



THE ESO Newsletter

July 2008

Volume 13, Issue 1

2007-2008 OFFICERS OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO

President

Rebecca Hallett 519-824-4120 x54488
rhallett@uoguelph.ca

President-Elect

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

Past-President

Blair Helson 705-949-9461
bhelson@nrca.gc.ca

Secretary and ESC Representative

David Hunt 519-738-1230
hunt@agr.gc.ca

Treasurer

Kevin Barber 705-941-5432
kbarber@nrca.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

Jen Perry 416-978-0387
jperry@zoo.utoronto.ca

Webmaster

Barry Lyons 705-541-5617
blyons@NRCan.gc.ca

Newsletter Editor

Jennifer Allen 519-826-4963
jennifer.allen@ontario.ca

Directors:

2006-2008

Sherah VanLaerhoven 519-253-3000 x2713
vanlaerh@uwindsor.ca
Laura Timms 416-531-9205
laura.timms@utoronto.ca

2007-2009

Doug Currie 416-586-5532
dcurrie@zoo.utoronto.ca
Jeff Skevington 613-759-1647
skevingtonj@agr.gc.ca

2008-2010

Hume Douglas 613-759-7128
douglass@inspection.gc.ca
Kathleen Ryan
Kathleen.ryan@utoronto.ca

ESO President's Message:

As my term as President wanes, and as we approach the election of our new Board members, volunteerism has been on my mind. The Entomological Society of Ontario is now 145 years old, a society founded by, and ever since dependent on the kindness and commitment of, volunteers. I would like to take this opportunity to thank those people standing as candidates in our current election.



Their willingness to step forward and continue the long tradition of active committed entomologists is appreciated and so critical to the continued vitality of this society. Unfortunately this year, there were relatively few people who were willing to step up and volunteer in this way. You will no doubt notice that for the first time in recent memory, a position on the board has been won by acclamation. I would like to express my congratulations and appreciation to Gary Umphrey for stepping up to serve in the President Elect position next year. Gary will undoubtedly be very dedicated and effective throughout his presidential term, and there is no question that he would have given anyone else willing to stand for the position a run for their money. But the lack of others willing to volunteer for this position gives me pause. This society, our conferences, journal, newsletter, public outreach activities, website, and administration are all dependent upon members being willing to volunteer a little, and sometimes a lot, of their time and energy to the society. Perhaps the word 'volunteer' is not quite

...continued on page 2...

I
N
S
I
D
E

President's Message	1
Monarch Butterfly News	2
Electoral Candidates	3
Obituary	5
Treasurer's Report	6
Graduate Position Announcement	8
2008 ESO JAM Travel Awards	9
2008 ESO-ESC JAM Announcement	10
Creepy Crawly Cooking Interview	12

Monarch Butterfly Notes

right though, for it suggests that one gives without receiving anything in return. There are many rewards that come with serving on the ESO Board – whether it be gaining committee experience that leads into involvement in national and international scientific societies, meeting and networking with other entomologists, or a sense of pride in helping to maintain the oldest entomological society, and longest running entomological journal, in Canada.

We seem to have a good number of students willing to get involved and actively contribute to the ESO, which is fantastic and a good sign for the future. Over the next year we will be looking for two people willing to assume the positions of Secretary and Treasurer. These positions have been ably and generously filled by David Hunt and Kevin Barber for a number of years now and they deserve a rest. So, I'd like to encourage each and every one of you, and particularly my peers and elders in this society (those mid to late career entomologists among us), to think about getting involved actively again and taking on a leadership role with us. Perhaps it's been a few years since you did so, and we'd love to have you back! And of course, new faces are always welcome too.

Remember as Henry David Thoreau once said:

"One is not born into the world to do everything but to do something."

We have some exciting events coming up in the near future, including a new pilot program, spearheaded by the Public Education committee that will take grad students into schools to encourage and teach children about the wonders of insects.

The Joint Annual Meeting with the Entomological Society of Canada is rapidly approaching. I am really looking forward to the very interesting and stimulating series of plenary speakers and symposia that have been planned by John Huber and his team. See the JAM 2008 website for more details: <http://www.canacoll.org/JAM2008/>

See you all in Ottawa, October 19-22!

Cheers,

Rebecca



As a result of a 3-day workshop held last December 2007 in Morelia, Mexico and subsequent conference calls, representatives from Canada, U.S.A. and Mexico have produced a final draft of the **North American Monarch Butterfly Conservation Plan**, which will be presented for approval to the Council of the Commission for Environmental Cooperation at the Council's next meeting in June 2008 in Ottawa. Canadian Committee Members include Don Davis of the T.E.A. and Jean Lauriault of the Canadian Museum of Nature. Thanks for Dr. Karen Oberhauser, University of Minnesota, and Hans Herrmann of the CEC for their important leadership roles. Karen has also developed a draft for the Trilateral Monarch Monitoring Handbook.

The Canadian Monarch Butterfly Plan (SARA) planning process is currently delayed due to staffing changes at the Canadian Wildlife Service.

Migrating monarchs have now reached the southern United States, but unfavourable weather conditions may prevent a successful breeding season there. Dr. Orley "Chip" Taylor is particularly concerned about the monarch migration with respect to habitat loss in Mexico. See: <http://www.features.ku.edu/monarchs/>

Monarch Watch has launched a new Monarch Watch BLOG. This latest feature will keep you current with frequent updates of what's going on at Monarch Watch and with monarchs in general. Go to www.monarchwatch.org, and click on "Monarch Watch BLOG".

The Monarch Waystation Program continues to grow! Over 1871 individuals, families, schools and companies in Canada and the U.S.A. have established or dedicated a garden to help monarchs to produce successive generations and sustain their migration. For further details, go to: <http://www.monarchwatch.org/waystations/>.

Upcoming Monarch Butterfly Events in Ontario include: 22nd Monarchs and Migrants Weekend (Presqu'île Provincial Park) - Aug. 30-31/08; Monarch Days (Greenway Blooming Centre, Breslau - first three weekends in September) – www.monarchdays.com; Monarch Butterfly Migration Festival (Rondeau Provincial Park) – Sept. 21/08. The Monarch Teachers Network Canada will be holding 3-day workshops for teachers and educators in Brighton, Warton and Kingston, Ontario in late July and early August 2008. Go to: www.monarchcanada.org to register.

