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Entomological Society of Ontario

FALL NEWSLETTER



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Officers of the ESO



Fellow Entomologists,

As I sit to write this address to you all, the sights, sounds, and smells of Lake Opinicon still swirl in my mind. Our most recent Annual Meeting, held at the Queen's University Biological Station, was an unmitigated success. My personal thanks go out to Jay Fitzsimmons, Dave Beresford, and all of the organizers and volunteers for making the meeting so enjoyable and informative.

For 152 years now, professionals, amateurs, and students have been meeting in Ontario to discuss insects and related taxa. I feel that our annual meeting is the most important function of our society. It is a chance for researchers working in Entomology, in all its scientific breadth, to come together, share ideas, and socialize. The descriptions of ESO meetings that get repeated to me most often are “relaxed”, “broad in scope”, and “student-friendly”. These are our strengths and I hope that we can continue to build on them. Our next meeting is set for Sault Ste. Marie next Autumn. I look forward to seeing you all there. Also, please consider hosting the 2017 AGM in your city. Let me know if you are interested. Early planning makes it that much easier and there is no shortage of past meeting organizers to offer advice (myself included).

President's address



Thanks and good luck to Lauren Des Marteaux and Kruti Shukla as they take over the reigns of the ESO Newsletter. The newsletter is an important communication tool for our society and I believe that it will be in capable hands with the two new editors. Thanks as well to Trevor Burt and Amanda Lindeman for their hard work on the last few volumes of the ESO Newsletter.

By the time you read this, the 2015 version of our Bug Days will be complete. There was much enthusiasm and hundreds of attendees at our events in London and Ottawa. Bug Days are our chance to bring our science to the general public, and also to produce future generations of Ontario entomologists. Thanks to the organizers and volunteers in Ottawa and London for their hard work on these important events.

Lastly, welcome to our President-Elect Gard Otis, incoming Directors Laura Timms and Alex Smith, and incoming Student Representative Andrew Young. I look forward to working with all of you in the coming year. Thanks as well to our outgoing ESO Board Members, your contributions are appreciated. I strongly encourage each and every member of the ESO to consider a position on the ESO executive board.

Thanks and enjoy your Winter dormancy period,

Joel Gibson
ESO President

President's address



President-Elect

Gard Otis
University of Guelph

Gard is a professor at the University of Guelph with a research focus on the ecology, behaviour, and evolution of insects. Gard also teaches about insects and beekeeping in developing countries.



Director

Laura Timms
CVC, ROM

Laura is an ecologist working at Credit Valley Conservation (CVC) and a research associated in Entomology at the ROM. Her research interests include insect-host parasitoid diversity and interactions



Director

Alex Smith
University of Guelph

Alex studies contemporary distribution of hyper-diverse insects in tropical and temperate environments. His lab explores the causes and consequences of biodiversity across elevational, latitudinal, and disturbance gradients.



JESO Associate Editors

Jeff Skevington (left)
AAFC, CNC

Jeff studies syrphids and pipunculids, and develops systematic knowledge and management practices of pests in agronomy.



Andrew Bennett (right)
AAFC, CNC

Andrew develops a National Arthropod Information system and systematic knowledge of arthropods from a range of environments.



Student Rep.

Andrew Young
CNC

Andrew is a Dipterist, currently completing a PhD with Jeff Skevington on Australian Syrphidae and syrphid phylogenetics at the CNC.

New board members



This year, the **ESO AGM** was held at the beautiful Queens University Biological Station (QUBS). Thank you to all the organisers of this wonderful event!

Organising committee: Jay Fitzsimmons, Dave Beresford, and Amanda Roe

Program: Sarah Langer, Kaitlyn Fleming, and Kathryn Vezsenyi

Awards and Judging: Ian Scott, Michelle Locke, and Joel Gibson

Sponsorship: Donald Bourne

Website and Graphic Design: Trevor Burt



A. Guidotti



A. Guidotti

The ESO would like to extend a special thanks to all the wonderful staff at QUBS, including Frank Phelan (Manager), Andrew Rodmell (Assistant Manager), and Veronika Jaspers-Fayer (chef).

2015 AGM



Crystal Sobel and Allison Brown showed off the BIObus, including specimen vouchers and collection methods used that contribute to DNA barcoding global biodiversity.



Amanda Roe, along with volunteers Mike Lavender, Colin Jones, Casey Nelson, Leslie Holmes, and Kaitlynn Low spent the afternoon with AGM attendees to teach a variety of techniques for collecting and preserving insects.

2015 AGM – Entomology 101



S. McCann

ORAL – Andrew Young

Anchored hybrid enrichment produces a highly-resolved phylogeny of world Syrphidae

Syrphids are ideal candidates considering previous molecular techniques have highly unresolved topologies. Andrew presented the first use of this technique in Diptera phylogenetics.



