



THE ESO Newsletter

June 2010

Volume 15, Issue 1

ESO President's Message:

Greetings, fellow entomological enthusiasts. It's already been about eight months since I received the cockroach emblematic of the ESO Presidency from Cynthia Scott-Dupree, and, in this time, we've had an Interim ESO Board Meeting on April 26 at the apiculturally-imbued Townsend House at the University of Guelph. I do have several developments to fill you in on.

First, I would like to thank all members who have agreed to stand for election to the ESO Board. We have a superb slate of candidates, and while all cannot be elected at this time, each has made a significant contribution to the democratic governance of the ESO by allowing their name to go forward.

We have two new appointments to the ESO Board. I welcome Angela Gradish as our new Newsletter Editor, succeeding Jennifer Allen. Jennifer took over as our Newsletter Editor from Dana Gagnier as of the November 2006 newsletter, and I would like to express my sincere thanks for her stellar efforts. I would also like to welcome Morgan Jackson as our new Webmaster, taking over the reigns from Barry Lyons. Barry was our inaugural Webmaster and held the position for over 15 years, and he has also contributed to the ESO in many other ways, including serving as President. Your work over the years is very much appreciated, Barry.

We have important developments regarding future ESO meetings. You'll want to mark these on your calendar, as these will be events you absolutely won't want to miss. In a world of global connectivity with near-instantaneous telecommunication there is still tremendous value in interacting face-to-face; not only do people get a better understanding of each other's work at meetings but they are a lot of fun.

...continued on page 2...

INSIDE

President's Message	1
2010 Annual Meeting Announcement	2
2010 Electoral Candidates	3
Photo Contest	8
Treasurer's Report	9
Subury Bioblitz	11
2010 ESO Meeting Travel Awards	14

President

Gary Umphrey – 519-824-4120 x53288
umphrey@uoguelph.ca

President-Elect

Hannah Fraser – 905-562-1674
hannah.fraser@ontario.ca

Past-President

Cynthia Scott-Dupree – 519-824-4120 x52477
cscottdu@uoguelph.ca

Secretary

Nicole McKenzie – 613-736-3393
nicole_mckenzie@hc-sc.gc.ca

Treasurer

Shiyu Li – 613-694-2459
dr.shiyu.li@nrcan-rncan.gc.ca

JESO Editor

Miriam Richards – 905-688-5550 x4406
miriam.richards@brocku.ca

Librarian

Jim Brett – 519-824-4120 x4214
jimbrett@uoguelph.ca

Student Representative

Joel Gibson – 613-520-2600 x1244
jgibson5@connect.carleton.ca

Webmaster

Morgan Jackson – 519-824-4120 x52582
jackson@uoguelph.ca

Newsletter Editor

Angela Gradish – 519-824-4120 x53066
agradish@uoguelph.ca

Directors:

2008-2010

Hume Douglas – 613-759-7128
douglash@inspection.gc.ca
Kathleen Ryan
kathleen.ryan@utoronto.ca

2009-2011

Sigrun Kullik – 519-824-4120 x 54847
sigrun.jullik@sympatico.ca
Krista Ryall – 705-541-5549
kryall@nrcan.gc.ca

2010-2011

Ian Scott – 519-457-1470 x281
ian.scott@agr.gc.ca
Simon Lachance – 613-679-2218 x604
slachance@uoguelph.ca

2010-2011 OFFICERS OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO

On the immediate horizon is this year's ESO Fall meeting. Criteria the ESO Board considers in selecting a locale for the Fall meeting include willing local organizers, good value for members, an interesting locale, and geographic diversity. With the tremendous success of the 2009 meeting at Dorset, the ESO Board embraced the proposal spearheaded by Jeremy McNeil to hold the 2010 Fall Meeting at the Oakwood Resort in Grand Bend on October 15-17. Located on the shores of Lake Huron just north of Pinery Provincial Park, this area is one of my favorite places in Ontario, both entomologically and otherwise. The ESO Fall meeting is always a delightful social experience and a great place for members to present their research results. With its compact size, it is a particularly good meeting for students to present and, if they wish, compete for the President's Prize awards for the best paper or poster.

On a more distant horizon, I am pleased to announce that the ESC has accepted an invitation from the ESO to hold a special 150th Joint Anniversary meeting in Guelph October 20-23, 2013. If you have not done so, I urge you to read the excellent article by Laura Timms in JESO (2009, 46: 46-53) detailing the historical relationship between the ESO and the ESC. As correctly inferred by the ESO logo, the roots of the ESO date back to 1863, but the histories of the ESO and ESC are, in Laura's words, "inextricably entwined". My thanks to Maya Evenden, the President of the ESC, and the ESC Board for their enthusiastic support for holding this joint celebration.

The ESO Board continues to work on several other initiatives. We are seeking to improve our system for archiving ESO materials, including digital files. Setting out job descriptions and documenting ESO procedures and protocols is an ongoing process. We are looking into incorporating an electronic method of paying dues through the ESO website for those who prefer such an option to writing a cheque. Drawing inspiration from the very field-active Toronto Entomologists' Association, we are investigating the feasibility of holding an early summer ESO field meeting (starting no earlier than 2011). Finally, some very interesting proposals for outreach activities are under consideration.

One of the real pleasures of being a member of the ESO is the opportunity to be a part of, and contribute to, the ongoing legacy of a society with such deep historical roots. If you are not currently a member of the ESO, I would encourage you to join right away; if you are already a member, I would encourage you to recruit an entomological colleague who is not already a member. Membership dues for the ESO are considerably lower than for most private golf clubs. Our exclusivity arises only through our common interests in insects and insect-related science, and indeed we heartily welcome those interested in related arthropods such as spiders, mites, ticks, centipedes, millipedes, and crypto-

zoological nanopedes. Like a column of army ants, the strength of the social and political networks in our entomological community grows with numbers.

At the Fall meeting I'll be passing the Presidential cockroach on to Hannah Fraser. I always find it a delight at every ESO meeting to have the opportunity to see old friends, meet new friends, and to learn of some of the fascinating research work members are engaged in. I hope to see you this October in Grand Bend!

Yours in entomology,
Gary

ESO 2010 Fall Meeting

"Genes, bodies, and
wide open spaces"

October 15—17, 2010
Oakwood Resort, Grand Bend,
ON

Invited Speakers:

Dr. A. Moehring (molecular genetics of behaviour)
Dr. S. van Laerhoven (forensic entomology)
Dr. N. Keyghobadi (landscape ecology)

Registration fees will include the cost of
meals.

Please visit the ESO website
(www.entsocont.ca) for more information and
registration details or direct inquiries to:

Dr. Jeremy McNeil
Conference Committee Chair
519-661-3487
jmcneil2@uwo.ca



2010 ELECTORAL AND FELLOW CANDIDATES



All fellows, regular, and student members of the ESO who have renewed their membership in 2009 will receive an ESO election ballot and return envelope addressed to the ESO Secretary. The annual ESO election ballot lists all candidates running for an elected position on the ESO Board. This year's election ballot includes two candidates for President-Elect, three candidates for two director positions, and two candidates for one student representative position.

