



THE ESO Newsletter

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2007-2008 OFFICERS OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO

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ESO President's Message:

I would like to take this opportunity to thank all of you for giving me the opportunity to once again serve ESO in the capacity of President. It is indeed an honor to actively participate in the many worthwhile initiatives of this organization. I think my first order of business is to thank a number of people who have been toiling away "behind the scenes" in the last few years. First and foremost, my thanks to Past-President Rebecca Hallett who successfully steered us through several storms – always in control and most of the time with a smile on her face. I also need to extend my appreciation to the Executive, specifically Kevin Barber and Dave Hunt, for the dedication in which they conduct business associated with their positions - how could we function without both of you; and all the Board Members who have stepped up to the plate when needed and without exception have always done an excellent job. I would be remiss if I didn't thank John Huber – organizer of the recent Joint Annual Meeting of ESO and the Entomological Society of Canada in Ottawa – October 19-22, 2008. He accepted the position of organizer for this meeting despite the fact that it really wasn't on his "Top 10 List of Favourite Activities" and pulled together 4 days of excellent plenary speakers, scientific sessions, student competitions, posters presentations and social events that seem to satisfy everyone's interests. I also thank Jeff Skevington and Peter Mason for the help they provided John. I know I am

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missing others on the JAM Organizing Team – I thank all of you for a job well done.

During my term I hope to focus on improving the visibility of ESO through a revitalization of our website and increasing the ease of accessibility of JESO. I know there are a lot of people out there who want to get involved with entomology, hopefully they will choose to do this by becoming a member of ESO and spreading the word. However – I think that the website is key to improving our ability to communicate rapidly and efficiently with these individuals. Miriam Richards is working tirelessly on JESO and it has slowly transformed into a credible location for publishing valuable research results of a regional, provincial and national nature. I urge all of you to make sure that you submit a manuscript to JESO at least twice in the next 4 years – consider this my challenge to you. I'll end on that note. If any of you have suggestions for ESO initiatives please contact either myself or one of the Board Members – we love to listen to new ideas and have been known to act on more than one of them in the past.

— Cynthia Scott-Dupree

Emerald Ash Borer—Be On the Lookout

This highly destructive insect is on the move. As of December 8th, the CFIA has confirmed the presence of emerald ash borer in 15 regions of Ontario including:

- Essex
- Chatham—Kent
- Lambton
- Elgin
- Middlesex
- Norfolk
- City of Toronto
- Bluewater
- Pickering
- Sault Ste. Marie
- Vaughan
- Brampton
- Ottawa
- Mississauga
- Oakville



Photo—CFIA



2008 ELECTION RESULTS

The ESO is proud to welcome our new board members. The successful candidates were:

President-Elect — Gary Umphrey
Student Representative — Joel Gibson
2009-2011 Directors — Sigrun Kullik
Krista Ryall

DEPARTING BOARD MEMBERS



Every year at this time as we welcome our newly-elected board members, we must also say goodbye to our departing board members.

Thank you to Rebecca Hallett, our outgoing President. Rebecca's kindness and thoughtfulness was always appreciated. Thank you to both Sherah VanLaerhoven and Laura Timms for their service and dedication as ESO directors. As well, thank you, Laura, for all of your work on the Public Education committee. And finally, thanks to Jen Perry for representing Ontario students.

Mark Your Calendar

October 2—4, 2009

146th Annual Meeting of the
Entomological Society of Ontario

*"Earth, Wind & Water:
Insects in Ecosystems"*

The meeting will be held at the Frost Centre Institute, located just south of Dorset, Ontario.



The Frost Centre Institute (FCI) campus includes 20 buildings on 40 acres nestled in the beautiful Haliburton Highlands. With 2,500 feet of lake frontage on Lake St. Nora and direct access to groomed hiking (or skiing) trails located on 58,000 acres of crown land adjacent to the campus, the Centre offers a truly one-of-a-kind environment for experiential learning and outdoor education. To learn more about the FCI, visit www.frostcentreinstitute.com.

The conference price will be all-inclusive, including meals, accommodation and registration.

General Conference Chair—Rebecca Hallett,
Local Arrangements Chair—Sigrun Kullik,
Registration Chair—Jennifer Allen

Stay tuned for more meeting info in the Spring 2009 newsletter.

