



THE ESO Newsletter

December 2010

Volume 15, Issue 2

ESO President's Message:

The President's report for this newsletter is delivered by a Past-President, as the Presidential cockroach and gavel now reside with our current President, Hannah Fraser. It was my privilege to act as President until the closing of this year's ESO Annual Meeting. Held in Grand Bend at the Oakwood Resort on October 15-17, 2010, the meeting featured excellent paper and poster presentations, great opportunities to talk with fellow entomological enthusiasts, and superb weather. My thanks to Jeremy McNeil and the Organizing Committee for their work in arranging this meeting at such a delightful location.

The semi-annual ESO Board meeting preceded the meeting proper. The Board welcomed four recently-elected members: Bruce Gill (President-Elect), Rose Buitenhuis (Director), Jeremy McNeil (Director), and Michelle Locke (Student Representative). The Board meeting was the last in the three-year elected term for Past-President Cynthia Scott-Dupree, Director Kathleen Ryan, Director Hume Douglas, and Student Representative Joel Gibson, although Hume will continue to sit on the Board as the ESO Representative to the Entomological Society of Canada. I would like to thank sincerely the outgoing Board members for their contributions to the Society.

While much of the Board business involves governance (such as making sure the finances are in good shape) and moving various initiatives along, I can report some specific outcomes. The ESO Annual Meeting schedule is now set out for the next three years, subject to confirmation of exact places and dates. The 2011 meeting will be held in the vicinity

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2010-2011 OFFICERS OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO

of St. Catharines/Niagara Falls and the 2012 meeting will be held in eastern Ontario in the vicinity of Ottawa (if not Ottawa itself). As previously announced, the 2013 meeting will be a special 150th Joint Anniversary Meeting, to be held in conjunction with the Entomological Society of Canada, in Guelph on October 20-23. Jim Brett, the ESO Librarian, has arranged to complete the task of scanning all back issues of the Proceedings of the Entomological Society of Ontario (PESO) and Journal of the Entomological Society of Ontario (JESO) and have them available through the Internet Archive at no cost to the ESO; this is a substantial advance on efforts to improve the digital archiving of and access to ESO documents. Efforts are also underway, led by Miriam Richards, our JESO Editor, to increase the electronic search profile of JESO with the objective of increasing the impact of a JESO author's paper. We will be adding a system of electronic payment through our ESO website for those that prefer the convenience of paying their dues this way (but conventional payment will still be welcome). Several outreach initiatives are underway to increase the public profile of entomology, with the inaugural Bug Eye Photo Contest 2010 producing some spectacular winning entries that are currently posted on the ESO website.

The annual meeting featured a great collection of research papers and posters. Several more senior entomologists remarked to me that they were highly impressed by the level of student participation at the meeting. The ESO has an important role in facilitating social networks that enhance the chances of these students achieving career opportunities in entomology; I strongly question whether the Canadian entomological infrastructure is of sufficient breadth and depth to meet Canadian needs and responsibilities. Among presentations by some of our more senior students of insect science, I must mention that Sherah VanLaerhoven's plenary talk continues to resonate in my mind (forensic entomology being a very tough job that someone needs to do). Joe Shorthouse gave another of his always compelling talks (featuring artistically beautiful photos of midgut contents of insects) at his 35th ESO meeting, and Peter Hallett always impresses with his tremendous enthusiasm for studying trap-nests of solitary bees and wasps. Another highlight of the meeting was the presentation to our two newest Fellows of the ESO, Dr. Freeman McEwen and Dr. Bernard Philogène, in recognition of their stellar career achievements in entomology.

As Past President I will be continuing to work with Hannah, Bruce, and the ESO Board to move some key projects along. This will include organizing an informal ESO field meeting to be held in early summer of 2011. As we move towards the 150th anniversary, I am very optimistic about the role of the ESO in promoting and supporting science pertaining to insects and related arthropods in the decades, indeed centuries, to come.

It has been a great honour for me to have had the opportunity to serve as the ESO President, and I would like to thank the members of the Board for their work during my term and all members of the ESO for their participation in the Society and for their contributions to enhancing entomological knowledge.

