

# Bulletin

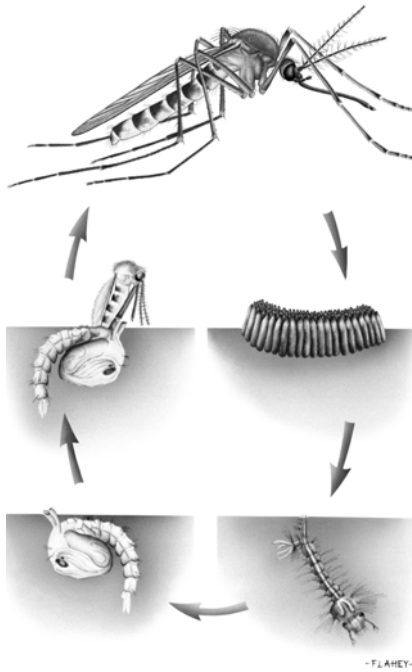
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Tel: (709) 895-2734, Fax: (709) 895-2734  
E-mail: [reely.west@roadrunner.nf.net](mailto:reely.west@roadrunner.nf.net)

### Bulletin Editor / Rédacteur du Bulletin

Paul Fields  
Agriculture and Agri-Food Canada  
195 Dafoe Rd., Winnipeg, MB R3T 2M9  
Tel: (204) 983-1468, Fax: (204) 983-4604  
E-mail: [pfields@agr.gc.ca](mailto:pfields@agr.gc.ca)

### Ass. Bulletin Editor / Rédactrice adj. du Bulletin

Lucie Royer  
Natural Resources Canada  
P.O. Box 960  
Corner Brook, NL  
Tel: (709) 637-4919, Fax: (709) 637-4910  
E-mail: [lroyer@nrcan.gc.ca](mailto:lroyer@nrcan.gc.ca)

### Webmaster / Webmestre

Barry Lyons  
Tel: (705) 541-5617, Fax: (705) 541-5700  
E-mail: [blyons@nrcan.gc.ca](mailto:blyons@nrcan.gc.ca), <http://esc-sec.org>

### The Canadian Entomologist

### Editor-in-Chief / Rédacteur en chef

Richard Ring  
Department of Biology, University of Victoria  
Victoria, BC, Canada V8W 2Y2  
Tel: (250) 721-7102, Fax: (250) 721-7120  
E-mail: [raring@uvic.ca](mailto:raring@uvic.ca)

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Jens Roland, E-mail: [jroland@gpu.srv.ualberta.ca](mailto:jroland@gpu.srv.ualberta.ca)

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### Head Office / Siège social

Entomological Society of Canada  
393 Winston Ave., Ottawa, ON K2A 1Y8  
Tel: (613) 725-2619, Fax: (613) 725-9349  
E-mail: [entsoc.can@bellnet.ca](mailto:entsoc.can@bellnet.ca), <http://esc-sec.org/>

## De Charlottetown à une planification stratégique

Dans mon texte publié dans le numéro de Septembre du *Bulletin*, j'ai oublié de mentionner qu'au Congrès International d'entomologie tenu à Brisbane en Australie, Ken G. Davey (York University) a reçu le "Wigglesworth Award and Lecture-2004" pour services éminents rendus à l'entomologie. Auteur de quelques 230 articles scientifiques, Davey a reçu plusieurs distinctions, dont la médaille d'or de la SEC et du Conseil de biologie du Canada, et il a été nommé Officier de l'Ordre du Canada. De même, lors du Congrès de la International Society for Chemical Ecology (ISCE) tenu à Ottawa en juillet dernier, Jeremy N. McNeil (University of Western Ontario) a reçu la médaille d'argent de la ISCE. Félicitations à ces deux excellents chercheurs canadiens!

L'avant dernière phrase de mon texte publié dans le numéro de Septembre du *Bulletin* concernait la réunion annuelle à venir de la SEC: "Les mots clés devraient être: bonne science et bon temps". Ceci s'est avéré vrai, grâce au merveilleux travail de Donna Giberson et de son équipe, notamment Jon Sweeney, Christine Noronha et tous les autres (incluant la Société canadienne d'entomologie). Concernant l'environnement de la réunion annuelle, il s'agissait de la première réunion annuelle de la SEC dans la charmante ville de Charlottetown. En ce qui concerne le programme scientifique, les trois salles où se tenaient les présentations ont été pleines presque tout le temps. Signe de changement, tous les gagnants des concours (présentations et bourses) étaient des étudiantes, ce qui a été publiquement reconnu par le Président sortant lors du banquet.

Tel qu'énoncé lors de mon discours présidentiel à Charlottetown, la Société d'entomologie du Canada a accompli beaucoup en 2003-2004, par exemple une nouvelle couverture pour *The Canadian Entomologist*, un nouveau logo en couleur, et de nouvelles bourses pour les étudiant(e)s. Ainsi, le Comité pour les prix aux étudiantes et



Benoit Rancourt

## From Charlottetown to a strategic review

In my text published in the September issue of the *Bulletin*, I forgot to mention that at the International Congress of Entomology in Brisbane (Australia), Ken G. Davey (York University) has been awarded the Wigglesworth Award and Lecture for outstanding services to the Science of Entomology-2004. Author of about 230 scientific papers, Davey has been presented numerous awards including the Gold Medal of the ESC and of the Biological Council of Canada and Officer of the Order of Canada. Likewise, at the International Society for Chemical Ecology (ISCE) held in July in Ottawa Jeremy N. McNeil (University of Western Ontario) has been awarded the Silver Medal of the ISCE. Congratulations to both of these fine Canadian scientists!