Additionally, there are two nominees for Fellow of the ESO: Dr. Freeman McEwen and Dr. Bernard J.R. Philogène. Fellows of the ESO are members or former members who have made an outstanding contribution to the advancement of entomology. Fellow nomination ballots will be included with the election ballots. A nominee for Fellow shall be elected if at least two-thirds of the votes returned to the Secretary are in the affirmative.

The following are biographies supplied by the candidates for the positions of President-Elect, Director, and Student Representative and for the Fellow nominees:

President-Elect Candidates

Dr. Bruce Gill

For the past ten years, I have been the co-head (with Doug Parker) of the Entomology Unit of the Ontario Plant Laboratory (Canadian Food Inspection Agency), located on the Central Experimental Farm in Ottawa. We operate an identification service and provide science support for the plant health programs of the CFIA to protect Canada from quarantine pests. We also provide advice to the Import Permit Office (Plant Health) for the importation of live insects, mites and terrestrial molluscs. In the past 5 years, we have created four new positions for taxonomists, three of which we have co-located in the Canadian National Collection at AAFC.

My interest in beetles and other insects began at an early age in Vancouver, B.C. I completed my B.Sc. in Honours Zoology at the University of British Columbia in 1980 and my Ph.D. at Carleton University in 1986. Additional details can be found in the May 2001 Newsletter (Vol.6 #2) of the ESO. In addition to membership in the ESO, I support the entomological societies of Canada, America and the Royal Entomological Society, London, and have been a member of the Coleopterists Society since 1976 and the International Heteropterists Society since 2000. I have served the ESO as a Director in 1995-97 and as President in 2002-03, and look forward to continuing to help strengthen all aspects of entomology in Ontario.



Dr. Sherah Van Laerhoven

Dr. Sherah VanLaerhoven received her Ph.D. (2001) from University of Arkansas, USA in Entomology and M.P.M. (1997) and B.Sc. in Biology (1995) from Simon Fraser University, B.C. Dr. VanLaerhoven is the Chair of Forensic Science in the Centre for Inter-Faculty Programs and an Associate Professor in the Department of Biology at University of Windsor. She has served on the Board of Directors for the Entomological Societies of British Columbia and Ontario, as Treasurer for the Berg-Isley Entomological Society, and on the Organization Committees for the 2006 Joint CIS/CSFS conference and 2004 Biocontrol Network meeting. She currently sits on the Board of Directors of the Canadian Society of Forensic Sciences, the Awards Committee for the North American Forensic Entomological Association and the CSFS, and the Organization Committee for the 2010 NAFEA conference. She is a Diplomate of the American Board of Forensic Entomology and a consultant and expert witness for police, medical examiners/coroners and lawyers in Canada and internationally, including the high profile cases *Regina v. Truscott* and *Regina v. Baltovitch*.

Her research program is based in insect ecology and behavior with applications in forensic science and biological control. Her areas of particular research interest include mechanisms driving foraging choices of omnivores and multi-trophic interactions including bottom-up effects of basal resources on colonization, competition, spatial and temporal resource partitioning, top-down effects of predators, parasitoids and omnivores on community dynamics and causes and testing current assumptions regarding the behavior of forensically-relevant insects. Her work has been fea-

tured numerous times in different media including Discovery Channel, Discovery Magazine, Globe & Mail, NPR and CBC Radio. She was awarded Canada's Top 40 under 40 and the C. Gordon Hewitt Medal.

Director Candidates

Dr. Rose Buitenhuis

I am currently working as Research Scientist in Biological Control at the Vineland Research and Innovation Centre. I am developing research projects to promote the uptake and integration of biological control and to support the needs of the horticultural industry, including greenhouse ornamental crops and nurseries.

I was introduced to entomology during a master's project at the University of Leiden in the Netherlands, dissecting fruitfly parasitoids for their eggs and fat content. After a brief digression into ornithology, I returned to insects for my PhD at Laval University where I worked on the life history and host finding behaviour of aphid hyperparasitoids. In order to expand my knowledge and experience to applied science and pest management, I worked as a post-doctoral fellow at Agriculture and Agri-Food Canada in Harrow. Here I developed different IPM strategies for the control of western flower thrips, and studied the biology and behaviour of the pest and biocontrol agents to improve pest control. I continued my research on thrips IPM during a post-doctoral term at the University of Guelph, concentrating on the predatory mite, *Amblyseius swirskii*.

I like the diversity in entomology, interacting with scientists, farmers, students, schools and the general public. Insects are of interest to everyone. I am looking forward to the opportunity to get more involved in the ESO, applying my experience and enthusiasm to promote entomology in Ontario.

Dr. Jeremy McNeil

Jeremy N. McNeil was born in England, and received his primary and secondary education in Newfoundland and England, respectively. He moved to Canada in 1964 when he enrolled in an honours degree in Zoology at the University of Western Ontario. Upon graduation in 1969, he enrolled as a graduate student in Entomology and Ecology at North Carolina State University and received his Ph.D. in 1972. He received a regional and a national award from the Entomological Society of America for his research on diapause. He immediately moved to the Department of Biology at Laval University in Quebec City, where he was a

professor for 30 years, until he took early retirement the end of 2002. At that time, he received a Humboldt Prize and spent 2003 at Hamburg University working with Professor W. Francke in the Department of Organic Chemistry. Having decided retirement was not the best option, he accepted a position as a professor in the Biology Department at the University of Western Ontario in 2004, and in 2008 also became the Scientific Director of the Biotron, a research facility on campus set up to study different aspects of climate change.

Dr. McNeil's research interests are in behavioral and chemical ecology, studying fundamental aspects of mate choice, seasonal migration, as well as plant-insect and host-parasitoid interactions from an interdisciplinary perspective. With his students (27 M.Sc. and 17 Ph. D. students, as well as 12 PDFs) and collaborators, Jeremy has published >160 papers in primary international journals and > 10 book chapters. He has received a number of research awards, including the Gold Medal of the Entomological Society of Canada, The Fry medal from the Canadian Society of Zoologists, The Silver Medal of the International Society of Chemical Ecology, and the Delwart Prize in Chemical Ecology (Belgium). Jeremy serves on several editorial boards, regularly serves on committees for national granting agencies, and acts as referee for international journals, granting agencies, and Universities.

Dr. McNeil has also been very active in the public awareness of science and each year, for the last 20 years, has spoken to > 500 school children in North America, Europe, and Australia. He also gives regular presentations at public institutions, as well as to amateur science and gardening clubs. Jeremy was the 2006 Lecturer for Governor General's lecture series organized by the RSC at different venues across Canada, and has received several national awards for his outreach activities.

Dr. McNeil is a member of several learned Societies and has played active roles in all, including serving as President of the Entomological Society of Canada, the Canadian Federation of Biological Societies and the International Society of Chemical Ecology. Since being elected as a Fellow of the Royal Society of Canada, Jeremy has chaired several RSC committees, organized an international symposium on GM plants in collaboration with the l'Academie Francaise, and currently represents the RSC in an IDRC-funded collaboration with the Senegalese Academy.



Director Candidates cont.