TEST YOUR KNOWLEDGE

1. An organism that attacks insects is called an _____?
2. Approximately what percentage of seed plants require insect pollination?
3. What two environmental signals commonly trigger diapause?
4. Most insects can not see what colour?
5. Name two orders whose larvae have prolegs?
6. Soldier termites bang their heads against their nest to _____?
7. The individual parts of a compound eye are called _____?

Answers:

1. entomopathogen 2. 33% 3. day length and temperature 4. red 5. lepidoptera, hymenoptera 6. warn of danger 7. facet

Source: www.mstate.edu/Entomology/4-H/LINNAEAN.html

Obituary— Stuart Walley 1904– 2008

Imagine!! This fellow George Stuart Walley was born 100 years ago – April 23, 1904 - in Ingersoll, Ontario, - west of Toronto. Amazing -- he was born a few months after the Wright Brothers flew their first plane. Now he has lived to see space flights to the Moon and Mars, etc.

As a child, he headed to the cottage at Lake Muskoka. When the steamers came into Keewaydin Island, the young people had a favourite saying which they yelled (Keewaydin, Keewaydin K-double E-W-A-Y-D-I-N Keewaydin) Ask him to say it sometime. It's fun to hear!! Homes in those days had no electricity, large blocks of ice were delivered weekly by horse & wagon and large tongs lifted the ice to ice boxes, that kept the food cold. Laundry was washed in a round wooden tub with a paddle in the center. Later, a hand wringer was attached to wring out the clothes. Then the clothes were hung outside.



High school in Ingersoll had a course in Agriculture. Stuart chose beekeeping as his project. This was the beginning of his love of entomology. Stuart graduated in entomology in 1926 from Ontario Agriculture College which is now the University of Guelph. At that time, radios were quite new and a student friend had a radio which needed an aerial; so the friend used a mattress spring for the aerial. The radio had earphones. Stuart listened one day and was shocked to hear KFI – Los Angeles. Unbelievable!!!

Stuart was 4 years old when the first car, the Model T Ford, was built. Stuart's University graduation gift was a Model T Ford, which came in handy working as an entomologist in Ottawa. At that time, it was a two day trip from Ingersoll to Ottawa. In 1926, Stuart was hired full time as an entomologist in the Department of Agriculture in Ottawa. He worked as an entomologist until he was 65. Stuart was given leave of absence to attend Iowa State University in Ames, Iowa. He finished his Master's degree and all the academic work for his PhD. However, he never completed his PhD thesis.

Where did Stuart meet his first wife Ena Decelles? It was at a Dominion Entomologist's Christmas Party. The host asked his secretary to arrange for Stuart to take Ena to the party. Stuart and Ena were married after he graduated from Iowa State University. Stuart has a good story about he and Ena being the first to drive up the original road to Mt. Washington in New Hampshire. They had been married fifty years when Ena died in 1981.

Stuart's second marriage was in 1982, to Eleanor McKenny a friend who was also widowed. They were both seventy eight years old, and many at the wedding remarked, "What a cute couple!. They were married 14 years until she died in 1996.

Until about 3 years ago, you could still see Stuart sitting on his lawn tractor mower mowing the huge lawn around his home on the Rideau River. He also had the biggest vegetable garden and delicious raspberries. He learned gardening from his father.

Smoking a pipe and cigars are still a favourite pastime. He painted a few pictures. His mother, he claims, was the better painter. Stuart credits his long life to his mother. She gave him a good home life and nutritious food which he continued. And here he is celebrating his 100th birthday!

*This piece was written by Ed Becker Close friend & colleague on Stuart's 100th.
Many thanks to Peter Gillespie, Stuart's nephew for submitting this piece.*



JOINT MEETING OF THE
ENTOMOLOGICAL SOCIETIES
OF
CANADA AND ONTARIO



RÉUNION CONJOINTE DES
SOCIÉTÉS ENTOMOLOGIQUES
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The 2008 JAM was held at the Crowne Plaza hotel, Ottawa from 19-22 October, with 362 people registered. The theme was IDEAs: Integrating Diverse Entomological Approaches.