Special thanks to Don Davis for this piece.



2008 ELECTORAL CANDIDATES



All fellows, regular and student members of the ESO who have renewed their membership in 2007 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 one candidate for President-Elect, three candidates for the two director positions, and two candidates for student representative.

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

President-Elect Candidate—Acclaimed

Gary Umphrey

My educational and employment history has been intertwined between entomology and statistics. I completed my BSc from the University of Guelph in 1976, majoring in biology but with a minor in mathematical science. During my undergraduate days I developed a passion for myrmecology, the study of ants. Gainful employment in the Department of Mathematics and Statistics at Guelph eventually led to completing an MSc in Statistics in 1982. After teaching statistics for three years in the Department of Statistical and Actuarial Sciences at The University of Western Ontario, I went on to a PhD in Biology at Carleton University under the supervision of the distinguished scarab taxonomist, Dr. Henry Howden. My research employed karyology, enzyme electrophoresis and morphometrics to help sort out the systematics of a species complex in the ant genus *Aphaenogaster*.

I took on various contract teaching stints in both biology and statistics during and after my PhD at Carleton, UWO and Guelph. I am now a faculty member and resident myrmecostatistician in the Department of Mathematics and Statistics at the University of Guelph. I describe my principal research focus as biodiversity-related inference, with particular emphasis on the evolutionary biology and systematics of ants. My graduate students often work on projects outside of this area, and I venture into other areas myself. However, nothing beats field work on ants for personal research excitement.

I served as a Director of the ESO for the term 2004–2006. I have been tremendously impressed by the contributions of members to enrich the outreach of the Society; the evolutionary enhancements of the ESO website, journal and newsletter are but some of the more visible examples.

Its rich historical tradition and its efforts to encourage students are two outstanding traits of the Entomological Society of Ontario. The 150th anniversary of the ESO in 2013 offers a special opportunity to build on the latter by celebrating the former at our Annual Meeting. As President of the ESO I would like to initiate the process of preparing for this milestone celebration while supporting the ongoing efforts to enrich the great traditions of the ESO as a vigorous, active scholarly society.

Directors Candidates

Sigrun Kullik

My academic background is in agricultural entomology with a focus on corn pests, having completed my doctoral studies at the University of Guelph in 2006. I am currently a postdoctoral fellow at Guelph and the Research Coordinator for the Frost Center Institute, a non-profit organization dedicated to environmental research and outdoor education. My current research interests include vernal pools, decomposition ecology, and soil arthropods. This work requires an active involvement in field and laboratory research as well as working directly with graduate and undergraduate students.

Through my position with the Frost Centre Institute I have also been given the opportunity to work with youth at the secondary and elementary levels, providing them with hands-on exposure to scientific research and helping to foster entomological interest in Ontario's youth.

I first joined the Entomological Society of Ontario in 2001 and have been an active member ever since. I benefited greatly from participating in student competitions at the annual meetings. In 2003 I became actively involved in organizing the annual meetings as a

Directors Candidates con't

member of the Program committee. I found this to be a deeply rewarding and educational experience, so in 2006 I co-chaired the 143rd annual meeting. During this same year I also coordinated the re-design of the society's logo. I have gained considerable administrative skills and organizational abilities through these experiences and an appreciation for the ESO's committed and active membership. As a director I would like to further my knowledge of governing an organization such as the ESO, increase public awareness of the society, and promote entomology in Ontario.

Shiyou Li

Shiyou Li obtained his honours B.Sc. (Plant Protection) in 1981 from Anhui Agricultural University in China and his M.Sc. (Entomology) in 1984 from Chinese Academy of Agricultural Sciences, China. He received his Ph.D. (Entomology) in 1992 from Queen's University, Canada.

Shiyou has worked for the Canadian federal government since 1993, first as a NSERC postdoctoral fellow at Agriculture and Agri-Food Canada, then Research Scientist and now Research Coordinator at Canadian Forest Service, Natural Resources Canada. His research was primarily focused on development of environmentally-sound pest management strategies for defoliators. He has published more than 40 referred scientific papers in various entomological journals and more than 50 technical reports, and has made more than 60 presentations at meetings & conferences. Currently, he is working on regulatory issues on pests of outdoor woody ornamentals and forestry.

Dr. Li resides in Ottawa with his family. He was the Treasurer for Entomological Society of British Columbia from 1993 to 1995. He is also heavily involved in activities of local communities. He is the first Vice-President of Ottawa Association of Chinese-Canadian University Alumni and the Treasurer of the Canada-China Friendship Society, Ottawa Chapter.

If elected as a Director of ESO, Shiyou would be honoured to be involved in promoting entomology and entomological education in Ontario.



Krista Ryall

Dr. Krista Ryall is currently working at the Great Lakes Forestry Centre as a research scientist, leading the Forest Health unit and collaborating with scientists in the Pest Ecology team. Her research focuses on monitoring and sampling techniques and tools for native and invasive insect species, including the invasive emerald ash borer and Sirex woodwasp, as well as understanding the impact of insect activity on our native forests. Previously, Dr. Ryall worked as a research scientist at the Corner Brook laboratory of the Atlantic Forestry Centre for three years, working on the chemical ecology of the spruce beetle and elm spanworm, and on natural mortality factors of the blackheaded budworm and hemlock looper. Prior to that, she completed a post-doc in Lenore Fahrig's landscape ecology lab at Carleton University, researching effects of habitat loss on predator-prey interactions. Dr. Ryall obtained her PhD from the Faculty of Forestry at the University of Toronto, with Dr. Sandy Smith as her supervisor, conducting research on responses by scolytids and their predators following the ice storm of 1998 across eastern Ontario. Her MSc in Zoology, also from the University of Toronto with Dr. Smith, focused on the biology of the introduced pine shoot beetle. Finally, she began working in the field of entomology under the supervision of Dr. Dolf Harmsen of Queen's University where she obtained a BSc.H.