Sincerely,

Gary Umphrey

2010 Election Results

The ESO is excited to welcome its newly-elected board members:

Bruce Gill (President-Elect)
Rose Buitenhuis (Director 2010 - 2012)
Jeremy McNeil (Director 2010 - 2012)
Michelle Locke (Student Representative)



Departing Board Members

As we welcome our new board members, the ESO also would like to thank its outgoing board members for their dedication and invaluable service:

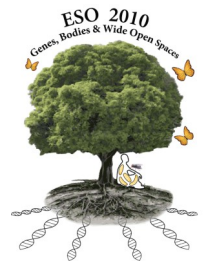
Cynthia Scott-Dupree (Past-President)
Kathleen Ryan (Director 2008 - 2010)
Hume Douglas (Director 2008 - 2010)
Joel Gibson (Student Representative)



Multicoloured Asian lady beetle, *Harmonia axyridis*, photographed in Guelph in spring, 2010. Photo by Erik Glemser.



2010 ESO Fellows



At the 2010 ESO Annual Meeting in Grand Bend, ON, two fellows were recognized by the Society for their career achievements in entomology: Dr. Freeman McEwen and Dr. Bernard Philogène.



Dr. Freeman McEwen receiving his plaque from ESO President Gary Umphrey. Photo: Morgan Jackson.

Dr. Freeman McEwen

Freeman McEwen earned his B.Sc. (Entomology) at MacDonald College of McGill University in 1950 and his M.Sc. (Entomology) in 1952 and Ph.D. (Entomology and Plant Physiology) in 1954 at the University of Wisconsin. Dr. McEwen recognized the need for a balanced, scientific approach to pesticide use, and emphasized the importance of considering both the benefits and risks of their utility. He was an early advocate of integrated pest management (IPM) and, in his research on vegetable insect control, continually stressed the need to develop IPM programs.

Dr. Bernard J.R. Philogène

Bernard J.R. Philogène is an insect physiologist specializing in the study of insect development, plant/insect relationships, pesticides of plant origin and chemical ecology. Born in Mauritius, he earned a B.Sc. (Zoology) from l'Université de Montréal (1964), an M.Sc. (Entomology) from McGill University (1966), and a Ph. D. (Entomology) from the University of Wisconsin (Madison) (1970).



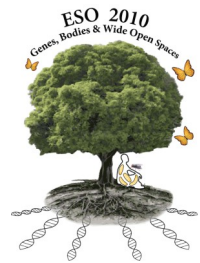
Dr. Bernard J.R. Philogène receiving his plaque from ESO President Gary Umphrey. Photo: Morgan Jackson.



Dr. Freeman McEwen (left) and Dr. Bernard J.R. Philogène (right) at the 2010 ESO annual meeting. Photo by Morgan Jackson.



2010 ESO President's Prize Winners



Katie Marshall

Winner Oral Presentation: Cold comfort: the effects of snow cover on overwintering *P. isabella* (Katie Marshall and Brent Sinclair).

Katie hails from the small farming town of Elmira, Ontario (just north of Kitchener-Waterloo). She completed her undergraduate degree in Nova Scotia at Acadia University and her honours thesis examined deerfly and horsefly diversity (Diptera: Tabanidae) in relation to forestry activity in southwest Nova Scotia.

Now a PhD student at the University of Western Ontario, her research focuses on the effects of multiple cold exposures in a variety of local insect species. Climate models predict an increase in freeze-thaw cycles in temperate regions in the next 50 years, yet the majority of experiments involving cold exposure in insects only use a single cold exposure. While cold exposure can certainly cause mortality in many insects, understanding sub-lethal effects on an individual's fitness (specifically ability to produce young) can also be important for predicting the impacts of climate change on insect populations. This is particularly important since many insect species spend the majority of their life cycle overwintering. Key questions are whether multiple cold exposure has similar impacts on insects with different strategies, and what climate change holds for insects.



Katie Marshall receiving her award from ESO President Gary Umphrey. Photo: Morgan Jackson.



Tejal Mistry receiving her award from ESO President Gary Umphrey. Photo: Morgan Jackson.

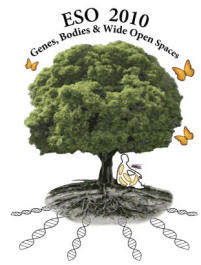
Tejal Mistry

Winner Poster Presentation: Building a host-parasitoid library for big-headed flies (Diptera: Pipunculidae) using molecular tools (T. P. Mistry, J. H. Skevington, S. Kelso).