The penultimate sentence of my text published in the September issue of the *Bulletin*, concerned the then coming Charlottetown meeting: "The key words should be: good science and good time". This proved to come true, thanks to the wonderful work of Donna Giberson and her team, notably Jon Sweeney, Christine Noronha and all others (including the Entomological Society of Canada). As for the setting, it was the first ESC meeting in the charming city of Charlottetown. As for the scientific program, all three rooms were full most of the time. As a sign that times are changing, all the student winners (presentation and scholarships) were women, a fact publicly acknowledged by the Past-President at the banquet.

As stated in my Presidential address in Char-

étudiants a accompli beaucoup de travail cette année, notamment pour écrire de nouvelles directives pour ces bourses. Dans ce contexte, l'intention du Comité d'administration est à l'avenir d'augmenter le montant de chaque prix (ou bourse) plutôt que d'en créer de nouveaux. Le Comité des publications fait face à de nouveaux défis, notamment concernant la publication électronique. La SEC a eu des surplus d'opérations depuis 1998. Quoiqu'en bonne santé financière, des préoccupations concernant les finances à moyen terme, principalement en raison du phénomène de publication électronique et du nombre de membres, ont déclenché une revue stratégique qui sera effectuée sous le leadership du Président Bob Lamb. Le Comité d'administration désire essentiellement revoir les opérations de la SEC de façon à ce que nous accomplissions notre mission essentielle dans un environnement changeant.

Quelques jours après que je sois revenu de Charlottetown, j'ai fait parvenir un e-mail à tous les Présidents de Comité et aux autres personnes qui ont eu un apport significatif à la Société en 2003-2004. Je veux réitérer mes remerciements à ces personnes. Sans leur travail volontaire, il ne serait pas possible de vous offrir autant à ce prix. Alors que je reviens vers mes projets de recherche, je tiens à remercier les membres de la SEC qui m'ont accordé leur confiance en me permettant de servir notre Société.

lottetown, the Entomological Society of Canada accomplished a lot in 2003-2004, for example a new design for *The Canadian Entomologist*, new color logo and new scholarships for students. The latter has caused the Student Awards Committee to work very hard during the year to establish new guidelines for the Scholarships. In that context, it is the intent of the Board now to augment the amount of money for each scholarship (or award) rather than creating new ones. The Publications Committee is facing new challenges, notably in the area of electronic publishing. The ESC has been working in the black since 1998. Although still in a sound financial state, concerns about mid-term finances due largely to the electronic publishing phenomenon and membership level have prompted the initiation of a strategic review that will be lead by President Bob Lamb. In essence, the Board wants a review of ESC operations so that we stay in line with our fundamental mission in a changing environment.

A few days after I came home from Charlottetown, I sent a thank-you e-mail to all Chairs and other persons that had a significant input in the affairs of the Society in 2003-2004. I want to reiterate my thanks to these people. Without their volunteer work, it would not be possible to offer so much at that price. As I return to my research duties, I want to thank all ESC members who vested their confidence in me for serving our Society.

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## New Honorary Member Sought

Active members of the Society are invited to nominate individuals whom they regard as eligible for "Honorary member" status. An Honorary Member may be an Active Member or former Active Member who has made an outstanding contribution to the advancement of entomology. Honorary Members are not required to pay dues. Nominations should be sent in an envelope marked "Confidential" to the following address:

Achievement Awards Committee  
Entomological Society of Canada  
393 Winston Avenue, Ottawa, Ontario  
K2A 1Y8

and should comprise: (1) the name and address of the nominee(s); (2) a statement of relevant achievements; and (3) the name of at least five nominators who are active members. To be considered by the Achievement Awards Committee, nominations must bear a postmark no later than 28 February 2005.

## **International Symposium Ecology and Management of *Lygus* Plant Bugs**

Ottawa, Ontario, Canada, 30 January- 3 February 2005

Contact: Peter Mason, [Lygus\\_Symposium@hotmail.com](mailto:Lygus_Symposium@hotmail.com)

## **9<sup>th</sup> International Conference of the Orthopterists' Society**

Canmore, Alberta, Canada, 14-19 August 2005

Contact: Dan Johnson, [dan\\_johnson@uleth.ca](mailto:dan_johnson@uleth.ca)

<http://www.orthoptera2005.org>

## **International Symposium on Biological Control of Arthropods**

Davos, Switzerland, 12-16 September 2005

<http://www.cabi-bioscience.ch/ISBCA-DAVOS-2005/>

## **IOBC Nearctic Regional Section - Biocontrol Network**

Magog, Quebec, Canada, 8-11 May 2005

Contact: Jacques Brodeur, [jacques.brodeur@plg.ulaval.ca](mailto:jacques.brodeur@plg.ulaval.ca)

<http://www.biocontrol.ca>

## **Biocontrol Network 2<sup>nd</sup> Summer School**

Magog, Quebec, Canada, 12-13 May 2005

Contact: Jacques Brodeur, [jacques.brodeur@plg.ulaval.ca](mailto:jacques.brodeur@plg.ulaval.ca)

<http://www.biocontrol.ca>

## **Joint Annual Meeting of the Entomological Societies of Alberta and Canada**

Canmore, Alberta, 3-6 November 2005

Contact: Dave Langor & Felix Sperling, [DLangor@NRCan.gc.ca](mailto:DLangor@NRCan.gc.ca), [felix.sperling@ualberta.ca](mailto:felix.sperling@ualberta.ca)

<http://www.biology.ualberta.ca/courses.hp/esa/esa.htm>

## **52<sup>nd</sup> Annual Meeting of the Entomological Society of America**

Fort Lauderdale, USA, 6-9 November 2005

[http://www.entsoc.org/annual\\_meeting/2005/index.htm](http://www.entsoc.org/annual_meeting/2005/index.htm)

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## **Postdoctoral Positions**

**University of Maryland:** A postdoctoral position to study the evolution of eusociality using termites is available. Experience with molecular genetic techniques, population genetics and data analysis required. Three years of NSF support, with preferred start date February or March 2005.