A. Guidotti

POSTER – Ivan Aguilar

Effects of host plants, nectar sources, and habitat features on the spatial distribution of Mottled Duskywing butterflies

Ivan investigates the behavior of the endangered mottled duskywing butterfly in southeastern Ontario and how it interacts with its environment.

AGM highlights – President's prizes



Travel Award (Graduate) - Lauren Des Marteaux

Below the critical thermal minimum (CT_{min}), insects enter chill coma: a reversible state of paralysis. Chill coma is accompanied by a disturbance in ion and water balance, but little is known about these mechanisms. Lauren is investigating how cold exposure and cold acclimation affects ion-transport in insects. She is currently looking the effect of cold acclimation on gene expression, cellular structure, enzyme activity, and active ion transport function in the hindgut and Malpighian tubules of crickets.



Travel Award (Graduate) - Casey Peet-Paré

Casey studies hoverflies (Diptera: Syrphidae) which are well-known Batesian mimics of bees and wasps (Hymenoptera). So far her research has focused on the appearance of hoverflies and their models in visible light (400-700 nm). However, many hoverfly predators are also able to see ultraviolet (UV) light (300-400 nm). She is assessing hoverfly mimicry from a predator perspective using UV photography, and found UV colour in 48 of 83 hoverfly species. Her next step is to determine whether hoverflies match their models in the UV, and how UV colour in insects changes over time.

AGM highlights – Travel awards



A. Guidotti

Travel Award (Undergraduate)

Ellen Richard (left), **Chelsie Xavier-Blower** (right)

Policy decisions concerning forestry and logging fail to adequately represent how these practices affect diversity and abundance of insects. Considering that Diptera are amongst the most diverse insect groups, their presence (or absence) can have large ecosystem effects. Ellen and Chelsea spoke about how the abundance and diversity of Algonquin Park dipteran communities are affected by timber harvesting.



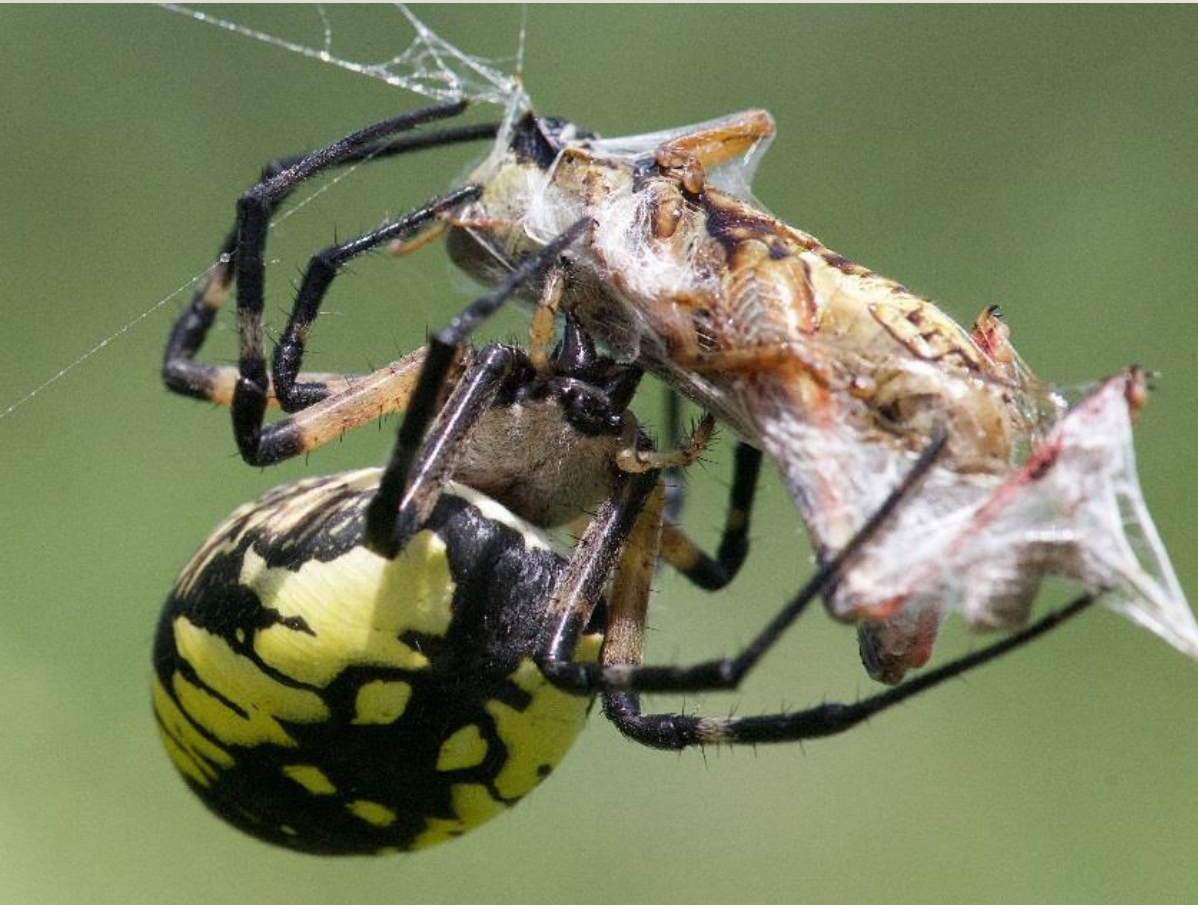
A. Guidotti

Travel Award (Undergraduate)