My name is Tejal Mistry and I'm a Bachelor of Science student studying Biology at Carleton University. In my final year, I've been working on my undergraduate thesis project with Dr. Jeff Skevington at the Canadian National Collection of Insects, Arachnids and Nematodes. This project investigates the host-parasitoid relations of Pipunculidae, which are important parasitoids of leafhoppers and planthoppers (Auchenorrhyncha). Over 300 pipunculid species occur in North America, undoubtedly parasitizing at least that many species of hoppers. Despite this, there are only 17 documented host-parasitoid associations, mostly developed through lengthy rearing efforts. The present study identifies 27 new associations of pipunculids and their hosts. The larvae were identified by matching their COI sequences with a developing database of identified adult big-headed fly sequences. The majority of the leafhopper hosts have not yet been identified. Many species of Pipunculidae in other parts of the world have been documented to have multiple host species. This result is also to be expected with these specimens collected in Southeastern Ontario and parts of Eastern USA.



2010 ESO Travel Award Winners



Jess Vickruck

Winner Graduate Travel Award: Nesting biology and bar-code analysis of two cryptic species within *Ceratina dupla*, with comparisons to *C. calcarata* (Hymenoptera: Apidae: Xylocopinae) (J.L. Vickruck, S.M. Rehan, C.S. Sheffield, M.H. Richards) (oral presentation).

I have recently completed my MSc and started my PhD in the department of Biological Sciences at Brock University under the supervision of Dr. Miriam Richards. After finishing my undergraduate days at the University of Guelph, I knew I wanted to study something related to entomology, but I was unsure exactly what. I have certainly found my home in the 'bee lab' here at Brock.

My Master's research focused on niche and nest resource partitioning in two closely related species of small carpenter bee (genus *Ceratina*). It also turned out that what we had thought was one species of bee were actually two, and that these two species had different colony cycles in southern Ontario. I was fortunate enough present this research at the ESO annual meeting this past October in Grand Bend, thanks in large part to the ESO travel award!



Jess Vickruck receiving her award from ESO President Gary Umphrey. Photo: Morgan Jackson.

Andrew McFarlane

Winner Undergraduate Travel Award: Three's a crowd, but five's a colony: a method for determining the sublethal effects of pesticides on *Bombus impatiens* (A. McFarlane, A. Gradish, C. Scott-Dupree) (poster presentation).

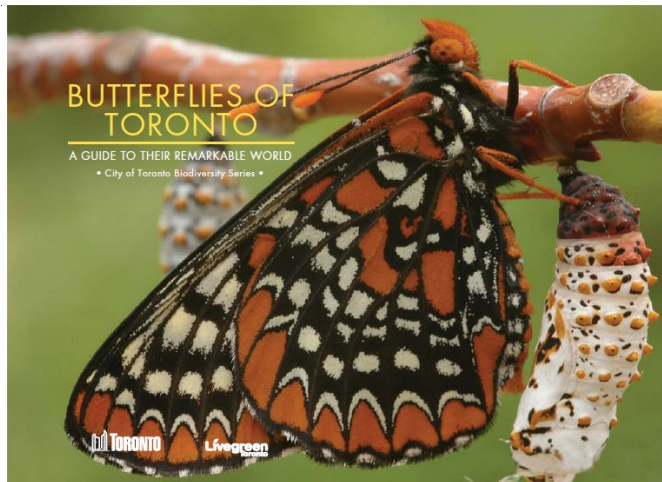
My name is Andrew McFarlane, and I was lucky enough to have received the Undergraduate Travel Award for the 2010 ESO. The ESO at Grand Bend was my first opportunity to present research at a conference. It was a lot of fun and also a great experience presenting my undergraduate thesis project titled 'Three's a crowd, but five's a colony: a method for determining sub-lethal effects of pesticides on *Bombus impatiens*'. I was born and raised in Mount Forest, ON and my experience in agriculture began at the age of 10 when my family became involved in the beef cattle industry. This led to my involvement with 4-H, as well as our family moving to a farm. Although I was involved in agriculture, my interest in entomology did not become apparent until university. As a fourth year student studying Environmental Biology at the University of Guelph, my interests and desire to learn are constantly evolving. My experience at the 2010 ESO was nothing but the best; it has furthered my interest in entomology as well as pursuing more education in a graduate program.



Andrew McFarlane receiving his award from ESO President Gary Umphrey. Photo: Morgan Jackson.

The Butterflies of Toronto

A city of Toronto *Biodiversity Series* publication



Imagine a Toronto with flourishing natural habitats and an urban environment made safe for a great diversity of wildlife species. Envision a city whose residents treasure their daily encounters with the remarkable and inspiring world of nature, and the variety of plants and animals who share this world. Take pride in a Toronto that aspires to be a world leader in the development of urban initiatives that will be critical to the preservation of our flora and fauna.