Send a cover letter describing research interests and career goals, a CV, publications, and names, addresses and phone numbers of three references to:

Barbara Thorne,

Dept. of Entomology, University of Maryland  
College Park, MD 20742 or

[bthorne@umd.edu](mailto:bthorne@umd.edu), [rd12@umail.umd.edu](mailto:rd12@umail.umd.edu)

<http://www.thornelab.umd.edu>

**University of Rochester:** Two postdoctoral positions are available: 1) evolutionary genomics of *Wolbachia* and their *Nasonia* hosts, 2) ecology and evolution of *Wolbachia* - host associations in natural communities of mycophagous insects. Experience with molecular techniques such as PCR and DNA sequencing and analysis, entomology or insect ecology, or molecular evolution, bioinformatics and microarray analysis is desired.

Screening will begin 1 November 2004. Send a cover letter describing research interests and skills, CV, relevant reprints, and the names of three references to:

Jack Werren

Depart. of Biology, University of Rochester  
Rochester, NY 14627

(585) 275-3694, [werr@mail.rochester.edu](mailto:werr@mail.rochester.edu)

# Moth balls / Boules à Mites

By Andrew Bennett

## The Extremely Incomplete Idiot's Guide to Entomological Nomenclature

**H**ow many times have you been annoyed by trying to determine the correct name for an insect? Don't you wish that names were stable, or at the very least, there was a simple guide explaining which name to use? Here is a brief guide to the basics of nomenclature using a well-known insect example.

### Background:

Scientific nomenclature is governed by a set of rules, which for animals is known as the International Code of Zoological Nomenclature (ICZN). Every few years, an updated Code is published (the latest came into effect 1 January 2000). Within the Code are a multitude of rules including which names have priority as well as the process required to name a new taxon. Perhaps the most important rule in nomenclature states that the oldest name for a species has priority over other, later names.

### Example: The Corn Earworm and its Numerous Aliases

*Helicoverpa zea* (Boddie, 1850)

*Bombyx obsoleta* Fabricius, 1793 (junior  
primary homonym of *Bombyx obsoleta*  
Fabricius, 1775)

*Phalaena zea* Boddie, 1850

*Heliothis umbrosus* Grote, 1862

What does all this mean? (Take a deep breath). The original description of the species was made

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Andrew Bennett is a research scientist with Agriculture and Agri-Food Canada in Ottawa working on the taxonomy of Ichneumonidae. He received his PhD at the University of Toronto. Contact details: e-mail: [bennetta@agr.gc.ca](mailto:bennetta@agr.gc.ca), telephone: (613) 759-1900.



in 1793 by Fabricius who called it *Bombyx obsoleta*. Unfortunately, Fabricius didn't have the benefit of a database or the internet at the time and made the unfortunate error of using a name that he had ALREADY GIVEN TO ANOTHER SPECIES! (DOH)! Because *Bombyx obsoleta* Fabricius, 1775 (named for another moth in a different family) pre-dates *B. obsoleta* Fabricius, 1793, the second usage of the name is not allowed. As fate would have it, Fabricius' second description actually never came into common usage when it was published and the species became known instead as *Noctua armigera* Hübner, 1805 and later *Heliothis armigera* (Hübner) when Ochsenheimer moved the species over to his new genus *Heliothis* in 1826 (the brackets around Hübner indicating that the species was described by Hübner in a different genus). The name *H. armigera* applied to individuals found in Europe, and it was thought that this was the same species found in North and South America (but see below). In 1903, a researcher by the name of Hampson re-discovered the Fabricius name (without realizing it was a primary homonym) so from 1903 until 1935 (when Hampson's error was discovered), most people called the species *H. obsoleta* (Fabricius).

From 1935 to 1953, the species name reverted back to *H. armigera* (Hübner) at which time, I.F.B. Common studied the genitalia and showed that the European species was distinct from the New World species. Common proposed that the name *Heliothis umbrosus* Grote, 1862 should be used for the New World species. This was the name

until 1955 when E.L. Todd discovered yet another overlooked description (this time in the astonishingly obscure journal, *The Southern Cultivator*) by J.W. Boddie who described the species in 1850 as *Phalaena zea*. The species name thus became *Heliothis zea* (Boddie) because the species fit well into the genus *Heliothis* as defined by Ochsenheimer. *Heliothis zea* was the name used from 1955 to 1965, when D.F. Hardwick decided that there was enough of a distinction between *H. zea* (and related species) and the other species in *Heliothis* to warrant erection of a new genus for *H. zea* and its relatives. He named this new genus *Helicoverpa*. This, for the most part, is the long and tortured history of how the name *Helicoverpa zea* (Boddie) came to be.

Why did I choose *H. zea* as an example? This species causes hundreds of millions of dollars of crop damage each year, and we had better all know what species we are studying if we are to help control its damage. And this same notion should be applied to all species in the interest of cataloguing the biodiversity of the planet.