Natasha Welch (left), **Christina Cortes** (right)

Timber harvesting across Algonquin Provincial Park has created spatial variability within the forest. Spatial heterogeneity can significantly affect the morphology of flora and fauna associated with these areas. Natasha and Christina are interested in how dipteran morphology may differ between harvested and non-harvested areas within Algonquin Park.

AGM highlights – Travel awards



Best overall photo - Andrea Brauner



Best Ontario Insect Photo - Connie Hartviksen

BugEye photo contest



1st place junior entomologist
Mason Walton

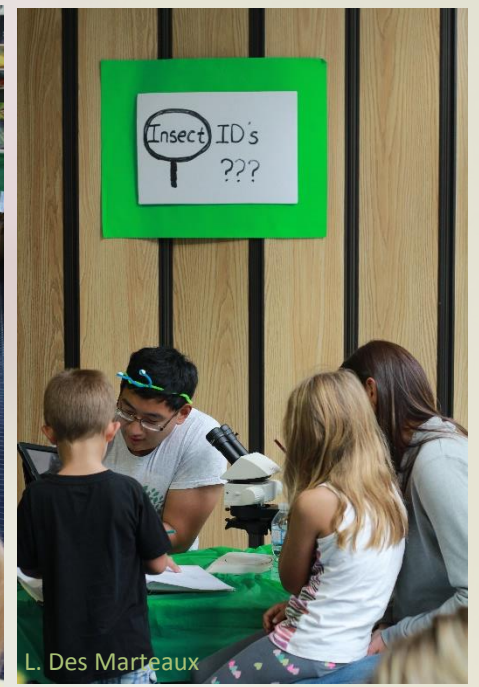


2nd place junior entomologist
Alexander Skevington



3rd place junior entomologist
Colin Walton

BugEye photo contest



Bug Day needed to expand, so we took our operation to the London Children's Museum this year! Our event was coordinated by Lauren Des Marteaux, run by **28 fantastic volunteers**, included 19 different activities, and attracted **500 visitors!**

Bug Day goers were treated to beautiful pinned displays from the Western University zoological collections before getting up-close and personal with live spiders and insects (including honey bee and termite colonies). Kids did bug crafts and learned how to identify different insects, while parents got tips on gardening to attract pollinators.



Bug Day - London



L. Des Marteaux

For the ecologically-inclined (or maybe just the hungry ones), chocolate ants were especially popular this year. The consensus with regard to roasted mealworms: They taste like seasoned popcorn!



L. Des Marteaux

The Cambridge Butterfly Conservatory ran two workshops on Monarch Butterflies. Visitors learned about the Monarch life cycle and how to tag wings. Kids also got to dress up as Monarchs.

The Middlesex London Health Unit brought live and pinned insects to educate visitors about pests and disease vectors. Bug day was also joined by Nature Conservancy Canada and Nature London, who promoted awareness and stewardship of local habitats and their flora and fauna.



L. Des Marteaux



J. McKay

Visitors had a great time at Bug Day and we're looking forward to next year's event!

Bug Day - London

Ottawa's third Bug Day was hosted by the Canada Agriculture and Food Museum on September 26th. The event was coordinated by Sophie Cardinal and run by **68 volunteers** who worked together to present a diversity of insect-related displays and activities. This year the Ottawa Bug Day attracted approximately **1700 visitors**! We had great bug filled day and it was very rewarding seeing so many people having fun while learning about insects.



Bug Day had many live insects and other invertebrates for people to observe and hold. These included exotic Australian walking sticks, millipedes, local caterpillars, tarantulas, mantids, beetles, and more. The cockroach races were, once again, the big draw! Heartfelt congratulations to Roachzilla for becoming the Champion racer!



Caramel cricket corn, chocolate cricket macaroons, and oven roasted crickets and mealworms were served to all those who were adventurous enough to try... Yum!



Bug Day - Ottawa



S. Cardinal

Bug Day visitors created bee houses from paper tubes - they will be placed outside next spring



S. Cardinal

The Canadian National Collection of Insects, Arachnids, and Nematodes displayed some of their most beautiful and fascinating insects.



