated during courses with Dr. Gard Otis on insect behaviour, apiculture, and an entomological field study in Ecuador. After graduation, I worked at the Toronto Zoo (with vertebrates and invertebrates alike), and then began my journey as an educator. After the birth of my daughters, I started working in elementary classrooms to bring discovery-based science to students to drive engagement. While I enjoyed teaching entomology, biodiversity, and microscopy workshops, and later developing educational programs, I ultimately decided to return to school.

I am currently completing the Master of Environmental Science program, at the University of Toronto. My graduate research is aimed at characterizing the nesting phenology of Queen bumblebees in Ontario. I have teamed up with Wildlife Preservation Canada to complete my research and assist in their Native Pollinator Initiative program.

I am running for the Student Representative position on the ESO board because I believe that connecting entomologists is a necessary step to communicate and share research, while also opening the door for budding young scientists. While I am new to the ESO, I hope that I can bring my experience and skills as an educator to the role and provide a fresh perspective on student engagement. I hope that I will become your next student representative, so that I can share my love for the most diverse, and most important, organisms on the planet!



Aleksandra Dolezal

Student representative

Since childhood I have been interested in entomology and my whole life has been a means to pursue a career in it. I am currently a master's student with Andrew MacDougall at the University of Guelph, and will be continuing to a Ph.D. in the same lab. I investigate how habitats in agricultural landscapes affect arthropods and provide ecosystem services on farms. I believe that understanding, protecting, and harnessing arthropod biodiversity is key to the agricultural and food challenge before us.

Not only am I involved in entomological research at the U of G, but also in entomology-related outreach. I initiated the first entomology club at U of G in winter 2018. For my club duties as president, I presented a series of insect identification workshops targeted for beginner entomologists, organized lightning talks for graduate students to present their research, and planned insect field trips. Other duties included providing networking, volunteer, and employment opportunities for undergraduates interested in entomology. Apart from this club, I have been involved

In planning Guelph Bug Day for two years in a row. I have also been involved in Entomology Societies, serving on the Student Affairs Committee (North Central Branch) of the Entomological Society of America (ESA) and as the chair-elect for the Entomological Society of America (North Central Branch). With these leadership and outreach roles you can tell scientific communication is something I am very passionate about.

I believe that a scientist's most important skill is their ability to communicate their ideas to others including the public. To help communicate science to a more public audience I took an active role as a journalist for the website envirobites.org where I disseminate cutting edge environmental science research to the public in a way they can get excited about. The topics include entomology related issues but extend to broader issues such as conservation and climate change. I have also been curating my own research blog since 2016 at ecologyforlifeblog.wordpress.com.

If elected the position of ESO Student Representative I would no doubt be an asset in more scientific communication activities. I also want undergraduate students to get a head start in non-referred publications and get them to write for the ESO newsletter. I want to provide students with opportunities to share their research and also foster their passion for insect biodiversity.



2019 ESO ANNUAL GENERAL MEETING

"By observation and experiment: teaching and learning about insect biodiversity"

Date: November 1-3, 2019

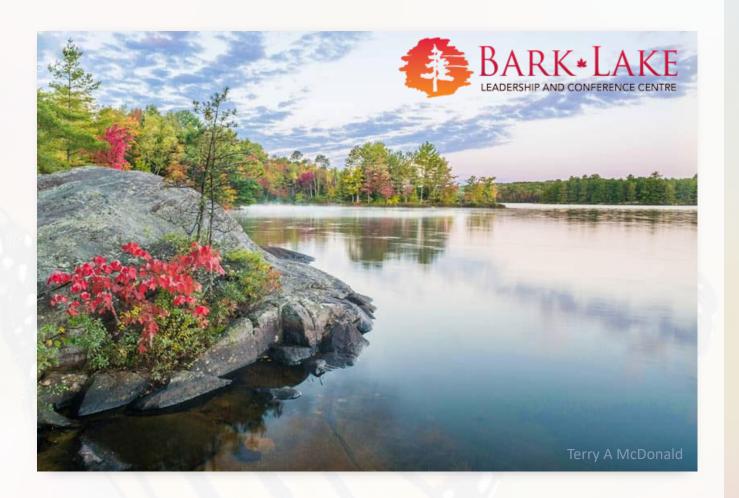
Our Annual General Meeting will take place at **Bark Lake Conference Centre** in Haliburton region this year. The venue is set amidst spectacular forests and lakes, well off the main road. It is the perfect place to balance learning and contemplation.