But, is there a better or easier way of naming species? Why not simply use common names? Unfortunately, in the example above, *H. zea* has

at least four common names in English depending on which crop it is feeding on (corn earworm, cotton bollworm, tomato fruitworm or false tobacco budworm) and no less than 13 additional names in Spanish and Portuguese.

What about using recent techniques with DNA (i.e. mapping the bar-coding region of Cytochrome Oxidase I) to identify species and then name them based on their unique codes? The problem; however, comes in conveying this information in everyday use (that's a beautiful ACGTAAC.... you collected yesterday).

On top of all this is the major criticism that the Linnaean system of binomial nomenclature (i.e. Genus + species) is founded on pre-Darwinian principles and therefore has no evolutionary component. This can create nomenclatural instability when hypotheses of relationship change. Some researchers have proposed a radical overhaul of the naming system to reflect evolutionary change which should stabilize nomenclature in the long term, but would completely change many names in the short term.

What's the answer? I'm not sure, but I shall be perusing my *The Southern Cultivator* until some Boddie figures it all out.



Steve Marshall

The corn earworm *Helicoverpa zea* (Boddie, 1850).



## Arctic Entomology

**T**he most important trick in the trade of working in entomology in the Canadian arctic or sub-arctic is to have lots of money --- and I mean lots of it! To their credit, NSERC had the foresight in the late 1970s to provide "northern supplements" to researchers in recognition of the great expenses involved in northern studies. This continued for several years, but petered out in the 1980s, much to the chagrin of the scientific community. Glory be, NSERC has recently re-instituted a form of northern supplements, and this should help alleviate what is presently a burdensome logistic cost. Add to this the renewed support for PCSP (Polar Continental Shelf Project) which is an indispensable resource for arctic research --- it supplies accommodation, lab space, transport (Twin Otters, helicopters, canoes, ATVs, etc.) and three hearty meals a day in Resolute! Then there is the recent installation of six NSERC Northern Research Chairs, each with its own funding and studentships (but none yet in entomology). Finally, there seems to be a growing number of student scholarships, such as NSTP (Northern Scientific Training Program) grants as well as many others devoted to specific topics and/or localities e.g. Churchill Northern Research Centre.

The second trick is to plan well in advance. I am assuming at this point that you and/or your supervisor have obtained the necessary funding and have worked out your project and *modus operandi*. Obtaining PERMITS in advance is a fact of life in arctic research. In fact, you may have to apply separately for research permits in

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*Richard Ring has spent the bulk of his scientific career at the University of Victoria studying insect seasonal adaptations such as cold hardiness and diapause, with several summers in the Canadian Arctic. He recently retired from teaching and has taken on the role as Editor-in-Chief of The Canadian Entomologist. For contact information see the inside of the front cover.*

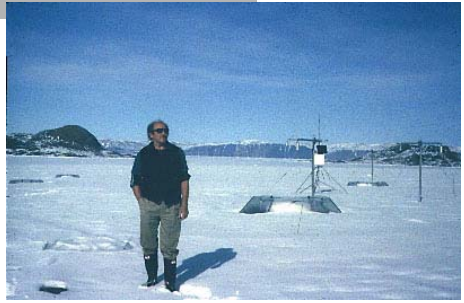


Figure 1. Richard Ring in mid-summer at Alexandra Fiord, Ellesmere Island, Nunavut (ITEX site).

**each** Territory and, in some circumstances, for **each** jurisdiction. I know a biologist who sat for a week in Inuvik waiting for a research permit to work on Banks Island. He was refused and had to return home. The Science Institutes of each Territory have been making progress in streamlining this permitting process and have recently facilitated the whole procedure.

Now come the personal items and equipment. I was lucky to live close enough to a Mountain Co-op store in Vancouver. Double check the quality and integrity of your personal gear, such as tent, sleeping bag, foot wear, outer wear, Gore-Tex jacket, food supplies, etc. --- you don't usually have to worry about drinking water in the arctic! **Be prepared**, since you may be several hundred/thousand kilometers away from the "local" grocery or hardware store. Dress for extremes (see Figures 1-3) which may vary on a daily basis. I am well aware of the vagaries of an arctic summer, having been in Inuvik one mid-summer day when the temperature was 31 °C and in Resolute the next year on the same date when it was 1 °C with winds blowing off the glaciers at 50 km per hour! As entomologists, you probably don't have to be reminded of biting flies (I hate black fly bites!). However, the reality of the situation is often greater than you can imagine. Take plenty of DEET with you, or any other repellent that works for you. Many people (particularly women, it seems) are very sensitive to DEET on their skin, and prefer other ways of avoiding mosquitoes, black flies, biting midges, horse flies, etc. I



prefer a mixture of DEET and "Skin-so-Soft" (1:3), but it is an individual choice. Remember, however, that it is a serious problem for the southern visitor. What you spend on insect repellents, can be compensated for by your savings on flash-light batteries!

Insect collecting and preservation supplies will be determined by the goals of your research project and the locality in which you plan to work.

More of a tip than a trick is my advice to **talk to the local inhabitants**. Although TEK (Traditional Ecological Knowledge) is a bit of a buzzword these days, my experience in the North tells me that it is of great interest and importance to communicate with indigenous peoples. You can learn much from local ways, culture, language and knowledge of the environment. Not only that, but they may even invite you back again! Give talks on your research to local communities, and **always** return copies of reports, theses, published papers, etc... to the community office or library. Sadly, it has happened far too often that northern communities have shown great hospitality and co-operation to the southern scientist only to be



Figure 2. Mid-summer at Resolute, Cornwallis Island, Nunavut.

betrayed after the scientist returns home after his/her one-summer "arctic experience".