S. Cardinal

The Canadian Museum of Nature taught attendees all about insect morphology. Kids applied their newly acquired knowledge when making their own insect model to take home.



D. Lepage

Insect-catching expeditions were held throughout the day, and expert taxonomists were on hand to give out helpful hints!



We hope that we inspired some future entomologists at Bug Day! ESO would like to thank everyone that helped out, and the Ottawa Field-Naturalists' Club for co-sponsoring the event.

Bug Day - Ottawa



#YOLO: The Impact of Social Media Use on an Entomology Career

Morgan Jackson, University of Guelph

If I had known what #YOLO¹ meant in 2010 when I took my first tentative steps into the world of social media and blogging, it would have made a fitting utterance when I hit Publish that very first time. In a world ruled by scholarly publications and citation metrics, devoting time to writing a blog (or tweeting your research, or starting a podcast...) typically goes against everything grad students are encouraged to do. Yet I threw caution to the wind and dove headfirst into a brave new world anyways, and ended up finding a different path to academic success.

While my original intentions for blogging were simply to improve my writing skills—an experiment I feel confident calling a success now—it soon became apparent that there was more to be gained from my literary sandbox. I was instantly connected with researchers at other institutions who not only learned who I was and what science I was passionate about, but who routinely shared their own experiences living the academic life. I learned how other departments functioned, found new ways to collect and analyze data, and realized that others were experiencing and surviving the same highs and lows of grad school as I was.

And it wasn't long until the intangible benefits of networking were followed by things that could actually be included in my curriculum vitae. Things like being invited to speak at conferences²; awards for content that I created; funding for research travel or other projects; and more recently, peer-reviewed paper collaborations. As these traditional indicators of academic success have begun to accumulate by way of social media, striking the "right" balance between online activities and academic pursuits has also become more difficult. With more research scientists and academics incorporating social media into their lives and work, will we see a greater acceptance of time spent online and words written outside of peer-review, or will the status quo hold on for another generation? When it comes to gambling on the future, particularly in academia, perhaps the only sure bet is to do what you love, whatever that may be, and be ready to accept and embrace the career that comes your way as a result.

Because in the end, YOLO is the only thing that really matters.

¹internet slang for "You Only Live Once"

²including this year's ESO AGM as a plenary speaker.

You can download the full presentation I gave this year, and that inspired this article, at <http://dx.doi.org/10.6084/m9.figshare.1547938>



A Review of Some Biological Control Programs Against Invasive Plants in Canada and Ontario - *William D. McIlveen*

Saturday, January 23, 2016. 1:15 pm.

Room 206, Victoria College (73 Queens Park, Toronto, ON)

Not all of the over 1600 non-native plants in Ontario pose the same level of concern as purple loosestrife, but some do involve serious ecological, economic or health concerns. These are the ones for which special control efforts are needed. The presentation looks at several examples of **control programs involving multiple insect species** and some unexpected complications.



Toronto Entomologists' Association Student Symposium

Saturday, March 19, 2016. 1 p.m. to 3 p.m.

Room 432, Ramsay Wright Building, University of Toronto (25 Harbord Street, Toronto, ON)

Graduate students, senior undergraduates and postdoctoral fellows will be presenting talks and posters.

ICE - XXV International Congress of Entomology

September 25-30, 2016.

Orlando, Florida

This conference will be held in conjunction with the Entomological Society of Canada's Annual Meeting. See the [Website](#) for more details



Source: Toronto Entomologists' Association

Upcoming events



L. Des Marteaux

Graduate Student Positions

PhD Position, biological control of Leek Moth

Université du Québec à Montréal/Institut de Recherche et de Développement en Agroenvironnement

Application Deadline: As soon as possible, until suitable candidate found

[Details](#)

PhD position, interactions of antibiotics with bee health

University of Exeter, United Kingdom

Application deadline: December 1, 2015

[Details](#)

PhD position, evolution of pollinator pathogens

University of Exeter, United Kingdom

Application deadline: January 8, 2016

[Details](#)

Source: www.esc-sec.ca/jobs

Job postings

Within Canada

See the ESC-SEC jobs page, [here](#)

International (mostly USA)

See the ESA jobs page, [here](#)

Opportunities



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.



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ESO membership

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Who are we?

Formed in 1863, the ESO aims to further entomology through annual meetings, publications, and public outreach.

What do we do?

In addition to holding interactive events like Bug Day, we also have an annual meeting, a society journal, and publish a biannual newsletter.



Why should you join?

Membership is FREE for students!

Becoming a member entitles you to:

- Newsletters sent to your email
- A subscription to the Journal of the Entomological Society of Ontario
- Access to entomology job postings, student resources, and opportunities to network with other entomologists



How can you join?

Just fill out the form on our website and email or mail it to us!

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: NEW - 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:



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