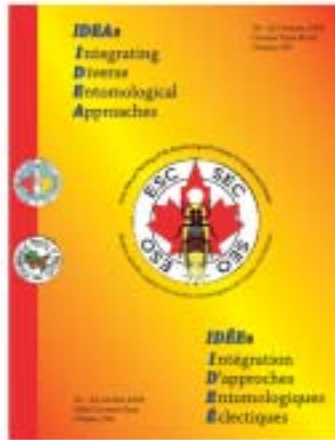
Sunday afternoon we had three plenary speakers as well as the gold medal winner, all of whom lived up to their reputation as dynamic and interesting speakers. They fulfilled their role admirably, keeping very much in line with the theme of integrating diverse approaches to solving problems (and discovering greater complexity in the process) in their respective groups of study. Maydiane Andrade talked about sexual selection driving plasticity in an extreme mating system in spiders, John Heraty spoke about his 30 years of research on Eucharitidae, parasitoids of ants, and Dan Janzen spoke about his years of biodiversity work on macrolepidoptera and their parasitoids in Guanacaste, Costa Rica. Bernie Roitberg, the gold medalist, provided a mixture of philosophy, theory and practice in his approach (together with his students) to solving a variety of problems over his career.

In addition, about 175 talks and 75 posters (70 and 26, respectively, by students for the President's Prize competition) were presented. Besides the regular Graduate student symposium, six other symposia representing a diversity of topics were also held: Invasive species, 60th anniversary of CABI, Digital entomology, Biological Survey of Canada, Canadian insect collections, and Insect pests of grapevine.

Evenings were busy with mixers, the banquet, and an entertaining heritage lecture on notable insect collectors, past and present, delivered by Stewart Peck as well as the opportunities for groups of people to get together to enjoy each other's company and catch up informally on news and projects, perhaps the most useful part of any meeting.

Many thanks, to John Huber, (Organizing Committee Chair) who wrote and submitted this piece.

As well as the regular ESC and ESO meetings, several associated meetings were held before, during and after the JAM: AAFC Biological Control Working Group (Friday before JAM), Biological Survey of Canada (Wednesday and Thursday following JAM), the Canadian Forum for Biological Control (during JAM), and the Weed Biocontrol Workshop (Saturday before JAM). All of which helped increase the attendance.



The graduate students organized a very successful silent auction. Canacoll supplemented the material available for auction by donating Ed Becker's collection of books, with the proceeds going to both the graduate student scholarship fund and Canacoll (to support curation of the Canadian National Collection of Insects). Four organizations contributed exhibits of one sort or another. John Dedes (CFS-Sault Ste. Marie) provided information on insect cultures for sale; Rob Favrin and Troy Kimoto (CFIA) on invasive forest pests; NRC exhibited and sold (at a reduced price) entomology books published by them; and, Routledge/Taylor & Francis Group, also a book seller, provided literature on what they sell.

Images from the JAM are on the website at www.canacoll.org/JAM2008/Gallery/prints/ContactSheet.html. Most photos are of the banquet, table by table. See if you were there!

At least 55 Guelphites were present, perhaps representing the largest contingent of members from a single institution at a JAM ever held anywhere in Canada.

We were very fortunate to have good sponsorship support from about 15 organizations, which yielded over \$16,000 – a great help in making this JAM break even.

As chair of the organizing committee I offer my sincere thanks to the numerous colleagues (at least 50 students and professionals) who worked hard in various capacities to make the 2008 JAM a success.



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President's Prize Winners — 2008 JAM

President's Prize—Systematics

Jason Dombroskie—University of Alberta

Quantifying gestalt: towards an interactive matrix-based key to Canadian lepidopteran subfamilies.

Identifying Lepidoptera to family using dichotomous keys is difficult as existing keys cover only distinctive families or rely on difficult characters. A matrix-based key shows great promise as a way for to identify Lepidoptera to family because non-discrete characters can be used. I constructed a key using 95 external characters (193 states) that are visible with a dissecting microscope. This key will likely become a valuable tool in lepidopteran identifications.



President's Prize—Biodiversity

Matthew Pyper, John Spence and David Langor - University of Alberta

Aggregated retention patches and beetle conservation in the mixed wood forests of Alberta, Canada.

Aggregated retention patches (isolated patches of live trees within clear-cuts) were studied to determine how size and distance from the intact forest impact the preservation of mature forest species. Ground and rove beetles were sampled within patches ranging from 0.3 to 14.1 hectares. Patches <0.5 ha provided little benefit for beetles, while patches greater than 3 hectares preserved assemblages similar to the mature forest. Ambient air temperature supported these conclusions.