Student Representative Candidates

Joel Gibson

My name is Joel Gibson and I am currently in my first year of a Ph.D. programme at Carleton University. I am working with Drs. Jeff Skevington and Stewart Peck at the Canadian National Collection of Insects and Carleton University. My research is on the systematics of the family Conopidae (thick-headed flies). Morphological characters as well as mitochondrial and nuclear gene sequences comprise the data for my studies.

I received my Honours B.Sc. from the University of Guelph, my M.S. from Iowa State University, and my B.Ed. from OISE/University of Toronto. My professional experience includes periods as a Student Curator at the University of Guelph Insect Collection, an Entomology Intern with the U.S. Geological Survey in Volcanoes National Park, Hawaii, a Teaching Assistant at both Iowa State University and Carleton University,

Student Representative Candidates con't

and a Secondary School Science Teacher for four years in Toronto. My past committee involvement has included serving on curriculum and awards committees at Iowa State University, as well as being elected the Vice-President of the Iowa State University Entomology Graduate Students' Organization.

I would like to serve as the Student Representative for the Entomological Society of Ontario in order to further the mission of keeping students of entomology informed of events and news concerning current and future research, funding, and employment opportunities. Also, I would like to help the ESO to function as a network for students to share information for the benefit of all those whose research includes insects in some way.

Jess Vickruck

My family still tells stories of finding me as a child with my face next to the concrete, watching lines of ants cross the pavement. I have always been fascinated by the diverse and unique biology of insects. This interest was rekindled in the last years of my undergraduate degree at the University of Guelph, where I obtained my BSc in Zoology. Upon finishing my degree I knew that I wanted to pursue graduate studies, but also wanted to do a bit of exploring. After some volunteer work in Mexico where I was performing coral surveys, and some backpacking in Australia I returned home to Canada.

I have recently started my Master's at Brock University under the supervision of Dr. Miriam Richards. My research will focus on comparing and contrasting the phenology and nesting preferences of two sympatric sister species of small carpenter bee (*Ceratina dupla* and *C. calcarata*). Currently I am excitedly preparing for my first field season.

This year I attended my first annual ESO meeting and had a wonderful time talking with all of the enthusiastic entomologists. Although new to graduate studies and the ESO I brought me a tremendous amount of enthusiasm. I have very much enjoyed the student update e-mails sent by Jen Perry, and would definitely continue to this initiative. I would also love to pioneer a program that would introduce local school children to the fantastic world of insects.

Obituary—Dr. Ed Becker

Dr. Ed Becker passed away on May 13, 2008 at the age of 85. He was a research scientist at Agriculture and Agri-Food Canada from 1952-1980 working as a taxonomist at the Canadian National Collection of Insects, Arachnids and Nematodes (CNC) in Ottawa. His area of expertise was the systematics of click beetles (Coleoptera: Elateridae), which include many Canadian crop pest species. During his life, he published 36 scientific articles, book chapters and reviews. Following retirement, he became an Honorary Research Associate and continued to come into work nearly every day for the past 28 years.

In addition to Ed's scientific work, he was active in many entomological societies and organizations, working as treasurer of the Entomological Society of Canada (1961-1985), Section A representative for the Entomological Society of America (1982-1984), Editor of the Coleopterists Bulletin (1983-1990) and President of the Coleopterists Society (1971-1972). Ed was nominated and became a Fellow of the ESO in 2003. Perhaps his biggest contribution to entomology was through the CanaColl Foundation, a non-profit organization that Ed helped create and almost single-handedly nurtured for the past 36 years. The foundation promotes taxonomic research at CNC by providing funds to visiting entomologists who curate the collection. The Foundation currently has investments of \$475,000 and has awarded over \$200,000 in grants to nearly 300 researchers. Ed was recognized for his work by receiving the Queens Silver Jubilee Medal (1978), the Canada Commemorative Award (1984) and was made a Fellow of the Entomological Society of Canada (1974) and an Honorary Member of the Entomological Society of America (1997). His tireless efforts to promote entomology and the CNC have had far-reaching effects not only in Canada, but throughout the world. Ed's cheerful, positive attitude, sense of humour and love of bowties will be sadly missed.

Ed was born on March 15th, 1923 and lived his early years in Williamsville, Missouri, coming to Canada in 1952. He is survived by his wife of 60 years: Martha Mae Elliott; daughters: Barbara (Dennis) Eliason, Marcia Gosse, Debra, Lynda (Lucien Groulx), Patricia (Mike McCorkell); grandchildren: Teresa (Don) Williams, Jeffrey Eliason, and Melanie Gosse; siblings: Caroline, Jim (Patti), and Liz (Tom). Predeceased by his son: Thomas Coulton, and brothers: Bill (Lil) and John.



Treasurer's Report – Fiscal 2007

Submitted by Kevin Barber

The following is the annual financial report for the period 01 January to 31 December 2007. Carl Nystrom and George Kyei-Poku (Great Lakes Forestry Centre, Sault Ste. Marie) audited the report on 06 March 2008 and the results were forwarded to the Secretary.

Under **Publication**, the income transactions for JESO 136 are complete with the receipt of \$2,326.22 subscriptions, \$1,146.95 page charges, and \$379.80 reprints. There was a write-off as a bad debt of one outstanding page charge (\$455 shown under income and expense) against JESO 135. Income transactions for JESO 137 are nearly complete (1 CDN and 6 US subscriptions (~\$210), page charges for one author (~\$400 US), outstanding) having received \$3,104.42 subscriptions, \$3,743.36 page charges, and \$856.54 reprints. All bills have been paid including printing (\$4,707.202 – now with Thistle Printing Ltd.), reprints (\$433.20), and layout / technical editing (\$2,247.27). We have now set up a Publication Fund where we have identified an amount set aside for purposes of supporting page-charge waiver applications beginning with JESO 137 (this goes hand-in-hand with a new page-charge waiver policy). Currently, \$630 has been set aside for a waiver that has been authorized for JESO 138 which will then be debited against the Fund in 2008. The plan is to set aside \$500 during each publication cycle to a maximum of a \$2,000 fund balance and then maintained as necessary (e.g. \$300 per volume). Currently we are showing a surplus in Publication of \$3,539.80 which is primarily the result of deferred income from JESO 136 (\$4,307.97). JESO 137 is estimated to be in surplus of about \$300 given that the previously mentioned outstanding amounts of \$610 are received (i.e. Income of \$7,704.32 + \$610 = \$8,314.32 less Expenses of \$8,017.49 (excluding the bad debt of \$455 attributed to JESO 135)).