Cover Photo: Kerry Jarvis, www.kerryjarvis.com
The exquisite orange, white and black markings of the Baltimore Checkerspot make this one of the most vibrant and beautiful butterflies to behold. These tell-tale colours are evident in the pupa and adult stages. The Baltimore Checkerspot is found in wetland areas where its host caterpillar plant is plentiful. The caterpillars overwinter in a silken nest attached to the leaves of turfgrass and emerge to continue feeding in the early spring. Then, the magic of metamorphosis takes place. This image captures the beauty of both the newly emerged adult and its chrysalis in all its glory.

City of Toronto © 2010
ISBN No.



Front cover (top) and second page (bottom) of the *Butterflies of Toronto* booklet. Cover photo by Kerry Jarvis.

The *Butterflies of Toronto* is a booklet that will be published by the City of Toronto in December 2010. It is part of the city's *Biodiversity Series*, whose main goal is to cultivate a sense of stewardship in residents. It is hoped that the *Series* will help reduce biodiversity loss by assisting people to make informed individual decisions and by re-connecting residents with nature. The *Series* will also inform city staff and politicians about the current state of local biodiversity and how current City policies, procedures, and operations can be enhanced, altered, or revised in order to help mitigate local biodiversity loss.

The booklet is not a field guide, but it provides a comprehensive snapshot of butterflies in the Toronto area. Included will be a species list (109 species recorded from the area!), images of all species, places to view butterflies, a list of some butterfly nectar plants and caterpillar food plants, pages about biology, identification, habitats, policy initiatives, a chronology, and a 'how you can help' section.

Under the leadership of City of Toronto staff, a working group of volunteers, both amateur and professional, have been meeting throughout this year to prepare the *Butterflies of Toronto*. Active members of this working group include scientists from the following organizations: the Royal Ontario Museum, the Toronto and Region Conservation Authority, the Toronto Zoo, and the Ontario Ministry of Natural Resources. Volunteers from these organizations are also contributing to the *Series*: Toronto Entomologists' Association, Toronto Field Naturalists, Friends of the Spit, and the Monarch Butterfly Fund. Artists, including Robert Bateman, have donated their work to the *Series*.

Call for Ontario Butterfly and Dragonfly Sightings

The Toronto Entomologists' Association is requesting 2010 Lepidoptera and Odonata records for the publications "Ontario Lepidoptera" and "Ontario Odonata". Odonata records are also added to the Ontario Odonata Atlas.

Please submit records from the 2010 season by January 31, 2011. Colin Jones and Ross Layberry, Editors and Compilers of Ontario Lepidoptera and Ontario Odonata, solicit records, notes, articles and photographs. See these links for more information on the summaries and how to submit records, as well as downloadable records templates: http://www.ontarioinsects.org/LEP_contributors.htm ; http://nhic.mnr.gov.on.ca/MNR/nhic/odonates/notice_to_contributors.html. The newly released "Ontario Lepidoptera - 2009" can be viewed here: <http://ontarioinsects.org/Publications/Summaries/Pages2009.pdf>.

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Ross Layberry: rosslayberry@yahoo.ca

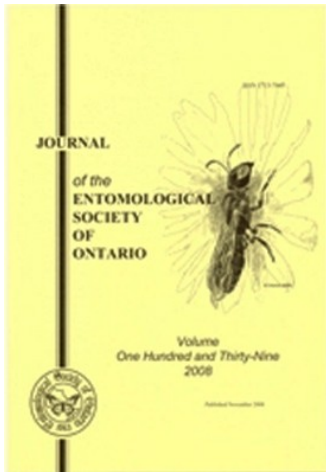
All records past and present are appreciated, but records submitted after the deadline cannot be guaranteed for inclusion in the 2010 print version of the summary. Please share this request with other individuals or organizations that have compiled records in 2010. Source: www.ontarioinsects.org