O.K. You have the money, research goals you wish to achieve, the relevant permits, transportation has been worked out, you have good gear, lots to eat and drink, the appropriate collecting supplies, and, of course, you are full of energy and enthusiasm! There are not too many other tricks to this trade that I can think of. Except one. Choose your field companion(s) carefully!



Figure 3. Richard Ring (left) and Roger Worland of British Antarctic Survey, Cambridge, U.K. on South Georgia in mid-summer, sub-Antarctica (with British Antarctic Survey).

### Department of Entomology, University of Manitoba

The Department of Entomology at the University of Manitoba was established in 1921. For its first 30 years its teaching was primarily focussed on undergraduate degree and diploma students in the University's Faculty of Agriculture. The first MSc student graduated in 1951 and the first PhD in 1962. The shift in emphasis towards graduate education has continued to this day. In 1996, the Department ceased to offer an undergraduate major in entomology, although it continues to offer seven undergraduate entomology courses and two courses for agriculture diploma students. Currently, the Department has 16 MSc students and five PhD students, and offers seven scheduled graduate courses and a

number of topics courses to cater to these students' academic needs. Graduate students are required to take a course that trains them in scientific writing, literature searching techniques and seminar presentation.

Former graduates of the Department are to be found in faculty positions at several Canadian and US universities as well as locations as far-flung as Thailand and Sri Lanka. Other graduates occupy many research, technical and regulatory positions with the Federal government, and extension positions with a number of provincial governments across Canada. Virtually all of our 18 graduates of the last five years are continuing careers in entomology or biology, with a number in post-doctoral positions or PhD programs, and several already established in permanent research or extension positions.



L. Babey

Departmental Christmas party 2003. Back row (left to right): Mark Lowdon, Kristin Yaworski, Kathleen Ryan, Teran Fenwick, Mike Fuentespina, Lisa Baspaly, Robyn Underwood, Lisa Capar, Susan Funk, Sharon Suerowiec, Rob Currie; Next row: Sandy Holder, David Holder, Hema, Sandhya Hemachandra, Sajida Sharmeen, Jashim Uddin, Scott McMahon, Tonya Mousseau, Neil Holliday, Todd Underwood, Christie Borkowsky, Terry Galloway, Rob Roughley, Lisa Baker, Darlene McEvoy; Next row: Shashika Hemachandra, Terri Baker, Mitchell Graham, Preston Graham, Carol Galloway, Margaret Ann Baker, Germaine Léger, Kate Roughley; Next row (sitting): Ariel Patio with daughter Leira, Drew Holder, Bob Lamb with Carolyn Currie, Desirée Vanderwel with Samantha Currie, Pat MacKay, Lynda Holliday, Kathy Graham, Front row: Lisa Babey, Dalila Seckar, Kim Riley

The entomological community in Manitoba is highly concentrated in Winnipeg and environs. On the campus of the University, entomologists are to be found at the Cereal Research Centre of Agriculture and Agri-Food Canada, the Freshwater Institute of the Department of Fisheries and Oceans Canada, and the apiculture section of Manitoba Agriculture, Food and Rural Initiatives. Within the City, the University of Winnipeg, Manitoba Conservation, the City of Winnipeg, the Canadian Grain Commission and the Canadian Science Centre for Human and Animal Health are also locations of entomological activity. Slightly further afield are Brandon University and the agricultural insect control specialists with the Manitoba government. These organizations between them house about 25 individuals engaged in professional entomological activity. Added to these are consultants, private business people and retirees who have entomological interests that bring them into frequent contact with the Department. The interactions between these people and the Department benefit the Department enormously. Many of the individuals are frequent visitors to the Department, or are encountered at functions of the Entomological Society of Manitoba, and so our graduate students have great opportunities to find out about "real-life" entomology, to develop contacts, and to take short-term contracts to enrich themselves scientifically, experientially and financially.

The Department has more formalized links with a number of scientists in the Winnipeg area through the mechanism of adjunct professorships. Adjunct professors may supervise their own graduate students or may participate in advisory committees. Currently the Department has four adjunct professors at the Cereal Research Centre, three at the Freshwater Institute, three at the University of Winnipeg and one at the Centre for Human and Animal Health. A further four adjunct professors are located in Vancouver, Saskatoon, Ottawa and Switzerland. These fifteen individuals are enormously important in augmenting the supervisory efforts of the four full time faculty members of the Department. The adjuncts, together with our senior scholar, allow us to diversify the range of our graduate education offer-

ings, so that students can do research in topics ranging from crop protection entomology to aquatic systems ecology and from forensic entomology to forest ecology.

The Department has a close relationship with the Entomological Society of Manitoba. The Society publishes a journal, has several social events each year, and holds its annual scientific meeting within a few steps of the Department's doors. That meeting draws virtually all the active entomologists from Manitoba, together with some from North Dakota and our neighbouring provinces, and so provides an excellent opportunity for sharing results, networking and socializing with like-minded people. Virtually all of our students make oral or poster presentations at the annual meeting; making one's first presentation at a real scientific conference, but among predominantly familiar and friendly faces is a good confidence booster. Graduate students, and some undergraduates taking entomology courses, are an important part of the Society. Students frequently hold office on the Society executive committee, or are chairs of some of the committees that do the work of the Society. In particular, graduate students are heavily involved in the Youth Encouragement Committee of the Society.