Morgan Jackson

Not knowing what I wanted to do in life other than work with “animals”, I came to the University of Guelph as an undergraduate student and soon found myself enamoured with insects. After a diverse array of entomology courses and a field course or two, I knew that taxonomic entomology was where I belonged. Currently a graduate student with Drs. Steve Marshall (University of Guelph) and Jeff Skevington (Canadian National Collection of Insects), I study the systematics of Neotropical stilt-legged flies (Micropezidae). I will be completing my M.Sc. in the spring of 2010, and plan to continue my research as a Ph.D. student shortly thereafter. Although on paper my career seems confined to Guelph, I spent 9 months of my M.Sc. at the Canadian National Collection in Ottawa, and have travelled around North and South America collecting and studying flies, meeting entomologists from all walks of life and spreading the word about insects to anyone willing to listen.

I have found that those willing to listen have often been undergraduate students, who I eagerly encourage to pursue entomology through my work as a teaching assistant, a guest speaker for university courses, and a mentor. The world is a much larger place than the walls of the university however, and I take pride in promoting entomology to the general public with seminars and through my personal website (www.biodiversityinfocus.com/blog). I have been actively involved with the ESO annual general meetings as a registration attendant (2006), and through involvement in the scientific program committee for the ESC-ESO JAM (2008), and the AGM website development committee (2009).

If elected to the ESO Board of Directors, I would continue to promote entomology to the masses, and I would strive to increase awareness of the ESO and the role its members play in society. As an active member of the ESO since 2006, I feel that the Annual General Meeting (AGM) is an extremely important instrument for the ESO to attract and involve undergraduate and graduate students, researchers, and interested members of the public. I have always enjoyed the opportunity to meet and interact with other entomologists at the AGM, and my previous experiences have reinforced my belief that showing students the diversity of entomological research being done in Ontario helps them develop into enthusiastic researchers and involved members of the ESO, two factors vital for the growth of our society. The AGM has given students a chance to discuss ideas, learn of opportunities in research, find potential employers, and share their passion for insects

with like-minded individuals. Likewise, researchers are provided a stream of keen students ready to take on the entomological world and an opportunity to get to know them outside of the classroom. If given the opportunity to serve on the Board of Directors, I would like to increase undergraduate student involvement at the AGM and provide more opportunities for student inclusion.

I look forward to becoming more involved with the ESO and hope that you will consider electing me as a Director of the ESO.

Student Representative Candidates

Jay Fitzsimmons

I am a PhD candidate supervised by Dr. Jeremy Kerr in the Biology Department at the University of Ottawa. My current research focus is butterfly species range shifts in response to modern climate change in Canada. I am finding out which species have shifted north in Canada over the past century, and whether there are any traits that might explain why some species are shifting more than others. More broadly, I am an evolutionary ecologist interested in many topics including citizen science, forensic entomology, the evolution of taxonomic resources, and natural history. As student representative for ESO, I intend to continue the excellent work by Joel Gibson and his predecessors by sending e-mails to students every month with job postings, grad student opportunities, and other relevant information. I would welcome the opportunity to work with editor Dr. Miriam Richards to find ways to continue to strengthen the Journal of the ESO, drawing on my experience as a member of the Ottawa Field-Naturalists' Club Publications Committee researching online publication systems for Canadian Field-Naturalist. I am looking forward to working with the ESO's Board members on initiatives to strengthen our journal and society.

Michelle Locke

Hi! I'm Michelle Locke and I would like to be your ESO Student Rep. I am currently in the first year of my M.Sc. at Carleton University studying under Drs. Jeff Skevington and Stewart Peck, as well as Steve Marshall from Guelph. My project is a revision of the genus *Dasysyrphus* (Diptera: Syrphidae). I am using a combination of both morphological and molecular systematics to complete my project and I am fortunate enough to have access to the resources of the Canadian National Collection of Insects, Arachnids and Nematodes to assist in this.

Student Representative Candidates cont.

I completed my undergrad at the University of Guelph in 2006, studying zoology. I have always been interested in nature and animals of all sorts, but it was at Guelph that I gained my love for insects after taking many of their entomology courses, and in particular, the entomology field course.

During the years between my U of G days and starting at Carleton, I spent time working for a wildlife rehabilitation centre in my hometown of Windsor, caring for orphaned and injured raccoons, opossums, squirrels, raptors, song birds and any other native wildlife that happened to land on our doorstep. I also spent time as the lab manager in the forensic entomology lab at the University of Windsor.

As Student Rep., I would like to continue the efforts of past representatives to provide communication to students regarding news, events and jobs. I would like the ESO to be a point of connection for students to share ideas and resources and I would like to spread the word about our organization to as many students in Ontario as possible, who have yet to be involved with the ESO.

Sandra Rehan

I am a third year PhD candidate studying under the supervision of Miriam Richards at Brock University. In 2005, I became a student member of ESO and presented my 3rd year undergraduate research on demographic variation in the Niagara bee fauna. This work resulted in my first refereed publication in JESO. In 2006, I was on the organizing committee for the Ontario Ecology and Ethology Colloquium, began my 4th year Honours research project on sex ratio variation in the small twig-nesting carpenter bee, *Ceratina calcarata*, and I worked as a research technician on the social behaviour of ground-nesting sweat bees. In 2007, I started my graduate research on the social evolution and biogeography of the small carpenter bees. Since then, I have been fortunate to form international collaborations providing opportunities for field work on bees in Australia, Borneo and South Africa. In 2009, I completed the first molecular phylogeny and historical biogeography of the small carpenter bees, tribe Ceratinini. This phylogeny has revealed an ancient origin and rapid radiation in the ceratinines and provided strong support for the monophyly of the tribe and insights into their origin and subgeneric relationships. My research on the Australian small carpenter bees examines nesting biology, population genetics, and behavioural experiments, all of which indicate this species to be at the very cusp of an evolutionary transition from solitary to social behaviour. My interests in entomology range from taxonomy and

systematics to natural history and social behaviour. I have experience working with regional, national and international entomologists. My involvements with the ESO include conference attendance and presentations as both an undergraduate and graduate student. In addition, I was technical editor of JESO from 2008 to 2009. I would like to continue my involvement with the ESO and build stronger ties between students and the entomological community. I would be honoured to represent the society and promote student publication in JESO and to facilitate entomological outreach within the province.

Fellow Candidates

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 was employed briefly by the Canada Department of Agriculture in Charlottetown, P.E.I. prior to accepting a position in 1954 as Assistant Professor at the New York State Agricultural Experimental Station, Cornell University, Geneva, N.Y. He was promoted to Associate Professor in 1958, and to Professor and Department Head in 1965. In 1968, after 14 years at Cornell, Dr. McEwen was appointed Professor of Zoology at the University of Guelph, becoming Professor and Chair of the newly formed Department of Environmental Biology in 1971, Associate Dean of the Ontario Agricultural College in 1983, and Dean from 1983-1990. On sabbatical leave from 1963-64 and 1976-77, he was Visiting Professor at the University of Hawaii.

During the course of his career, even with heavy administrative responsibilities, Dr. McEwen maintained his interest in teaching and, with colleague Dr. Gerry Stephenson, developed a hugely successful course in "Pesticides and the Environment". The textbook they co-authored (1979) was used by students throughout North America and a revised version remains in use today.