Under **General**, membership dues of \$2,994.90 have been received and \$435.61 bank interest has been earned. Bond interest is comprised of \$999 paid directly to our account from our 2006-series bonds. We received a Public Encouragement Grant from the ESC of \$400 (2006 and 2007) while sales of ESO lapel pins amounted to \$40. There were the usual modest expenditures for mailing newsletters and ballots (\$237.10), website (\$49.46), and bank charges (\$73.65). The cost of mailing JESO 137 was \$1,063.83. The 5 student awards amounting to \$1,250 (\$250 each) included 2 Travel Awards and 3 President's Prizes. Public Education expenses of \$308.93 were incurred in support of traveling to and operating a booth at the Insect Fair. Beginning in 2007, we are

re-establishing a stipend for the Student Representative that matches the amount for a travel award (\$250 travel expenses claimed with receipts). This leaves a reported surplus of \$1,636.54 in this section of which \$450 are membership fees for previous years or next year.

Under **Meeting**, surplus funds of \$1,427.81 and \$369.65 were received from the organizing committees of ESO2006 (Guelph) and ESO2007 (SSMarie). There were also some additional transactions between the ESO and ESO2007 where sponsorship cheques were received/exchanged and a refund paid on behalf of ESO2007. The balance here of \$1,250 minus \$1,055 increases the surplus from ESO2007 by \$195 to \$564.65. There was a total of \$1,100 paid out in Group Travel Subsidies for students traveling to ESO2007. This was an agreed upon disbursement of the ESO2006 surplus that leaves \$327.81. The remaining combined surplus in this section is \$892.46.

The *Fiscal Balance* of our bank accounts is reported as a surplus of \$6,068.80 and is then distributed across the three accounts. There were transfers totalling \$15,000 from the Savings to the Chequing Account to cover expenditures. There was a conversion of \$21,000 of bonds from 2006-series to 2007-series (leaving \$6,000 in 2006-series). In addition, the new Publication Fund is established with \$630 credited for fiscal 2007 to be rolled over. There was also \$6,000US transferred to the Chequing Account (\$5,640CDN).

The advance loan of \$1,500 to ESC/ESO2008 is identified under *Outstanding Loans*.

Under **Investments**, a total of \$27,000 principal is reported and the conversion of \$21,000 from 2006-series to 2007-series 5-year step-up OSBs is identified. All bonds pay annual interest to our Savings Account for fiscal use.

The Society remains in sound financial shape while absorbing a depreciated value in US account holdings (1.1324 down to 0.9576 year-end rate). There is an estimated \$23,635.03 total cash in the three bank accounts. With the principal amount of OSBs at \$27,000, and the outstanding loan of \$1,500, *Total Assets* are estimated at \$52,135.03.



Entomological Society of Ontario

Treasurer's Report -- Fiscal 2007

01 January to 31 December 2007

FISCAL BALANCE	2007
1. Publication (JESO Volume/Printer)	(137/TPL)
Credits - Previous Volumes 135&136	
Page Charges (svgs)	\$ 1,146.95
Reprints (svgs)	\$ 379.80
Subscriptions (svgs)	\$ 660.00
1 Subscriptions (US\$ to C\$ equiv.)	C\$ \$ 1,666.22
2 Unpaid Page Charges (Memo - svgs)	\$ 455.00
	\$ 4,307.97 A
Credits - Current Volumes 137	
Page Charges (svgs)	\$ 3,290.00
1 Page Charges (US\$ to C\$ equiv.)	C\$ \$ 453.36
Reprints (svgs)	\$ 690.00
1 Reprints (US\$ to C\$ equiv.)	C\$ \$ 166.54
Subscriptions (svgs)	\$ 720.00
1 Subscriptions (US\$ to C\$ equiv.)	C\$ \$ 2,384.42
3 Page Charge Grants (Memo from Fund - svgs)	\$ -
	\$ 7,704.32 B
Debits - Volumes 137	
4 Printing	\$ 4,707.02
4 Reprints	\$ 433.20
5 Layout / Technical Editing	\$ 2,247.27
3 Allocation to Publication Fund (Memo - svgs)	\$ 630.00
2 Page Charges - Bad Debt (Memo - svgs)	\$ 455.00
	\$ 8,472.49 C
Publication (Subtotal 1 = A+B-C)	\$ 3,539.80
2. General	
Credits	
Membership Dues (svgs)	\$ 2,994.90
Interest/Credits (svgs)	\$ 427.03
Interest/Credits (cheq)	\$ 8.58
6 Bond Interest (svgs)	\$ 999.00
7 ESC Grant - Pub.Encour. (svgs)	\$ 400.00
ESO Lapel Pins (svgs)	\$ 40.00
	\$ 4,869.51
Debits	
8 Secretary	\$ 237.10
9 Treasurer	\$ 1,063.83
Website	\$ 49.46
10 Prizes, Awards	\$ 1,250.00
11 Bank Charges	\$ 73.65
12 Public Education	\$ 308.93
13 Travel	\$ 250.00
	\$ 3,232.97
General (Subtotal 2)	\$ 1,636.54
3. Meeting	
Credits	
14 AGM Surplus (svgs)	\$ 1,797.46
15 Sponsor from ESO2007 (svgs)	\$ 1,250.00
	\$ 3,047.46
Debits	
15 Sponsor/Refund ESO2007	\$ 1,055.00
14 Group Travel Subsidies (Student)	\$ 1,100.00
	\$ 2,155.00
Meeting (Subtotal 3)	\$ 892.46
FISCAL BALANCE (Subtotals 1-3)	\$ 6,068.80