At least the last three chairpeople of the Society's Youth Encouragement Committee have been graduate students in the Department, and it is virtually impossible to distinguish where the Society's Youth Encouragement activities end and the Department's public education role begins. The Department houses many of the resources that are used in these activities, but some of the budget is from the Society, and some members of the Society who are not directly connected with the Department are participants. Youth encouragement activities involve presentations on-campus and off-campus to school classes, daycare groups, and youth groups of various sorts including girl guides and boy scouts. A great collection of resources have been gathered for these purposes. Among these are live arthropods, including stick insects, several species of cockroaches, tarantulas, lubber grasshoppers and more. Then there are the pinned specimens, including a representative collection of Manitoba insects, and "The

Wowee Box", so called because its iridescent morphos and gigantic phasmids, owl moths and rhinoceros beetles, never fail to elicit a "Wowee!" from at least one member of a juvenile audience. The Committee has developed a series of age-specific interactive games and activities designed to entertain while teaching some basic elements of insect biology. From September- April, youth encouragement events occur about once per week, and most graduate students participate frequently. The biggest events of the year are participation in "Amazing Grains", which involves groups of school students of about grades 4–6, who spend half hour sessions at each of five entomological stations where they can learn about insect anatomy, stored products insects, bee biology, etc. In the course of one of these events, as many as 1200 school children will gain some contact with entomology. While youth encouragement events can be very demanding of time, the enthusiastic participation of the graduate students indicates that the benefits in terms of contact with young people and honing of presentation skills are considered very worthwhile.

The Department of Entomology is heavily involved in extension activities. In this, it works closely with the entomological specialists of Manitoba Agriculture, Food and Rural Initiatives. From May to August, the Department operates a "Bug Line", for which a student is hired to deal with many of the routine calls from urban and rural people wanting information about insects or their control. For the rest of the year, these types of calls are fielded by volunteers from among the graduate students. The students suggested this approach, as it provides them with experience in dealing with the public on practical entomological issues.

The core academic members of the Department of Entomology are the faculty members, Rob Currie, Terry Galloway, Neil Holliday and Rob Roughley. In addition, Pat MacKay is often in the Department in her capacity as senior scholar. We have two technicians, David Holder and Lisa Babey, and a number of office staff who attempt to keep us administered.

### Rob Currie

Rob Currie is the most recent in a line of apicultural researchers in the Department, a line that traces back through Cam Jay to the founder of the Department, A.V. Mitchener. These individuals have built up the campus apicultural facilities to include a honey house and apiary yard, a controlled temperature overwintering building, and a sophisticated bee flight room in which bee behaviour can be studied in controlled conditions. Rob teaches a course in economic entomology for diploma students, a practical beekeeping course that can be taken by diploma students or the general public, and courses in pollination biology. Rob is perhaps the most absent minded and accident-prone of the members of the Department, and this seems to infect his students too, some of whom have been known to cause major flooding in the building. Rob's most recent escapade was to lay the world's longest sugar syrup trail along a couple of hundred kilometers of Manitoba highways. Currently Rob has two students, Robyn Underwood and Paul Kozac. Robyn's PhD thesis work focuses on using formic acid indoors in winter to control varroa mites (*Varroa destructor*) infesting honey bee colonies. The mites are ectoparasites which can cause colony death within 3–4 years of initial infestation. One method of control is to use formic acid, which is generally applied to individual colonies outdoors. Using this fumigant indoors allows more control over ambient conditions and, thus, over the concentration and duration of fumigation. In



R. Underwood

Honey bee drinking water



addition, fumigating in the winter allows the exploitation of the pause in honey bee reproduction that forces the mites onto adult bees where they cannot escape treatment. Robyn's work has shown that this technique can be successful and the bees kept healthy if the proper dose is applied. Paul Kozak has just begun work on his MSc in Rob's laboratory, and will also be working on varroa management, particularly how mite control is affected by manipulating environmental factors.

### Terry Galloway

Terry Galloway is a multi-faceted individual. To the agricultural community of Manitoba he is the only livestock entomologist they know. To many, he is an aquatic entomologist or a mosquito biologist, but to others he is a world authority on arthropod ectoparasites of vertebrates, in particular lice and fleas. To yet others, he is known for his passion for penny whistle music, and for appearing as an aged tramp on Halloween, playing a bodhran drum and threatening "trick or beer." Terry has an enormous knowledge of insect biology, and is a consummate story teller, which is perhaps why he is also a star teacher. Periodically he disappears to New Zealand where he hunts penguin lice. A recent departure from Terry's laboratory is Mahmood Iranpour, who completed a PhD on egg parasitoids of tabanids, which involved a molecular biological approach to identification of egg masses. Mahmood is now a post-doctoral fellow at the Canadian Science Centre for Human and Animal Health but maintains strong links with the Department through an honorary academic appointment. Terry has three MSc students, Ginger Gill, Stacie Stiege and Andrea Thomson. Ginger is close to defending her thesis on forensic entomology; her research involved putting pig carcasses out in selected parts of Manitoba and recording the insect colonists. Stacie is close to completion of a project involving caddis fly biology and appropriate measures to prevent hydroelectric generating stations suffering mass invasions of caddis fly adults. Andrea is beginning her degree program, which involves the utilization of catch basins by mosquitoes with the capability to vector West Nile Virus. Terry also has a great deal to do with two other students



T. Galloway

The chewing louse, *Austromenopon scopulacorne* from a bird, Sora, *Porzana carolina*.