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. With environmental health in mind, in cooperation with his colleague Dr. Richard Frank, chemical persistence studies were often in-

Fellow Candidates cont.

cluded as a component of pesticide efficacy trials. Over the course of his research career, Dr. McEwen authored/co-authored more than 100 papers in referred journals, several book chapters, textbooks and more than 300 other publications related to plant protection. Dr. McEwen also played a major role in establishing the Canadian Centre for Toxicology at the University of Guelph, serving as Acting Director from 1982-84. This national network continues to address the need for accurate, unbiased data on environmental health risks associated with chemical control agents.

Dr. McEwen has been a member of numerous scientific and professional organizations in North America most notably the Entomological Societies of America, Canada, and Ontario. His contributions as a teacher, researcher, and administrator have been widely recognized by his peers – he is a Fellow of the ESC and also received their Gold Medal for Outstanding Achievement in Canadian Entomology, and most recently was the recipient of the MacDonald College Distinguished Alumni Award. On his retirement from the University of Guelph, the Ontario Agricultural College (OAC) Alumni Foundation established the F.L. McEwen Scholarship in Sustainable Agriculture, in recognition of Dr. McEwen's vision, guidance and imprint, not only on OAC, but on agricultural research, innovation, and industry practice in Ontario and beyond.

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). In December 1995 Bernard was awarded an honorary D.Sc. by the Université de Technologie de Compiègne (France), and in October 2005 an honorary D.Sc. by the Université de Pau et des Pays de l'Adour (France)). He is a Fellow of the Entomological Society of Canada, received the Gold Medal of the Society in 2000, and in 2003 was made a Commandeur de l'Ordre des Palmes Académiques (France).

Dr. Philogène joined the University of Ottawa in 1974 after three years of teaching and research in the Department of Plant Science at the University of British Columbia and five years as a research scientist with the Canadian Forestry Service, in Ste Foy, Quebec. At the University of Ottawa, in addition to his regular

teaching and research responsibilities, he has successfully been Vice Dean and Acting Dean of the Faculty of Science and Engineering, the first Dean of the newly created Faculty of Science (1985-1990) and Vice-Rector (Academic) (1990-1997). He was appointed Emeritus Professor in 2005.

Dr. Philogène's main scientific contributions have been in the area of insect development and diapause as influenced by light and temperature, and in the field of plant-insect relationships. Working with insects as different as the Swaine jackpine sawfly, the banded woolly bear, the cinnabar moth, and the sugar cane borer he and his students demonstrated that day-degrees, light energy, and spectral composition were all components of the physical energetic requirements for proper insect development, even proposing that insects have a minimum radiation requirement.

Aside from scientific presentations and addresses nationally and internationally on insect problems, pesticide issues, university and policy issues - and involvement in school programs in the Ottawa area - Dr. Philogène has authored or co-authored 150 refereed scientific papers. He has also co-edited/co-authored: *Les Pesticides et l'Environnement* (Environnement Québec, 1983); *Insecticides of Plant Origin* (American Chemical Society, 1989); *La post-récolte en Afrique* (AUPELF-UREF, 1992), *Biopesticides d'Origine Végétale* (Lavoisier, 2002, 2008), *Enjeux phytosanitaires pour l'agriculture et l'environnement* (Lavoisier, 2005).

Dr. Philogène has been an active member of scientific and professional organizations in Canada and the United States, notably the ESC, ESO, ESA, and the ISCE. With the ESC, he was Editor of the Bulletin (1976-1979), member of the managing council (1976-79), member of the committee on university research financing (1977-1978), fellowship committee (1981-84), finance committee (1981-1982), chair of the annual meeting (1978), and student awards (1986). He has also served on the editorial board of the *Journal of Chemical Ecology* (1989 to 1998) and *The Canadian Journal of Development Studies* (1981-1990). Dr. Philogène was a member of the Ontario Pesticide Advisory Committee from 1987 to 1991. From 1992 to 1994, he was the President of the National Consortium of Canadian Scientific Societies, whose main task was to bring to the attention of federal politicians the funding requirements for research in Canada. At the international level he has been very active in the scientific endeavors of the Association of French-speaking universities (AUPELF), notably coordinating the activities of the post-harvest scientific committee. From 2003 to 2009, he was an Auditor for the Undergraduate Program Review Audit Committee of the Council of Ontario Universities.

BUG EYE

A photo contest presented by

THE ENTOMOLOGICAL SOCIETY OF ONTARIO



Prizes for:
Best photo by an amateur entomologist
Best photo by a professional entomologist
Best photo by a young entomologist (under 16 years old)

Contest is open to everyone and there is no entry fee. Images must be of insects or closely related arthropod species (eg. mites, spiders). Each person may submit up to 5 photos and judging criteria will be based on image composition, visual impact, subject interest, sharpness of subject, difficulty of image acquisition, and depth of field within image. Winners will be announced on October 16, 2010.

Photographic enhancement is allowed as long as it is something that could also be achieved in a real dark-room with a color or black & white negative (e.g., adjustment of contrast, color enhancement, cropping etc.). However, very obvious enhancements will be negatively scored.

Submit the image by creating a digital file that is the equivalent of 7.5 inches by 10 inches, at 150 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 inches by 10 inches, at 150 dpi) for submission. Please include a short description of your entries (where they were taken, why you like them etc) and what category you are entering (amateur, professional, youth (age if youth)).

Please submit photos to esophotos@gmail.com
Deadline for submissions is Sept. 15, 2010



Treasurer's Report – Fiscal 2009

Submitted by Kevin Barber

The following is the annual financial report for the period 01 January to 31 December 2009. Carl Nystrom and Leo Cadogan (Great Lakes Forestry Centre, Sault Ste. Marie) audited the report on 29 January 2010 and the results were forwarded to the Secretary.

Publication: Transactions for JESO139 are complete with receipts totaling \$5,816.02 (includes JESO140 income from a page charge grant of \$280 and a single prepaid subscription of \$30USD=\$30.41CDN). All expenses have been paid for both JESO139 & 140 – printing \$6,665.54 and layout/technical editing \$3,677. There were delayed Editor expenses from 2008 for layout software and scanning of PESO volumes totaling \$759.79 while a total internal allocation of \$780 was made to the Publication Fund. This leaves a current reported deficit in Publication of \$6,066.31. However, by adding outstanding page charges/subscriptions (\$1,885CDN and \$2,578.80USD), and by removing the delayed Editor expenses (\$759.79), and before making the internal contribution to the Publication Fund (\$780), the deficit is estimated to be ~\$27 (with the page charge grant of \$280 included as income). An increase in exchange rate from 1.0138 to 1.1694 on the USD income in 2009 would be enough to pay for the Publication Fund contributions with no deficit. JESO finances will be an area of concern going into the future if exchange rates remain low while subscriptions continue to decline and expenses creep higher.

General: Membership dues (\$2,495.22), Bank Interest (\$321.41), Bond Interest (\$1,020), and sales of ESO Lapel Pins (\$65) totaling \$3,901.63 were received. Expenses include Secretary (\$452.22), Newsletter Editor (\$29.73), Treasurer (\$1,257.52), Website (\$950), Prizes and Awards (\$1,283.61), Bank Charges (\$79.50), and Board Travel (\$675.25) totaling \$4,727.83. This leaves a deficit of \$826.20 in this section, mostly the result of the one-time cost associated with the new website.