Obituary: Peter deGroot 1954–2010

de GROOT, Peter Friday, October 22, 2010 (HBSchF, PhD Entomology) - August 14, 1954 - October 22, 2010 - Peacefully surrounded by the love of his wife Elizabeth Deakin, his children Cathleen de Groot (Alexander Noonan) and Jonathan de Groot (Samantha Schruder) and his grandchildren Adalia and Deiderich de Groot. He is predeceased by his mother Paula Philips-de Groot. Son of Jan and Frances de Groot. Dear brother of Mieke Mason (David). Son-in-law of Richard and Beth Deakin. Brother-in-law of George Deakin (Sheila), Catherine Rogers (Peter), Richard Deakin (Vicki) and James Deakin (Debbie). Special Uncle Pete to many nieces and nephews. He will be remembered by many friends and colleagues. Friends may call at the Arthur Funeral Home & Cremation Centre on Monday, October 25, 2010 from 6 - 9 pm. Funeral service from the chapel on Tuesday, October 26, 2010 at 1 pm. Rev. Faye Stevens officiating. Peter lived his life filled with integrity in all that he did; hopefulness for the harmony of humanity, one with the other, and nature, one with the multitude; a uniquely brilliant humour; a sense of purpose; wisdom; and a spiritual awareness - a rock that so many of us relied on. We have been blessed by his presence in our lives. In lieu of flowers, donations may be made to the Kidney Foundation, the Salvation Army or the Nature Conservancy of Canada. Expressions of sympathy may be offered at www.arthurfuneralhome.com.

JESO Wants Your Manuscript!

Consider submitting your next manuscript to JESO.



Instructions to authors are available on-line at
www.entocont.com/instructions_2008.pdf

Electronic submissions should be directed to:

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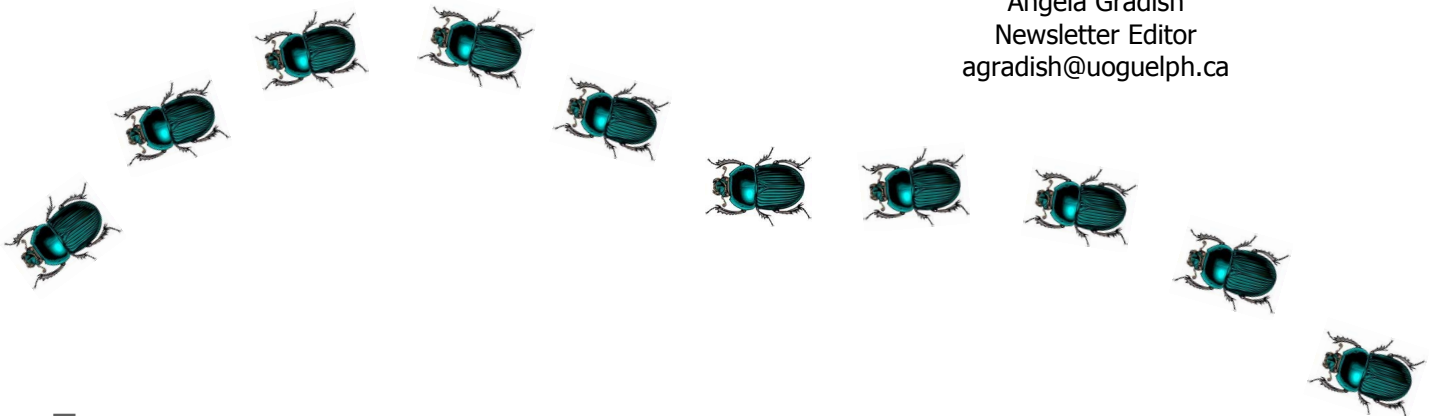
If you know any of these members, please ask them to send their contact information to ESO Secretary, Nicole McKenzie:

Amanda Naaum
Danielle Fife
Jen Perry
David Malone
Tomislav Terzin
Jessica Hurley
Tania Mottus

Write for the ESO Newsletter

The newsletter is always looking for articles of entomological interest, notices of upcoming events, or ideas for columns! Please send submissions to:

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Spread the Love

Let everyone know how great entomology is by getting involved in ESO outreach activities! Activities may include:

giving presentations for schools or children's groups

collaborating on outreach/engagement curriculum, literature, or web content

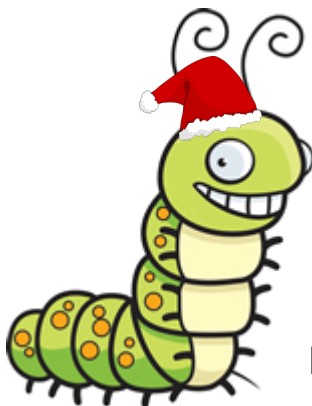
providing information to the media on behalf of the ESO



If you are interested in becoming involved or have ideas for outreach activities, please contact our outreach committee!

Looking for a unique entomological holiday gift?

How about buying an ESO membership for that special entomologist in your life? Or better yet, treat yourself and pay your 2011 ESO membership dues by the end of 2010! Please take this light-hearted advertisement as a reminder that your **2011 membership fees are due by December 31, 2010!** For more information, or to simply mail your membership dues, please contact:



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Happy Holidays from the ESO!