Kevin Barber – Treasurer

Carl Nystrom – Auditor

George Kyei-Poku – Auditor

TOTAL ASSETS	2007
FISCAL BALANCE (Subtotals 1-3)	\$ 6,068.80
Fiscal Activity - CDN Svgs Account	\$ 14,165.14
Fiscal Activity - CDN Cheq Account	\$ (12,766.88)
1 Fiscal Activity - US Account	C\$ \$ 4,670.54
TOTAL ASSETS	
CDN Savings Account	
Opening Balance	\$ 10,465.88
Fiscal Activity	\$ 14,165.14
Transfer to CDN Cheq. Acc't	\$ (15,000.00)
16 Bonds Mature / Cashed	\$ 21,000.00
16 Bond Purchase (2007 Series)	\$ (21,000.00)
Publications Fund - 2006 Rollover	\$ -
3 Credits from Rollover and "Publication"	\$ 630.00
Debits as Waivers/Grants	\$ -
Closing Balance	\$ 10,261.02 D
Publications Fund - Subject to Rollover	\$ 630.00
CDN Chequing Account	
Opening Balance	\$ 2,210.07
Fiscal Activity	\$ (12,766.88)
Transfer from CDN Svgs. Acc't	\$ 15,000.00
Transfer from US Acc't	\$ 5,640.00
Closing Balance	\$ 10,083.19 E
US Account	
Opening Balance	US\$ \$ 4,559.19
1 Fiscal Activity	US\$ \$ 4,877.34
Transfer to CDN Cheq. Acc't	US\$ \$ (6,000.00)
Closing Balance	US\$ \$ 3,436.53
CDN equivalent	C\$ \$ 3,290.82 F
Outstanding Loans	
17 ESC/ESO2008	\$ 1,500.00 G
Investments - Ontario Savings Bonds	
* 2006 - Principal (Ann. Int. to Account)	\$ 27,000.00
2006 - Principal redeemed	\$ (21,000.00)
** 2007 - Principal (Ann. Int. to Account)	\$ 21,000.00
Total Investments - OSB	\$ 27,000.00 H
TOTAL ASSETS (D+E+F+G+H)	\$ 52,135.03
Increase (Decrease)	\$ 5,796.25
- Attributable to fiscal transactions / Pub.Fund	\$ 7,551.36
- Attributable to change in exchange rate	\$ (1,755.11)

- 18 US account transfer exchange rate 0.9400
 - 19 Reporting exchange rate (interim/year-end) **0.9576**
 - 20 Previous year-end exchange rate 1.1324
 - 21 Member dues rates \$30/\$0/\$10
- * 5-year step-up (3.70, 3.80, 3.90, 4.00, 4.25%) annual interest to Svgs Acct
- ** 5-year step-up (4.00, 4.20, 4.40, 4.60, 4.95%) annual interest to Svgs Acct
- Bond Calculator – <http://www.ontariosavingsbonds.com/calculator.asp>
- 1 - US account transactions converted to C\$ to calculate "Fiscal Balance" then reported in US Account in US
 - 2 - inability to pay in absence of waiver application
 - 3 - new Publication Fund setup to accumulate budgeted rollover amounts
 - 4 - JESO137 - Thistle Printing Ltd.
 - 5 - JESO137 - A.Rutgers-Kelly - layout \$1626, tech-edit \$594.50, mailing \$26.77
 - 6 - \$27,000 @ \$3.70%
 - 7 - \$200 for each of 2006, 2007
 - 8 - mailing of Newsletter, Ballots, Invoices by Secretary
 - 9 - mailing of JESO 137 \$1,018.24; kraft envelopes \$45.59
 - 10 - 5@\$250: 2 Travel Awards, 3 President's Prizes
 - 11 - includes \$42.40 for Safety Deposit Box rental
 - 12 - Insect Fair - \$220.50 M.Bergeron, \$23.66 M.Pickles, \$18.49 A.Thielman, \$22.75 A.Sharp
 - 13 - stipend for Student Representative
 - 14 - ESO2007 \$369.65; ESO2006 \$1,427.81 applied to group-travel subsidies for ESO2007
 - 15 - ESO2007 - \$1,000 sponsorships written to ESO; \$55 student registration refund
 - 16 - conversion of \$21,000 2006-series (leaving \$6,000) to 2007-series
 - 17 - ESC/ESO2008 Joint Annual Meeting - startup loan repayable before final accounting of meeting finances
 - 18 - actual US-C\$ exchange rate achieved during account transfer
 - 19 - exchange rate used at end of reporting period (31-Dec-2007)
 - 20 - used to calculate value of US in C\$ if there had been no change in rates
 - 21 - Regular/Domestic Student/International Student

Graduate Position Announcement

GRADUATE STUDENT ASSISTANTSHIP (M.Sc.)

Insect Pest Management – Codling Moth Insecticide Resistance Research



Supervision:

Dr. Cynthia Scott-Dupree, Dept. of Environmental Biology, University of Guelph

Dr. Ian Scott – Research Scientist, Agriculture and Agri-Food Canada (London, ON)

Location: University of Guelph, Guelph, ON, and Agriculture and Agri-Food Canada Research Station, London, ON

Project: The codling moth is recognized as a major pome fruit pest in many parts of the world. For many years the organophosphate insecticides guthion and imidan have provided control of 1st and 2nd generation codling moth larvae as well as other apple pests in Ontario orchards. Recent reports from Ontario growers and industry reps suggest that the level of control using these products may have decreased. In adjacent U.S. states, for example Michigan, insecticide-resistance has been documented for a number of years. This project will attempt to clarify whether insecticide resistance is present in populations of codling moth in apple orchards in Ontario. The project will also investigate whether there may be cross-resistance with other insecticides registered for use with this pest, including the nicotinoids - Calypso and Assail, and the insect growth regulators - Intrepid, Confirm and Rimon. A successful MSc. candidate will have the opportunity to work with a team of researchers from the University of Guelph, Agriculture and Agri-Food Canada and grower-co-operator members from the Ontario Apple Growers. The student will be involved in both laboratory and field research. It is hoped that the project outcomes will ensure a more effective management strategy by establishing area-wide IPM programs to mitigate future resistance development in this pest. This project is a valuable contribution to research that supports the apple industry and growers by providing information on the continuing effectiveness of specific crop protection tools.