Registration includes all meals and accommodation costs. We look forward to seeing you there!

Abstract submission deadline: Oct 12 Poster pdf submission deadline: Oct 21

Early registration deadline: Oct 4 Final registration deadline: Oct 21

Check the ESO website for more details soon!





The Canadian Society for Ecology & Evolution, the Entomological Society of Canada, and the Acadian Entomological Society

invite you to a joint meeting!

August 18th-21st, 2019 Fredericton, New Brunswick

Important dates:

Registration opens
Early-bird deadline

Talk submission deadline

Poster submission deadline

April 5th

June 5th

June 5th

August 7th

Check the website for more information!











ICAIS 2019 presents some of the best science on invasive species in freshwater and marine environments to benefit managers and stakeholders worldwide. It emphasizes emerging and novel research in invasion ecology and its applications, and includes seven keynote presentations by a diverse group of leading international scientists.

For the first time, ICAIS will include a special session Integrating Invasion Science and Management Across Realms: Learning from Terrestrial, Marine and Freshwater Experiences that will feature presentations by a series of speakers who will address management challenges at different stages of the invasion cycle (involving risk assessment, vectors, eradication and control), followed by an interactive panel discussion that will provide opportunities for collaboration to improve outcomes across taxanomic boundaries.

Check the <u>website</u> for details and preliminary program!

The 6th Annual **London Bug Day** will be held on September 7th, 10AM-3PM at the London Children's Museum! Come on down to London to learn about the wonderful world of insects with special collections from Western university, edible insects, a special visit from the Cambridge Butterfly Conservatory and much more!

For details, check the entsoc website, or contact: Jackie Lebenzon (jlebenzo@uwo.ca)











Guelph Bug Day is a fun, free, educational event for community members of all ages! Our goal is to cultivate a fascination for the very cool, very small world of insects! Come get up close and personal with our live specimens, take one (or two, or three!) guided bug-catching hikes in the expansive and beautiful grounds at the University of Guelph Arboretum, try tasty insect cuisine, put your imagination to the test with insect drawing contests, and explore the variety of buggy vendors that Guelph has to offer. Rain or shine, bring your adventuring spirit and prepare to be amazed.

WHEN & WHERE:

Sunday August 25th, 2019 10AM-5PM <u>University of Guelph Arboretum</u> Center (College Ave E, Guelph, Ontario N1G 2W1)

For details, contact: guelphbugday@gmail.com



Twitter



Facebook



<u>Instagram</u>









Submit to the 2019 Bug Eye photo contest!

Instructions:

All Ontario residents, including international students living in Ontario are eligible to submit photographs. Copyright for the photo remains with the photographer, but use must be granted for ESO promotional material. Images must be of insects or closely related arthropod species (e.g. mites, spiders, etc). All submissions must be as a digital files. The judging criteria will be based on: a) image composition; b) visual impact of image; c) subject interest; d) sharpness of subject; e) difficulty of image acquisition; and f) lighting.

You may submit up to 3 unique images, but can only win one prize plus the People's Choice Award. Submit the image file by creating a digital file that is the equivalent of 7.5 inches by 10 inches (19.5cm by 25.4cm), at 300 dpi, formatted as a jpg. Create a filename using an appropriate title, underscore, your last name, underscore, first initial (e.g. **dragonfly_smith_j**). Images may be either "landscape" or "portrait" in orientation. Images recorded on film must be digitally scanned and then edited according to the prescribed resolution (i.e. 7.5" by 10", at 300 dpi) for submission.



2018 Best photo
Leigh Ayres ('Forktails')

Instructions (continued):

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.

The best pictures submitted will be selected by judges and entered into the People's Choice Award competition. The selected pictures will be posted on the ESO website and/or on a photo sharing website such as flickr for the community to vote on. The pictures will also be displayed at the Annual Meeting of the Entomological Society of Ontario. If you do not wish for your pictures to be posted in such a way, you can choose to not participate in the People's Choice Award.

Please include a short description of your entries (where they were taken, why you like them, etc.) and whether the picture is of an Ontario insect and if you are a child under the age of 13. You must also indicate if you would like to be considered for the People's Choice Award. Do not forget to include your complete address.



Prizes for:

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: <u>September 30th, 2019</u> Submit photos to: esophotos@gmail.com Winners announced: November 3rd, 2019



Details here.