Meeting: The JAM2008 Committee forwarded their closeout balance of \$14,478.55. After delayed travel expenses (\$1,734.06) and the ESC surplus share (\$6,400) were paid, a net surplus of \$6,344.49 was realized for the ESO. A total of \$270 was received as donations for undergraduate support. There were balanced transactions with ESO2009 of \$3,200 and \$250 for a repaid loan and exchange of a sponsor cheque, respectively. Additional expenses included the small net loss of \$61.80 incurred by ESO2009 and \$450 of

student group travel subsidies leaving a reported surplus of \$6,102.69 in this section.

The current net Fiscal Balance of activity is estimated at a deficit of \$759.82 and distributed across the 3 bank accounts.

The Savings Account saw transfers totaling \$17,300 to the Chequing Account. It also received the cashed face value of \$3,000 of 2007-series OSBonds and the purchase of \$6,000 of 2009-series Bonds (\$3,000 cash was added bringing total investment in OSBonds to \$30K). Publication Fund: there was a balanced debit/credit to setup the rollover amount of \$500 with additional credits totaling \$780 to balance the debit allocation from Publication, and a grant of \$280 was paid to the Publication. The Chequing Account received transfers from both the Savings (\$17,300) and the US (\$7,296 – \$6,000USD@1.2160) Accounts while the US Account shows the balanced transfer to the Chequing Account.

The three accounts total to an estimated balance of \$25,668.22. The total investment principal in Ontario Savings Bonds of \$30,000 leads to a current estimate of Total Assets of \$55,668.22 (currency exchange rate of 1.0138). The ESO is in sound financial shape.

Note: Dr. Shiyu Li, Canadian Forest Service, Ottawa, takes over the duties of ESO Treasurer as of 01 January 2010. Bank drafts of \$22,833.64CDN and \$2,796.00USD have been forwarded to him.



From left to right: *Greta nero*, *Greta nero*, and *Ithomia heraldica* (Glassy Wing Butterfly) - San Gerardo Research Station Monteverde, Costa Rica. Photo by Dave Cheung.



Entomological Society of Ontario

Treasurer's Report -- Fiscal 2009

01 January to 31 December 2009

FISCAL BALANCE		2009
1. Publication (JESO Volume/Printer)		(139-140/TPL)
Credits - Previous Volume 138		
Page Charges (svgs)	\$	-
Subscriptions (svgs)	\$	-
	\$	- A
Credits - Current Volumes 139 & 140		
Page Charges (svgs)	\$	2,170.00
Subscriptions (svgs)	\$	720.00
1,2 Subscriptions (US to C\$ equiv.)	C\$	2,646.02
3 Page Charge Grants (Memo from Fund - svgs)	\$	280.00
	\$	5,816.02 B
Debits - Volumes 139 & 140		
4 Printing	\$	6,665.54
5 Layout / Technical Editing	\$	3,677.00
6 Editor	\$	759.79
3 Allocation to Publication Fund (Memo - svgs)	\$	780.00
	\$	11,882.33 C
Publication (Subtotal 1 = A+B-C)		\$ (6,066.31)
2. General		
Credits		
Membership Dues (svgs)	\$	2,495.22
Bank Interest (svgs)	\$	313.60
Bank Interest (cheq)	\$	7.81
Bond Interest (svgs)	\$	1,020.00
ESO Lapel Pins (svgs)	\$	65.00
	\$	3,901.63
Debits		
7 Secretary	\$	452.22
8 Newsletter Editor	\$	29.73
9 Treasurer	\$	1,257.52
10 Website	\$	950.00
11 Prizes, Awards	\$	1,283.61
12 Bank Charges	\$	79.50
13 Board Travel	\$	675.25
	\$	4,727.83
General (Subtotal 2)		\$ (826.20)
3. Meeting		
Credits		
14 AGM Surplus (ESC/ESO2008)(svgs)	\$	14,478.55
15 AGM Loan Return (ESO2009)(svgs)	\$	3,200.00
16 Sponsor (ESO2009)(svgs)	\$	250.00
17 Donations (svgs)	\$	270.00
	\$	18,198.55
Debits		
AGM Loss (ESO2009)	\$	61.80
15 AGM Loan (ESO2009)	\$	3,200.00
18 Group Travel Subsidies - student (ESO2009)	\$	450.00
16 Sponsor/Refund (ESO2009)	\$	250.00
14 Delayed Travel Expense (ESC/ESO2008)	\$	403.20
1,14,19 Delayed Travel Expense (ESC/ESO2008)	C\$	1,330.86
14 Surplus Share to ESC (ESC/ESO2008)	\$	6,400.00
	\$	12,095.86
Meeting (Subtotal 3)		\$ 6,102.69
FISCAL BALANCE (Subtotals 1-3)		\$ (789.82)

- 1 - US account transactions converted to C\$ to calculate "Fiscal Balance" then reported in US Account in US\$
 2 - includes \$30USD (=30.41CDN) for JESO140
 3 - Publication Fund - \$500 rollover, \$500 credit (JESO139), \$280 credit/waiver (JESO140)

Kevin Barber – Treasurer (of record)	Date
Carl Nystrom – Auditor	Date
B. Leo Cadogan – Auditor	Date

TOTAL ASSETS		2009
FISCAL BALANCE (Subtotals 1-3)		\$ (789.82)
Fiscal Activity - CDN Svgs Account	\$	24,482.37
Fiscal Activity - CDN Cheq Account	\$	(26,587.35)
1 Fiscal Activity - US Account (Credits)	C\$	2,646.02
1,19 Fiscal Activity - US Account (Debit)	C\$	(1,330.86)
TOTAL ASSETS		
CDN Savings Account		
Opening Balance	\$	17,950.75
Fiscal Activity	\$	24,482.37
Transfer to CDN Cheq. Acc't	\$	(17,300.00)
20 Bonds Cashed (2007 series)	\$	3,000.00
20 Bond Purchase (2009 Series)	\$	(6,000.00)
3 Publications Fund - 2008 Rollover	\$	(500.00)
3 Credits from Rollover and "Publication"	\$	1,280.00
3 Debits as Waivers/Grants	\$	(280.00)
Closing Balance	\$	22,633.12 D
Publications Fund - Subject to Rollover	\$	1,000.00
CDN Chequing Account		
Opening Balance	\$	2,191.87
Fiscal Activity	\$	(26,587.35)
Transfer from CDN Svgs. Acc't	\$	17,300.00
21 Transfer from US Acc't	\$	7,296.00
Closing Balance	\$	200.52 E
US Account		
Opening Balance	US\$	7,212.50
1 Fiscal Activity - US Account (Credits)	US\$	2,610.00
19 Fiscal Activity - US Account (Debit)	US\$	(1,026.50)
21 Transfer to CDN Cheq. Acc't	US\$	(6,000.00)
Closing Balance	US\$	2,796.00
CDN equivalent	C\$	2,834.58 F
Outstanding Loans		
15 ESO2009	\$	3,200.00
15 Repayment (2009)	\$	(3,200.00)
ESO2009	\$	- G
Investments - Ontario Savings Bonds *		
2006 - Principal (Ann. Int. to Account)	\$	6,000.00
2007 - Principal (Ann. Int. to Account)	\$	15,000.00
20 2007 - Principal redeemed	\$	(3,000.00)
2008 - Principal (Ann. Int. to Account)	\$	6,000.00
20 2009 - Principal (Ann. Int. to Account)	\$	6,000.00
Total Investments - OSB	\$	30,000.00 H
TOTAL ASSETS (D+E+F+G+H)		\$ 55,668.22
Increase (Decrease)	\$	(3.18)
- Attributable to fiscal transactions, Pub.Fund	\$	267.51
- Attributable to change in exchange rate	\$	(270.69)