Qualifications: Applicants must hold a B.Sc. degree in biology, ecology, agriculture, or related discipline, and have a first class GPA (80%, A- or 3.7) in the last two years (last 20 courses) of undergraduate study. Experience and knowledge in entomology and ecology would be a valuable asset. Strong written and oral communication skills are key.

Stipend: \$21,000 per year for two years. Canadian citizens and permanent residents will be required to apply for a NSERC IPS1 scholarship sponsored by Ontario Apple Growers.

Start Date: January, 2009

For further information on the M.Sc. Program at the Department of Environmental Biology, University of Guelph, **and to submit an application**, contact Joy Roberts at joyrober@uoguelph.ca or visit the University of Guelph web site at: www.uoguelph.ca/registrar/graduatestudies/index.cfm



Congratulations to Mrs. Norah Urquhart CM



Mrs. Urquhart is a member of The Order of Canada, wife and research partner of the late Dr. Fred Urquhart, Professor Emeritus, University of Toronto, renowned for their discovery of the monarch butterfly overwintering sites in Mexico, and strong advocates for environmental protection and conservation. Mrs. Urquhart celebrated her 90th birthday on June 23, 2008.

Special thanks to Don Davis for submitting this piece and Doug Urquhart for providing the photo.

Undergraduate and Graduate Travel Awards for the 2008 ESC—ESO Joint Annual Meeting

Professors and teachers of entomology:

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

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! The Society wishes to encourage student members to share their research with other members by participating in the annual meeting. We believe that participation in the annual meeting is a great way for students to meet others with similar interests and to gain valuable feedback on their research efforts.

Student members of the ESO who are presenting a poster or a paper at the Annual Meeting of the Entomological Society of Ontario being held on the 18-22 October 2008, at the Crowne Plaza Hotel in Ottawa, ON are eligible to apply. Remember membership is free for students. If you need to become a member or renew your membership, visit <http://www.entsocont.com/member.htm>.

In addition to travel awards there will also be **President's Prizes** awarded at the meeting for exceptional paper and poster presentations.

Interested students applying for the Travel Award(s) should include: (1) a title and short abstract for their project; (2) a statement outlining why the funds are required and how the award will be used to support their participation in the ESO Annual Meeting; (3) a letter from their supervisor; (4) a curriculum vitae or other document outlining past academic achievements, publications and awards / scholarships, and any activities that promote entomology in Ontario.

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

Deadline for application is September 30th, 2008. Recipients will be notified at least two weeks before the annual meeting.

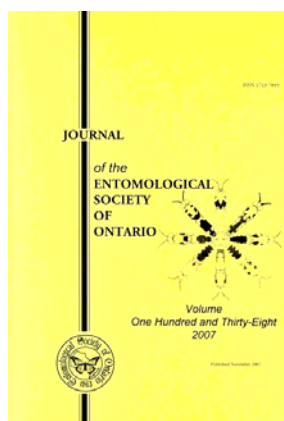
Please send travel award applications electronically to:

Jennifer Allen
Awards Committee Chair
jennifer.allen@ontario.ca

JESO

It's now on-line!

Did you know that you can access the table of contents of electronic copies of JESO articles dating back to 1993. Check out <http://www.entsocont.com/pub.htm>.



Working on a manuscript? Submit it to JESO.

Instructions to authors are available on-line at the [web address above](#).

Electronic submissions should be directed to **Miriam Richards**, JESO editor, at Miriam.Richards@brocku.ca.



JOINT MEETING OF THE
ENTOMOLOGICAL SOCIETIES
OF
CANADA AND ONTARIO



RÉUNION CONJOINTE DES
SOCIÉTÉS ENTOMOLOGIQUES
DU
CANADA ET D'ONTARIO



Final Announcement

This is the final printed reminder to all who are interested in attending the 2008 Joint Annual Meeting of the Entomological Societies of Ontario and Canada at the Crowne Plaza Hotel in Ottawa. The deadline for paying early registration fees is 31 August, after which late fees apply. Apparel (hoodies, T-shirts, fleeces, ESO pins) may also be bought, if desired, but please keep payment separate from registration fees.

If you plan to present a paper or poster please submit your abstract electronically before 31 August at <http://www.canacoll.org/JAM2008/>. If you do not receive an acknowledgement of receipt by Jeff Skevington within a week, please e-mail him directly at jhskevington@gmail.com.

We have had some problems with the website. Apparently, some abstracts may have been lost in cyberspace without our knowledge or that of the submitter. We have received titles from the following people (names are *italicized* if no abstract received yet):

- ◆ Ajlan Aziz
- ◆ *Bob Anderson*
- ◆ *Lars Andreassen*
- ◆ *Robyn Auld*
- ◆ *Erica Barkley*
- ◆ *Andy Bennett*
- ◆ Kate Bergen
- ◆ *Matt Bergeron*
- ◆ Andrea Brauner
- ◆ Adam Brunke
- ◆ *Rob Cannings*
- ◆ *Sophie Cardinal*
- ◆ *Dave Cheung*
- ◆ *Sheila Colla*
- ◆ *Doug Currie*
- ◆ *Charlotte De Busschere*
- ◆ *Jason Dombroskie*
- ◆ *Clayton D'Orsay*
- ◆ *Gil Felipe Gonçalves Miranda*
- ◆ *Jose Fernandez*
- ◆ Annie-Ève Gangon
- ◆ *Donna Giberson (2)*
- ◆ Jennifer Heron
- ◆ *Morgan Jackson*
- ◆ Wade Jenner
- ◆ *Robert Johns*
- ◆ *Joel Kits*
- ◆ *Dave Langor*
- ◆ *Marilyn Light*
- ◆ Lisa Lumley
- ◆ *Jessamyn Manson*
- ◆ *Don McApline*
- ◆ *Jim O'Hara*
- ◆ *Michael Otterstatter*
- ◆ *Josée Owen (2)*
- ◆ *Laurence Packer*
- ◆ Stewart Peck (2)
- ◆ Bernard Roitberg (2)
- ◆ *Marla Schwarzfeld*
- ◆ *Cory Sheffield*
- ◆ Louis Simard
- ◆ *Anna Simonsen*
- ◆ *Jeff Skevington (2)*
- ◆ *Felix Sperling*
- ◆ *Alana Taylor*
- ◆ *Aynsley Thielman*
- ◆ *Laura Timms*
- ◆ Chrystal Vincent
- ◆ *Terry Wheeler*
- ◆ Yingen Xue