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President's Prize Winners— 2008 JAM (con't)

President's Prize—Agriculture

Michelle Franklin and Judith Myers —University of British Columbia

Influence of local and long-distance dispersal in determining *Bt* resistance in cabbage looper populations: a molecular analysis.

The use of *Bt* products in vegetable greenhouses has been threatened by the development of resistance in cabbage loopers, *Trichoplusia ni*. Spatial patterns of *Bt* resistance and molecular analysis indicate that moths disperse between neighbouring greenhouses, resulting in the spread of resistance to untreated greenhouses. Susceptible long-range migrants have the potential to dilute resistance in greenhouse populations and molecular analysis is underway to track their movements.



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President's Prize—Poster

Jennifer Perry and Locke Rowe—University of Toronto

Correlated evolution of male and female morphology across populations of water striders (*Gerris* spp.).

Water striders are a model system for sexual conflict, yet the population-level variation in sexual armaments is unknown. We examined populations of *Gerris buenoi* and *G. incognitus*. We found strong covariance between male grasping traits and female anti-grasping traits across populations of *G. incognitus*, but not *G. buenoi*. In contrast to the species-level, populations with exaggerated male traits occur with reduced female traits, and vice versa. Ecological hypotheses are discussed.





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ESC Awards — 2008 JAM (con't)

Postgraduate Awards

M.Sc—Amanda Brown



Ph.D—Michelle Franklin



Biological Survey of Canada Scholarship

Marla Schwarzfeld



Ed Becker Conference Travel Award

Norman Lee



Special thanks to Rick West for all of the President's Prize photos.





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ESO Travel Award Winners— 2008 JAM

Undergraduate Award:

Paul Abram
Queen's University

Survey of Central and Southwestern Ontario for Leek Moth

P. Abram, K. Grigg, J. Allen, M. Appleby, and J. Groot-Nibbelink

The leek moth, *Acrolepiopsis assectella*, is an invasive alien species of European origin which damages *Allium* spp. Since its detection in 1993, the leek moth has caused significant damage to allium crops in eastern Ontario and south western Quebec. To-date, this pest has not been detected in the U.S. and, as a result, is considered an import risk. In 2007 and 2008, surveys were conducted to determine the distribution of leek moth in allium growing regions in central and south western Ontario.

Graduate Awards:

Lauren Strachan
Western University

The evolution of insect cold tolerance: A *Drosophila* model

L. Strachan, H. Tarnowski, and B. Sinclair.

The evolution of insect cold tolerance strategies are unclear; however, supercooling capacity appears to be fundamental in strategy "choice". We examined the factors determining cold tolerance strategy and supercooling point (SCP) among *Drosophila* species within a phylogenetically-independent context. Body mass, water content, SCP and cold tolerance strategy were determined in larvae from 27 species. We found body mass and absolute water content are stronger determinants of SCP than phylogeny.

Jennifer Babin-Fenske
Laurentian University

Using museum specimens to examine correlations between climate change and rapid morphological change in stream beetles.

J. Babin-Fenske, M. Anand, and Y. Alarie

Specimens of *Gyretes sinuatus* LeConte were examined for changes in size and shape over a 60-year period. Using specimen labels to determine locations, historic temperature and precipitation data from collection areas was also examined for temporal changes. We propose that morphological change is occurring in response to climate change and such trends would have remained hidden without the invaluable historic data found within a variety of insect collections.

JESO

**Working on a manuscript?
Submit it to JESO.**

Electronic submissions should be directed to:

**Miriam Richards,
JESO editor,**

Miriam.Richards@brocku.ca.



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
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Meetings:
Ontario and Beyond

Toronto Entomological Association

January 24, 2009—*Pollinator Watch*
Northrop Fry Hall, University of Toronto

For more info, visit www.ontarioinsects.org

International Conference on Entomology

February 20-22, 2009
Department of Zoology, Punjabi University
Punjab, India

If you would like more information on this conference please email me at Jennifer.allen@ontario.ca.

2009 Eastern Branch Meeting

March 20-23, 2009
Hilton and Towers, Harrisburg, PA

2009 North Central Meeting

March 15-18, 2009
Hilton at the Ballpark, St. Louis, Missouri

2009 ESO Annual Meeting

October 2-4, 2009
Frost Centre Institute, Dorset, ON

2009 ESA Annual Meeting

December 13-16, 2009
Indiana Convention Center
Indianapolis, IN

Wanted:
Entomology News

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

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