21 US account transfer exchange rate (16-Jan-2009)	1.2160	
22 Reporting exchange rate (interim/year-end)	1.0138	31-Dec rate
23 Previous year-end exchange rate	1.1825	
24 Member dues rates	\$30/\$0/\$10	

- * 5-year step-up, annual interest to Svgs Acct, series interest rates:
 2006 - 3.70, 3.80, 3.90, 4.00, 4.25%; 2007 - 4.00, 4.20, 4.40, 4.60, 4.95%;
 2008 - 2.60, 2.80, 3.00, 3.20, 4.00%; 2009 - 0.75, 1.50, 2.50, 3.50, 4.50%
 Bond Calculator - <http://www.ontariosavingsbonds.com/en/calculator.asp>
 4 - Thistle Printing Ltd. - JESO139-\$3,752.36, JESO140-\$2,913.18
 5 - S.Rehan - JESO139/140: layout \$1,019.50/\$905.50; tech.edi.\$755/\$957; mailing\$40/\$1
 6 - PESO scans \$500; InDesgn software \$259.79
 7 - postal box rental; mailing of invoices, ballots, labels (postage, envelopes, labels)
 8 - mailing of Newsletter hardcopies (postage)
 9 - mailing of JESO139-\$627.67, JESO140-\$612.90; envelopes \$16.95
 10 - M.Munroe - new ESO website design and initial migration
 11 - Travel Awards 2@\$250; Pres Prizes 3@\$250; Service Award - \$33.61
 12 - includes \$42 for Safety Deposit Box rental
 13 - ESO2009 - Student Representative \$235; Guest \$440.25
 14 - ESC/ESO2008 surplus less delayed travel expenses = \$12,744.49
 15 - ESO2009 - includes \$2,700 venue deposit, \$500 committee loan - paid back
 16 - exchange of sponsor cheque written to ESO
 17 - donations toward "Undergraduate Support"
 18 - 3@\$150 (1 group declined to submit)
 19 - valued @ 1.2965 (16-March-2009) - travel \$1,021.24US, bank draft \$5,26US
 20 - 2009-series bonds purchased (\$6,000)
 21 - actual US-C\$ exchange rate achieved during account transfer
 22 - exchange rate used at end of reporting period (31-Dec-2009)
 23 - used to calculate value of US in C\$ if there had been no change in rates
 24 - Regular/Domestic Student, Amateur, Retired/International Student, Amateur

CELEBRATE THE UNITED NATIONS INTERNATIONAL YEAR OF BIODIVERSITY BY STUDY-
ING THE BIOTA COLONIZING REVEGETATED SMELTER-DAMAGED LANDS NEAR SUDBURY

The 2010 BioBlitz of the Biological Survey of Canada will be held in Sudbury, Ontario June 14-20 to help celebrate the United Nations International Year of Biodiversity. For those unfamiliar with BioBlitzes, they are a special type of field study where a group of scientists and volunteers conduct an intensive biological inventory, attempting to identify and record all species of living organism in an area. The term "BioBlitz" was coined by U.S. National Park Service naturalist Susan Rudy while assisting with the first BioBlitz at Kenilworth Aquatic Gardens, Washington D.C. in 1996. Besides establishing the degree of biodiversity in an area, BioBlitzes help popularize science. The 2010 BSC BioBlitz will be different from those in the past as it will be more general: that is, besides entomologists, there will be botanists, mycologists, and vertebrate zoologists, along with the general public.

The BSC has held 7 BioBlitzes; the first was at Onefour in southeastern Alberta (see the BSC website <http://www.biology.ualberta.ca/bsc/bschome.htm>). Four of the BioBlitzes were held in National Parks

(Waterton Lakes, Gros Morne, Riding Mountain and Bruce Peninsula) where ecosystems are relatively untouched by human activity. A BioBlitz at Aweme, Manitoba in 2004, at the site of the Criddle/Vane home-
stead, was the first to be held at a site modified by past agricultural activities. The 2010 BioBlitz is novel because it is the first to be held at a site that has been damaged by past mining and smelting activities, but is in the process of being restored. Entomologists interested in participating in the 2010 BioBlitz have a unique opportunity to join the citizens of Sudbury in conducting an inventory and assessment of the insects that have colonized these recovering ecosystems.

The lands that received damage in the past surround three copper-nickel smelters near the towns of Copper Cliff, Falconbridge, and Coniston, all on the outskirts of Sudbury (Fig. 1). The Coniston smelter was decommissioned in 1972. However, initial damage to the environment around Sudbury was caused by roast yards, an old smelting technique whereby ore was placed on top of huge piles of logs and burned to