We look forward to seeing you in October.
Sincerely,

John Huber



JOINT MEETING OF THE
ENTOMOLOGICAL SOCIETIES
OF
CANADA AND ONTARIO



RÉUNION CONJOINTE DES
SOCIÉTÉS ENTOMOLOGIQUES
DU
CANADA ET D'ONTARIO



IDEAs: Integrating Diverse Entomological Approaches Draft Program

Saturday, 18 October

AFTERNOON Visit to Canadian National Collection of Insects or Canadian Museum of Nature. Tour of the Central Experimental Farm.

Symposia:

Graduate Student—Chris Bokent
chris.borkent@mail.mcgill.ca

Invasive Species—Hume Douglas
dougash@inspection.ca

Sunday, 19 October

MORNING Registration

AFTERNOON Opening ceremonies, ESC awards, Gold Medal Address, Plenary Session

EVENING Students meet the Board, President's reception

60th Anniversary of CABI—Canada Collaboration in Biological Control—Peter Mason
masonp@agr.gc.ca

Digital Entomology—David Shorthouse
dps1@ualberta.ca

Biological Survey of Canada—Andrew Smith
asmith@mus-nature.ca

Monday, 20 October (three concurrent sessions)

MORNING President's Prize sessions

AFTERNOON President's Prize sessions, symposia and poster session

EVENING ESC Annual General Meeting

Canadian Insect Collections—their role in support of national and international biodiversity research—Steve Marshall
smarsha@uoguelph.ca

Insect Pests of Grapevine—Christel Olivier and Charles Vincent
olivierc@agr.gc.ca, vincentc@agr.gc.ca

Tuesday, 21 October (three concurrent sessions)

MORNING Submitted papers

NOON ESC Board Meeting

AFTERNOON Student symposium, poster presentations, contributed paper sessions, other symposia

EVENING Banquet, award presentations and Heritage lecture

Wednesday, 22 October (three concurrent sessions)

MORNING Symposia, contributed papers

NOON ESC Board Meeting

Registration Type	Early [before 15 August]	Late [after 15]
Regular members	\$265	\$365
Students and retired members	\$100	\$160
Students non-member	\$140	\$200
Non-members	\$365	\$465
One-day registration		
Regular members	\$100	\$100
Students and retired members	\$75	\$75
Non-members	\$150	\$150
Companion Activities		
Guest ticket for the banquet	\$60	\$60
Canadian Museum of Civilization tour	\$20	\$20

For more information and to register—visit www.canacoll.org/JAM2008/index.html

Creepy Crawly Cooking — An Interview with Jeff Stewart



Jeff Stewart is currently a Professor of Hospitality and Tourism at Niagara College, the Chef and Owner of Creepy Crawly Cooking, and the father of three great kids.

Aynsley Thielman, former ESO Student Representative interviewed Jeff in late July. Below are excerpts from their time together.

Aynsley: So, what is Creepy Crawly Cooking and how did it get started?

Jeff: It is a Special Events and Catering company that incorporates insects as its primary menu item - a kind of extreme cuisine. It started with an Insect Food Festival called Bugfeast which was held at the Wings of Paradise Butterfly Conservatory and Bug Museum in 2000. More advanced than simply eating bugs, it looks at menus created around the world by cultures that use insects as food. In some countries insects are eaten in case of emergency (such as locusts in times of overabundance), as rare or expensive treats (wintergrass with galls created by moths can sell for \$100s of dollars per pound for Chinese Medicine), or even as a staple (such as the mopani worm, or Emperor Moth larvae, by tribes in South Africa).

Aynsley: Besides the fantastic demonstration you did for one of our Annual Meetings in Guelph recently, with Bombay Curry Mealworm Stir-Fry and Bee Larvae Ice Cream, what other types of events do you do?

Jeff: Creepy Crawly Cooking has done everything from big food festivals involving insects for the public to catering specialty meals and parties for small groups. So far, I haven't met anyone adventurous enough for a bug-based wedding just yet. However, I have done many interesting school demonstrations. The combination of chefs and cooking with bugs seems to really interest the children. Some kids get really excited learning about this largely untried type of food in Canada. I prepared a full course of tasty insect meals for a three day Halloween Party at a restaurant called Opus on 8th in Calgary. I've also done many educational seminars and bug-food tastings in conjunction with events held at the Butterfly Conservatories in Cambridge and Niagara Falls. About 1,200 people attended my first BugFeast, and this year at-

tendance was over 10,000. People definitely seem more interested in trying these foods today compared to even a few years ago. Two restaurants (Typhoon in California and Viji's in Vancouver) recently put insects on their menus, firsts for the US and Canada.

Aynsley: Well, perhaps some of our readers would be interested in a wedding with an entomological twist...

Aynsley: When and how did you first become interested in cooking with insects?

Jeff: I've always been interested in adventurous cooking, in experimenting with different types of foods, and in creating new things in the kitchen. The BugFeast in 2000 was my first real experience with insect cooking. Since then, all the research I've done on traditional dishes that use insect ingredients, combined with serving new and exciting foods to thousands of adventurous people, have kept me interested in cooking with bugs.

Aynsley: Where do you get your recipes from?