working on entomological aspects of West Nile Virus. Scott McMahon is an MSc student co-supervised by Rob Anderson (University of Winnipeg) and Terry in a study of mosquitoes breeding in used tire dumps. Lisa Baspaly, formerly an MSc student under Terry's supervision, is now doing a PhD with Robbin Lindsay (Centre for Human and Animal Health) on the vector competence of Canadian mosquitoes to transmit West Nile Virus. Lisa retains territorial rights in Terry's laboratory as her mosquito colonies are nearby. Terry's diverse interests place him on numerous graduate student advisory committees. He serves on the committee of Scott Derham, another of Rob Anderson's students, who also works on mosquitoes as disease vectors. Wearing his aquatic entomology hat, Terry serves on the committees of two students with supervisors in the Freshwater Institute: Dalila Seckar (supervised by Michael Paterson) and Rebecca Rooney (Cheryl Podemski). Most of our students in the Freshwater Institute do their field research at the Experimental Lakes Area, where large scale manipulations of

freshwater ecosystems can be performed. Rebecca is working on the benthic invertebrate component of such a project, which is a whole ecosystem assessment of the effects of fish farming on freshwater lakes.

### Neil Holliday

Neil Holliday is the Department's crop protection entomologist and insect ecologist. He is also Department Head. Most of his undergraduate teaching deals with general ecology or agroecology; but he also teaches insect ecology and insect population management. Neil tends to zip around the Department at high speed, which can be hazardous to those in his path. As the writer of this article, Neil thought it best to ask others what his peculiarities are considered to be. Disappointingly, the only response—from Terry Galloway—was a fondness for quantitative or statistical approaches, which Terry considers to be peculiar in an entomologist! Neil has six graduate students at the moment. Three are MSc students working on aspects of cabbage root maggot management in canola; these are Amy Hawkins-Bowman, Kim Riley and Lars Andreassen. Amy is nearing completion of a study of the effect of agronomic practices on maggot infestation. Kim and Lars are working on different aspects of *Aleochara bipustulata*, a staphylinid parasitoid being investigated for biological control of cabbage root maggot. Kim and Lars represent the latest two in a string of students who do much of their field research at the CABI Bioscience Centre, Delémont, Switzerland, where their local supervisor is Ulli Kuhlmann. Students in this collaboration spend 4–5 months per year in Switzerland, and spend the winter months in Winnipeg doing laboratory studies, course work and analysis. Two other students working on crop protection projects in Neil's laboratory are Jashim Uddin, who is nearing completion of a PhD on population ecology of pests of seed alfalfa production, and Ayman Mostafa. Ayman was faced with the challenge of working out the economic effects of late season populations of lygus bugs on seed alfalfa and buckwheat, and has reached greatly different conclusions for these two crops. The final student in Neil's laboratory is Kathleen Ryan, who



K. Riley

The staphylinid *Aleochara bipustulata*, which may have potential as a biological control agent of cabbage root maggot.

is co-supervised with Richard Westwood of the University of Winnipeg. Her project addresses the effects of plantation forestry on communities of carabid beetles and butterflies, and tests the validity of different experimental designs for addressing these questions.

### Pat Mackay

Pat MacKay retired in 2001, but is usually in the Department for two days each week. She probably does more science in those two days than she was able to achieve in the full pre-retirement weeks when teaching and administration intervened. Pat remains a great supporter of the Department and a resource for graduate students on insect physiological matters and aphids. Most of the time she does not gloat too much about the freedom that retirement brings; mercifully the gloating is not evident when the rest of the faculty are submerged in teaching, marking etc. Pat is an aphid person. With her husband, Bob Lamb, she is studying population dynamics of *Uroleucon*, which provides the perfect excuse to disappear on sampling trips to western Manitoba's Riding Mountain National Park.

### Rob Roughley

Rob Roughley is the systematist of the Department and teaches courses in taxonomy and morphology as well as in crop protection. Rob is not renowned for the quietness of his voice, hence the epithet "boomer", which is sometimes applied



to him. Rob's "pet" group of insects is the dytiscid diving beetles, a group that he has pursued in lakes and rivers from the Arctic to Costa Rica and from Europe to China. Rob also does research on arthropod biodiversity in prairie ecosystems, and how prairie insects are influenced by prairie conservation techniques such as prescribed burning. Rob has spent a considerable amount of time at INBIO in Costa Rica, and in recent summers has also instructed in a Boreal and Arctic Entomology Course offered at Churchill, Manitoba. Rob is the curator of the J.B. Wallis Museum of Entomology, which houses the Department's collection of insects, numbering perhaps two million. Rob was successful in getting Canada Foundation for Innovation funds for initiating an electronic data base of the specimens in the museum, funds which also allowed for doubling the museum's capacity through installation of a state-of-the-art storage system. Rob's graduate student team is currently in transition: Tonya Mousseau has just defended her thesis on the systematics and biology of the haliplid genus, *Brychius*, and is about to embark on a PhD at the University of Calgary. Michael Alperyn has also recently de-

fended his thesis, which is on dytiscid communities in ponds arranged along an east-west transect across Manitoba from the Ontario border to Saskatchewan. Michael was most enthusiastic about the sampling of ponds because it allowed him to indulge his passion for fishing. New to the laboratory is Anita Stjernberg, whose project will involve studies of the effects of seasonal grazing on spider and carabid diversity in mixed-grass prairie.