Kingston Field Naturalists 21st BioBlitz

June 14th-15th, 3:00PM, 2019. Ontario Power Generation Lennox GS

Kingston Field Naturalists will hold their 21st BioBlitz on the property of Ontario Power Generation Lennox Generating Station. With 1500 acres of land and 150 acres of water, some woodland and meadows. This property promises a good variety of species. Guided Hikes by experts in their field enable novices to learn some species (see program). BBQ for all.

Credit River Watershed Butterfly Blitz

June 22nd-August 24th, 2019. Credit River Watershed

This summer-long citizen science program gives residents of the Credit River Watershed the chance to help create a watershed-wide inventory of butterflies using the iNaturalist platform. Participants will help collect data, identify different species of butterflies, and track trends as the program is repeated over time. The Butterfly Blitz program will give insights to help protect and restore wildlife habitat in the Credit River Watershed.



Details here.

City of Toronto free one-hour tours and workshops

June 8, 11:15AM, 2019. Don Valley Brick Works Park

TEA member Bob Yukich will lead this tour, teaching about the butterflies of Toronto, how to identify them, and their habitat and life stages. Meet at the blue City of Toronto tent, near the entrance to the Weston Quarry Gardens this summer at the Don Valley Brick Works Park.

Insects and Their Habitats, a walk led by TEA member Taylor Leedahl

June 16th, 10:30AM - noon. High Park.

Meet at the benches, across the road from the south side of Grenadier Restaurant in the middle of High Park.

Regular meetings resume in September.



Photo: Alex Wild



Photo: Alex Wild

Graduate Student Positions

PhD Student – Spotted Wing Drosophila Management

London Research & Development Centre - Vineland Campus, AAFC, University of Guelph Start date: September 2019 or earlier. <u>Details here</u>

PhD Student – Graduate Assistantship in Systematics

Kansas State University. Application deadline: Open until filled. Details here

For more graduate positions (mostly USA), visit the ESC-SEC website

Job postings

Post Doc – Genomics

Beta Hatch - Seattle, Washington. Application Deadline: July 26th, 2019. Details here

Assistant Professor – Systematic Entomology

University of Guelph. Application Deadline: June 26th, 2019. Details here

Research Project Coordinator – Soil Science

University of Guelph. Application Deadline: June 21st, 2019. Details here

Research Scientist – Entomology

Global Plant Health (Ontario). Application Deadline: Open until filled. Details here

For more job postings, visit the ESC-SEC opportunities page and the ESA jobs page

OBITUARY Jim Corrigan - former ESO President (1952-2019)

Jim completed a BSc in Environmental Biology at the University of Guelph (1980) with a focus on leaf blotch miners and biological control, and earned an MSc (1988) from Rutgers University with a project on eulophid egg parasitoids. After some time in the PhD program at the Université Laval in Quebec City, Jim returned to the University of Guelph to teach and perform operational biocontrol research, going on to work with the OMNR to implement a successful purple loosestrife biocontrol program. Jim earned a BEd degree from the University of Western Ontario in the late 90s, and served as President of the ESO in 2003/2004. He went on to work for the British Columbia Ministry of Forests from 2006 until his retirement in 2018.

A lovely and detailed *in memoriam* about Jim can be found in the 2019 ESC bulletin here. There is also a memorial Facebook page for Jim here, where friends and family can share stories and memories.



Jim Corrigan fly-fishing in 2015
Photo by A. Larsen

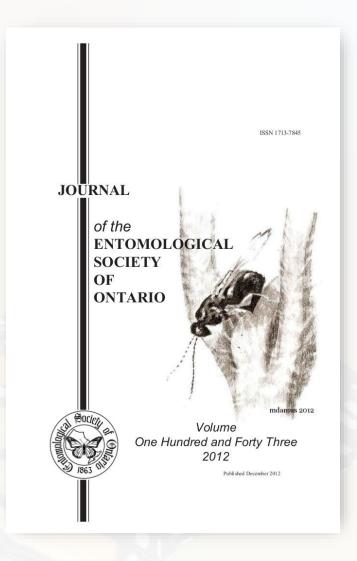
REMINDER:

Publish in *JESO* this year in honour of its 150th anniversary!

In the Fall 2018 ESO Newsletter, we noted that this year marks the 150th year of continuous publication of the ESO's annual publication. The title of our journal, now the *Journal of the Entomological Society of Ontario*, has mutated over time, but it has always been a well-respected entomological journal.