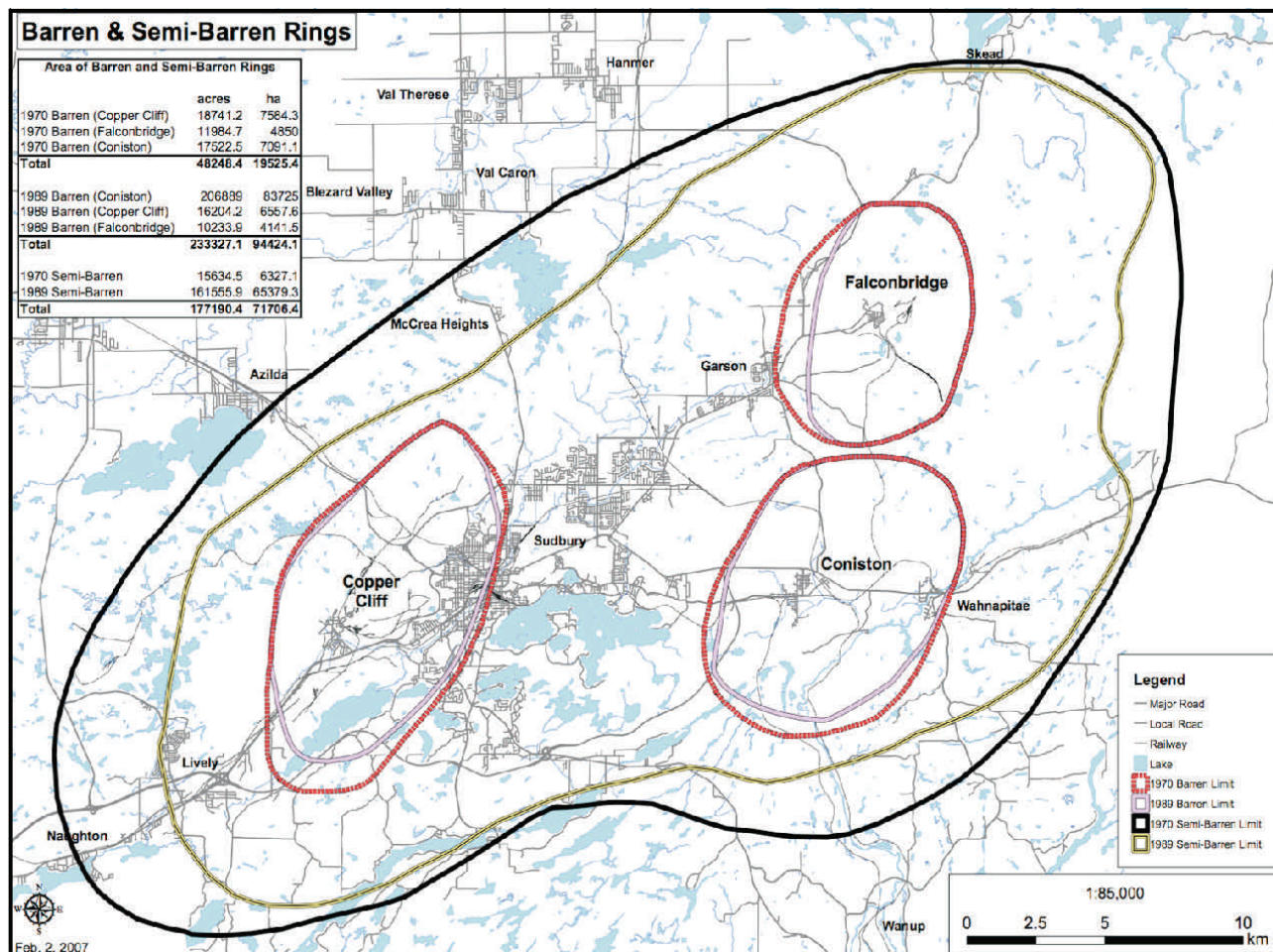


Fig. 1

drive off the sulphur. Fumigating clouds of sulphur swept over the surrounding country side killing vegetation, and as a result, soils were eroded from the hills. By the 1970s, environmental damage, caused primarily by the local mining industry, had stripped the vegetation from over 100,000 hectares of the land near Greater Sudbury. Furthermore, forested areas on the edge of the industrial barrens had their majestic white pines (*Pinus strobus*) removed to feed the roast yards or were shipped to the United States for use in buildings. Stumps of these trees remain to this day, some of which near the former roast yards were almost 'fossilized'.

The early citizens of Sudbury apparently paid little attention to the fumigations and damage caused to area hillsides, but things changed in the early 1970's when local citizens demanded a change in smelting practices and an end to pollution. The famous superstack was built in 1972 and new technologies resulted in SO₂ reductions of about 90% between 1970 and 2000. So little SO₂ comes from the Copper Cliff and Falconbridge smelters today that damaging fumigations no longer occur.

Most early attempts to re-establish trees on the damaged hillsides were unsuccessful, but then in the early 1970's, faculty in the Department of Biology at Laurentian University began researching the use of limestone to buffer the acidity and fertilizers to provide missing nutrients. It was necessary to establish grasses and legumes as nurse plants before attempts were made to plant trees. Not only did the grasses and legumes thrive as well as the planted trees, but after a few years the seeds of surrounding trees (mainly birch and poplars) blew in and became established in the developing leaf litter and soil. Restoration of damaged ecosystems intensified in 1973 by the launch of an organization called VETAC, the Vegetation Enhancement Technical Advisory Committee, with a mandate to coordinate the restoration process. In 1978, some of the severely damaged lands near highways running east, west and north of Sudbury were the first to receive the amelioration treatment and subsequently planted with trees such as jack pine, red pine and white pine on the grass-covered lands. Streets bordering the barrens within the city (Fig. 2) were also restored early in the process (Fig. 3). To date over 3400 ha have received the amelioration treatment and over 9 million trees have been planted.

The restoration process has been so successful that the region has been the recipient of many international awards, including the United Nations Local Government Honors Award presented at the Rio de Janeiro Earth Summit in 1992. Restored sites, which are likely similar to those following the retreat of glaciers about 12,000 years ago, have become fascinat-

ing places to study the compliment of flora and fauna that colonize these unique ecosystems.

A unique forest called the birch transition zone (Fig. 4) developed around the once barren areas. This zone is inhabited by coppiced white birch

(*Betula papyrifera*), a species well adapted to harsh conditions, but there is evidence that without human intervention, it will take many years until a more normal forest returns. It is thought that coppiced birch grow in this stunted, multi-stemmed form because of their roots being damaged by acidity, heavy metals, and frost heaving that occurs in areas without thick leaf litter and a closed canopy. Of interest, the tops of many hills in this zone are still blackened and have sparse vegetation.

However, when limestone and fertilizer is applied to birch transition hills, and planted with jack, red and white pine, leaf litter accumulates, soils begin to form, and a somewhat normal boreal forest begins to appear. Forests that develop in this manner have been considered examples of 'anthropogenic succession', but unfortunately, they have received little entomological attention. However, pitfall trapping in 1995 at a typical birch transition site revealed 24 species of carabids, 20 species of scelionids, 32 species of wandering spiders, and 7 species of sawflies. Of interest, the short, coppiced trees make it easy to sample insects in the canopy compared to normal forests. That is, insects are easily removed from the upper canopy without the use of ladders or ropes!

Other forest types surround the birch transition zone and the flora and fauna gradually becomes more diverse and natural as one moves away from the smelters. Clines from stressed to natural forests can be observed and studied in all directions from Sudbury with highways and side roads providing easy access.

The June BioBlitz will concentrate on the flora and fauna of the birch transition zone, although maps



Fig 2. before restoration



Fig 3. after restoration

and directions to all forest types in the Sudbury area will be provided. The Laurentian University campus (Fig. 5) is within the birch



transition zone to the east of downtown Sudbury and will be the focal point of the BioBlitz. Rooms have been reserved in a campus residence at a cost of \$50.00 per night. Participants can literally walk out the doors of all campus buildings into birch transition forest. Free parking and access to an Olympic pool, recreation facilities and food services are available on campus.



Space to sort specimens and meet with the public will be available in teaching laboratories in the Department of Biology. Two

students have been hired to sample the campus forests by pitfall and pan traps, sweeping, malaise, light trapping, etc. from May to August and will provide specimens for all participants and those interested in the survey, but unable to join us.

Sudbury was chosen for the 2010 BSC BioBlitz because of its leadership in recognizing the importance of biodiversity, the City's award-winning efforts at restoring once smelter-impacted lands, and the opportunity to learn about the fauna and flora that is colonizing once barren and polluted sites. The City has developed a Biodiversity Action Plan to be overseen by VETAC and the plan can be accessed at www.greatersudbury.ca/biodiversity. The 2010 BioBlitz is sponsored by the City of Greater Sudbury, Vale Inco, Xstrata Nickel and Laurentian University.

For further information, to register, and book rooms, contact: Joe Shorthouse, Department of Biology, Laurentian University, Sudbury, Ontario, P3E 2C6. Email: jshorthouse@laurentian.ca Telephone: 705-675-1151 Ext. 2285.

Article and photos by Dr. Joe Shorthouse

The ESO Needs You

At the 2009 Entomological Society of Ontario's Annual General Meeting, past-president Cynthia Scott-Dupree expressed to you the concerns that the board was having about declining membership and improving outreach and engagement opportunities for ESO members.