Jeff: Although I create most of my recipes myself, I use a variety of sources to develop them. For example, to develop an Amazonian menu for the Niagara Butterfly Conservatory, I went to Peru to learn how local people used insects in food. I visited with and talked to local people to see how certain dishes are prepared authentically. However, re-creating them on a much larger scale can be difficult, unfortunately. Suppliers of the various types of insects used in traditional dishes can be hard to find. In addition to going to different countries in search of new recipes, I also do research. There is much literature available on cooking with insects for anyone who is interested in learning. Besides being a source of information, the Internet has also helped bring together people from around the world with similar interests, including entomophagy. I have also used the Internet to show people that many other cultures around the world eat insects, which helps to convince them that eating insects is not so crazy after all.

Aynsley: What is your personal favourite entomological delight?

Jeff: My most popular insect-filled recipe at the moment is the Bug-In-Every-Bite Cookies which

are made with as many different types of insects as possible (whatever is in season – ants, worms, crickets, or grasshoppers to name a few) packed in with chocolate chips, caramel, and pecans. My personal favourite thing to cook with and eat is scorpions. It used to be bees but until the bee colony problems are no longer an issue, I don't want to cook or eat them. Scorpions can taste different, depending on their size and location of origin. My favourite one has a nice strong, dried shrimp flavour.

Aynsley: There seems to be a lot of interest in eating insects these days (ex. David Gracer – Owner of Sunrise Land Shrimp – made an appearance on the Colbert Report) and not just for thrill seekers interested in a "Fear Factor" type of experience. Reports of global food shortages and an increasing awareness of our carbon footprints have inspired discussion about the use of insects as a more environmentally-friendly source of protein. What do you think of the possibility of insects becoming a food source in the future?

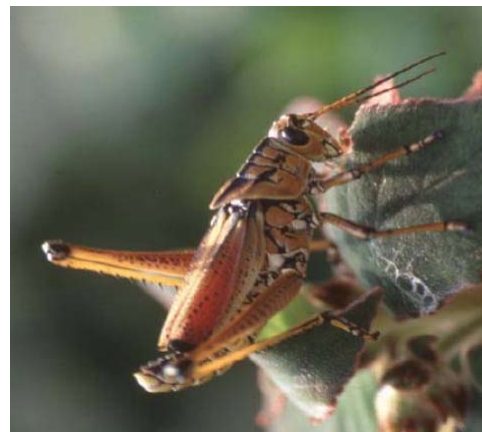
Jeff: It is already beginning to happen. Large scale manufacturers in China are producing ento-protein, particularly from grasshoppers, to be used as food supplements. This represents the first step in getting bugs into our diet. The main barriers to mass consumption are public perception and food and safety regulations. Although people all around the world have been eating insects for thousands of years, many Canadians find the thought of eating insects repulsive. My insects go through the CFIA to ensure they are safe for human consumption. I also send them for private microbiological analysis, especially for big events involving thousands of people, to be certain the food cooked with insects is safe. However, as we travel more, across borders and cultures, and learn more about the traditions and foods eaten by other cultures around the world, people are becoming more open-minded about the types of food they are willing to try. In some countries, it is the poor who eat the bugs, but in others, it is the very rich who dine on expensive insect delicacies. Still, I don't see Canadians embracing of entomological cuisine any time too soon. Most of the people who attend my demonstration fall into 1 of 2 categories: those at the front, asking questions and willing to try whatever gross creature I'm serving or those about 10 feet back, trying to peek at curious food from a safe distance.

For anyone interested in Jeff and his Creepy Crawly Cooking, you can find plenty of information, including recipes, on his website - www.creepcrawlycooking.com.

Written by Aynsley Thielman

Chipotle-Mescal Salsa with Roasted Locusts

© Copyright 2006 – Jeff Stewart



Ingredients:

- 1 Tbsp Canola Oil
 - 1 whole Onion, diced
 - 2 large cans (796 ml) Tomato, diced & drained
 - 4 Garlic cloves, minced
 - 2 tbsp Chipotle Peppers, chopped finely
 - 1 small can Tomato Paste
 - ½ bunch Cilantro, washed and minced
 - 1 tbsp Mescal
 - Salt to taste
 - Roasted Locusts (as many as you would like)
-

Please Renew Your 2008 ESO Membership

Please mail your invoice and payment to:
Dave Hunt, ESO Secretary
Agriculture and Agri-Food Canada
Research Centre
2585 County Road 20
Harrow ON N0R 1G0

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 ESO Secretary, Dave Hunt at:

huntd@agr.gc.ca

Missing Members:

If you know any of these members, please ask them to send their contact information to ESO Secretary, David Hunt.

Alex Ardila-Garcia
Melinda Barnadas
Lincoln Best
Teri Dickinson Jenner
Marjolaine Giroux
Jesse Hubley
Mireille Marcotte
Roy Mosher
Rajit Patankar
Chris Robinson
Riaz Shah

Thanks for keeping “DAVE” up-to-date!

As a member of the ESO, we ask you to do your part to keep our membership directory current. If your contact information changes (particularly your email address) in the future, please forward it to:

Dave Hunt — ESO Secretary
huntd@agr.gc.ca

Meetings: Ontario and Beyond

59th Annual Meeting of the Entomological Society of Canada and the 145th Annual Meeting of the Entomological Society of Ontario

19—22 October, 2008
Crowne Plaza Hotel, Ottawa, Ontario

Meeting Theme: *Insects: Microscale Subjects for
Macroscale Research*

Website: www.canacoll.org/JAM2008/index.html

18th International Symposium of Odonatology

5-13 November, 2008
Hislop College, Nagpur, India

Website: www.hislopcollege.ac.in/iso.html

ESA Annual Meeting

November 16-19, 2008
Reno, Nevada

Meeting Theme: *Metamorphosis—A New Beginning*

Website: www.entsoc.org/am/index.htm

Wanted: Entomology News

Notices of upcoming entomological events, ideas for columns, and articles of interest to ESO members are always welcome. Send submissions to:

Jennifer Allen — ESO Newsletter Editor
jennifer.allen@ontario.ca