In recognition of this milestone, the Entomological Society of Ontario encourages submissions of scientific manuscripts on all aspects of entomology. With the year now half over, it is time to pull up that partially finished manuscript on your computer, complete it, and submit through the JESO submission system. Of course, it will be sent to referees for review, but with the journal now being digital there is no limit to the number of articles that can be published. Publication in JESO is free (no page charges). Please encourage your colleagues to consider submitting to the journal this year. See newsletter pg. 25 for a link to submission instructions

- Gard Otis
(Retired Professor and former President of the ESO)

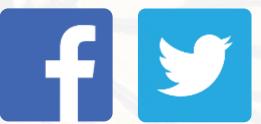


WANTED:

ESO SOCIAL MEDIA COORDINATOR

Do you enjoy interacting with members of the society and staying active on social media? Then consider joining our team and becoming an ESO social media coordinator! We are looking for members to help run the ESO Twitter and Facebook accounts. These accounts help us to stay engaged with members of the society and promote our outreach events.

If interested, please contact **Sarah Dolson** (Student Representative) dolsons@uoguelph.ca





WANTED: **ESO WEBMASTER**

The ESO is searching for a member volunteer to take on the responsibility of Webmaster for www.entsocont.ca/. This is an elected post with voting powers on the ESO Board!

Main duties include:

- Acting as chair of the Website Committee
- Managing content placement and appearance of webpages
- Constructing ESO event pages (AGM, Bug Days, etc.)
- Adding JESO articles by Volume at time of publication
- Adding entomology and related job postings / student opportunities
- Working closely with the President, Secretary, Treasurer, and action committees
- Providing Google Analytic data and improving web traffic where possible
- Managing membership and event payment options

Currently, the ESO website builder utilizes a simple and user-friendly drag and drop interface with HTML customizing options. This allows for fast editing and updating of the site and better page consistency. This is a great opportunity for a keen student who is interested in web design and entomology and looking to connect with other students, professional colleagues, and amateur enthusiasts throughout Ontario and beyond. The current Webmaster will provide training and any technical advice to ensure a smooth transition and will be available to assist with any Website related issues going forward.

If you are interested in stepping into this role please contact me at trevburt@gmail.com.

- Trevor Burt, ESO Webmaster



Become an ESO board member!

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





ISSN 1713-7845

JOURNAL

of the
ENTOMOLOGICAL
SOCIETY
OF
ONTARIO



Volume
One Hundred and Forty Nine
2018

Published 2018

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 <u>Instructions for Authors</u> page.



Editor
Chris MacQuarrie
chritian.macquarrie@
nrcanrncan.gc.ca



Assoc. Editor

Jeff Skevington

jhskevington@gmail.com



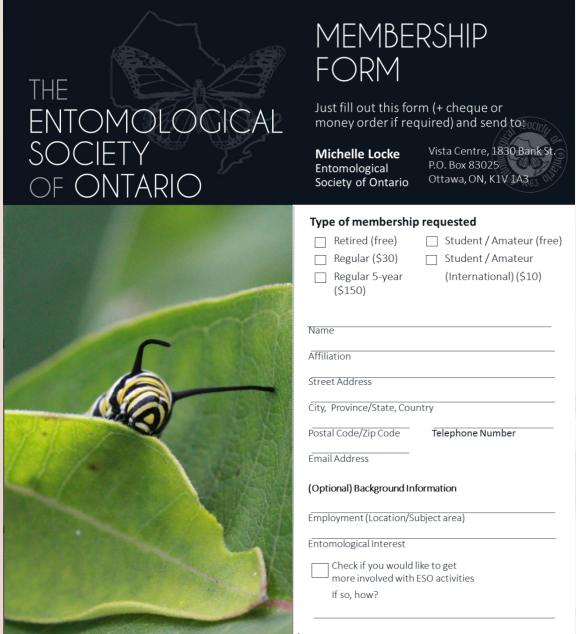
Assoc. Editor

Andrew Bennett

andrew.bennett@
agr.gc.ca



Technical Editor
Thomas Onuferko
onerko@yorku.ca



JOIN THE ESO!

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

Canadian student, amateur, and retiree memberships are **FREE!** Email Michelle for membership renewal (must be done each year): entsocont.membership@gmail.com

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:



Michelle Locke (ESO Secretary)
Vista Centre 1830 Bank St.
PO Box 83025 Ottawa, ON
K1V 1A3 Telephone:
(613) 759-1727