Well, here is your chance to help!

The ESO would like to gauge the interest of its members in becoming involved in outreach and engagement activities. These activities may include but are not limited to:

Giving presentations to local school groups, camp groups, etc.

Collaborating on outreach/engagement curriculum, literature, web content

Providing information to the media on behalf of the ESO

If you have an interest in any of the above activities, or have a suggestion about another outreach and engagement activity that was not listed, please send your contact information and ideas to Kathleen or Joel at the addresses below, along with your specialty or area of research. If you are already involved in some type of entomology outreach or community engagement work, please feel free to drop us a line and let us know how it is going!

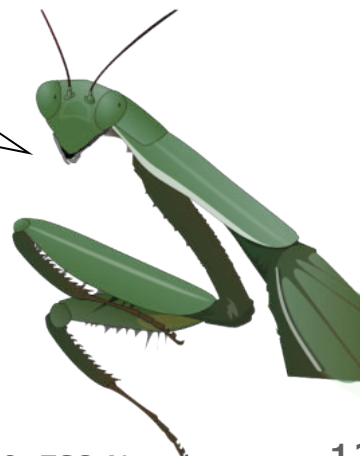
Kathleen Ryan

kathleen.ryan@utoronto.ca

Joel Gibson

jgibson5@connect.carlton.ca

Participate in Outreach with the ESO!



Make the Trip to the 2010 Annual Meeting: Student Travel Awards

Professors and teachers of entomology:

Do you know of a student whose research should be featured at the ESO Annual Meeting this fall? Please inform your students that the ESO has travel awards available to both undergraduate and graduate students.

Each year the Entomological Society of Ontario provides travel grants to assist students with their travel expenses to the annual meeting. **The ESO awards both a graduate and an undergraduate travel grant worth \$250 each!**

Student members of the ESO (registration is free—visit <http://www.entsocont.ca/>) who are presenting a poster or a paper at the Annual Meeting of the Entomological Society of Ontario being held October 15–17 2010, at the Oakwood Resort, Grand Bend ON are eligible to apply.

Interested students should forward: (1) a title and short abstract for their project; (2) a statement outlining why/how the funds will be used to support their participation in the meeting; and, (3) a curriculum vitae.

Only active student members of the ESO who are enrolled in a graduate or undergraduate program will be considered for travel awards. Students may receive only one travel award per degree.

Please don't forget to include contact information (phone number, mailing and email address).

Deadline for application is September 17, 2010. Recipients will be notified at least two weeks before the annual meeting. Please send applications electronically to:

Hannah Fraser
Awards Committee Chair
hannah.fraser@ontario.ca

There will also be President's Prizes awarded at the meeting for exceptional paper and poster presentations. Please refer to meeting registration forms for information on applying.

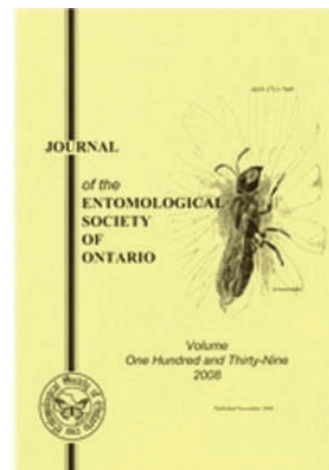
Working on a Manuscript? Submit to JESO!

Consider submitting your next manuscript to JESO

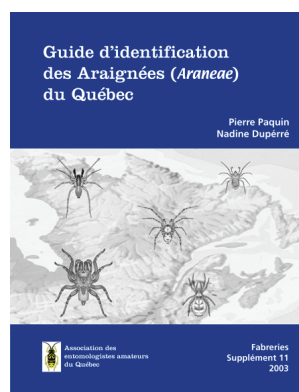
Instructions to authors are available on-line at www.entsocont.com/instructions_2008.pdf

Electronic submissions should be directed to:

Miriam Richards,
JESO editor
miriam.richards@brocku.ca



Quebec Spider Publication



Recently, the association that was taking care of the distribution of the **Guide d'identification des Araignées du Québec** by Paquin & Duperré (2003) decided to stop the distribution of this publication, leaving the authors with this task. This monograph (250 pages, spiral bound) contains 2700 illustrations that allows species level identification of 670 spiders, and constitutes a

precious tool for the identification of spiders of the East Coast of North America.

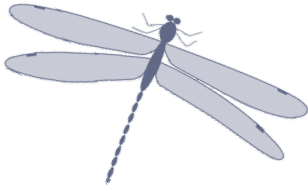
Complete reference:

Paquin, P. & Duperré, N. (2003) *Guide d'Identification des Araignées du Québec*. Fabriques, Supplément 11, 1–251.

Originally, this book sold for 45.00 (+ taxes + shipping), but can be purchased now for 25.00 + shipping (or with arrangements to save shipping charges).

For more information, please contact Pierre Paquin at ppaquin@swca.com

Damselflies Wanted



Chris Hassall is a researcher at Carleton University working on dragonflies and damselflies. As part of a project this summer, he would like to collect specimens of the Ebony Jewelwing Damselfly, *Calopteryx maculata*, from sites across Ontario.

If you know of a site at which this species is regularly present or if you come across such a site this year, please contact Chris at chassall@connect.carleton.ca.

ESO Committees

Awards: Hannah Fraser (chair) – 905-562-1674, hannah.fraser@ontario.ca; Ian Scott – 519-457-1470 x281, ian.scott@agr.gc.ca; Angela Gradish – 519-824-4120 x53066, agradish@uoguelph.ca

ESO Regional Rep to ESC: Hume Douglas – 613-759-7128, douglash@inspection.gc.ca

JESO Editor: Miriam Richards – 905-688-5550 x4406, miriam.richards@brocku.ca; Sandra Rehan (Technical Editor) – 905-934-3656, sandra.rehan@brocku.ca

Librarian: Jim Brett - 519-824-4120 x54214, jimbrett@uoguelph.ca

Outreach: Kathleen Ryan (chair), katheen.ryan@utoronto.ca; Joel Gibson - 613-520-2600 x1244, jgibson5@connect.carleton.ca

Nominations: Cynthia Scott-Dupree – 519-824-4120 x52477, cscottdu@uoguelph.ca

Website: Morgan Jackson (webmaster) - 519-824-4120 x52582, jackson@uoguelph.ca; Sigrun Kullik – 519-824-4120 x54847, sigrun.kullik@sympatico.ca; Hume Douglas – 613-759-7128, douglash@inspection.gc.ca



Renew Your ESO Membership!

Please mail your invoice and payment to:

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

Student, amateur and retired memberships in Canada are free but **must be renewed each year!** Free

memberships may be renewed electronically by sending an email to

Nicole at:

nicole_mckenzie@hc-sc.gc.ca

Missing Members

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

Tomislav Terzin
Jessamyn Manson
Scott MacIvor
Tania Mottus
David Malone
Ryan Burke
Charles K. Zubovits
Crystal Marie Vincent
Iain Buchanan
Kimberley Janes
Arun Rajamohan
Melissa Dugas
Carrie Woods
Amy Meekes

Share Your Entomology News or Stories in 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:

Angela Gradish
Newsletter Editor
agradish@uoguelph.ca