**Richard Westwood**

The largest concentration of graduate students outside the Department walls is in Richard Westwood's laboratory at the University of Winnipeg. The laboratory is a component of the Centre for Forest Interdisciplinary Studies (C-FIR), which is involved in a broad range of approaches to research, education and training that focuses on the sustainability and protection of the Manitoba's forest resource. Before joining the University of Winnipeg, Richard was with the Provincial Forestry Branch, and before that was a research scientist with Rohm and Haas Inc. Richard's favourite insect group are the Lepidoptera, and he



R. Underwood

Peter Kevan (left) and Rob Roughley sampling near Churchill, MB.

has co-authored a book on the *Butterflies of Manitoba*, and is working on a volume on moths. Two recent graduates from Richards laboratory are MSc students Diana Saunders and Lisa Capar. Diana examined the effects of the insecticide Mimic® on non-target forest Lepidoptera. Lisa's project examined the influence of forest harvesting on diversity and composition of carabid beetle communities in black spruce forest. Another MSc student, Jeff Shaddock, has a similar type of project on insect communities in aspen stands. The group of insect biodiversity studies is rounded out with that of Kathleen Ryan, who was previously mentioned as she is co-supervised by Neil Holliday. Not all Richard's students study forest insects. For her MSc, Christie Borkowski is examining the role of sphingid moths in pollination of the endangered western prairie fringed orchid, and is experimenting with ways of enhancing pollination success. Some of Richard's students do not work on insects at all, as Richard also has graduate students registered in the Department of Botany at the University of Manitoba.

### Graduate Student Association

A relatively recent appearance on the scene is a formal organization of the graduate students of into the Department of Entomology Graduate Students Association. DEGSA has regular meetings, and raises funds through summer barbecues, T-shirt sales and similar activities. Moneys are used to maintain the insects that are used in youth encouragement activities and to buy equipment and supplies to benefit the students. Among DEGSA's activities is "The Dead Scientists' Society", a discussion group that meets periodically to critique papers and to stage rehearsals of student seminars and papers. A distinguishing feature of the Dead Scientists is that faculty members and other scary people are excluded from their meetings.

All academic departments have their traditions, and the Department of Entomology is no exception. "Last Friday of the Month", is an occasion when all members of the Department head to a local hostelry for conversation and libation at the



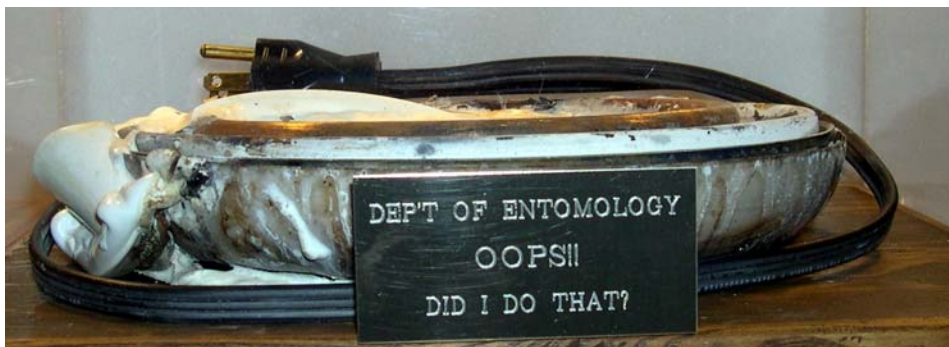
E. Westwood

The Westwood lab. vintage 2003. Back row (left to right): Kevin Kembal (Botany PhD student), Matt McBurney (summer student), Richard Westwood, Rachel Haverluck (recent MSc graduate), Neil Holliday, Kathleen Ryan, Rachel Vancaesele (technician), Christie Borkowsky, Lisa Capar; Front row: Jackie Legal, Kerri LaFrance, Debra Wytrykush (summer students), Diana Saunders, Karen Budnick (summer student).

expense of the faculty members. Another focus of tradition is the Christmas party, which is a "pot-luck" affair to which everyone from the janitors right down to the Dean of the Faculty are invited. The students take the lead role in organizing a secret gift exchange and entertainment. Gifts are usually highly innovative, and very occasionally useful. Entertainment has included speaking competitions in which faculty members and students compete to see who can best present a five minute talk on a topic of their choosing, using slides they have never seen before. Participants get very competitive, and judging is a difficult business. This possible source of discontent can be removed if non-human judges are used. In a recent competition, teams had to build living quarters for cockroaches. The constructions were then placed in a circle and a cockroach released in the middle to make its choice of the winner. The winning team knew of the planned judging technique, and had thoughtfully dipped their cockroach house in beer before presenting it for judging. A feature of the Christmas party is the presentation of the "Oops Did I Do That?" award. The award is in the form of a melted down kettle, on the top of which is clearly visible, in the writing of the

first recipient, "remember to unplug this kettle to avoid it boiling dry". Since the first award, it has been awarded in most years to a member of the department who, in the opinion of the somewhat impartial judging committee, has achieved the largest "oops" of the year. Among the "oops" that have recognized are floods, apparent fires, experimentations on the pendulum properties of gates, and of course, the aforementioned "world's longest sugar syrup trail". Strangely enough, most of these achievements are the work of a single individual, who will remain anonymous.

The Department is a vigorous unit, set at the crossroads of Canada. Next time you fly over Manitoba, consider a stopover to see us. We welcome visitors to view our facilities, to meet with us and our students, and maybe to give us a seminar. If your plans include a visit to Winnipeg, let us know in advance, and we will happily make arrangements for a seminar and expose you to some Manitoba hospitality in exchange. We are always on the lookout for graduate students. If you would like to know more about us, go to our website at [www.umanitoba.ca/afs/entomology](http://www.umanitoba.ca/afs/entomology) or email to [head\\_entomo@umanitoba.ca](mailto:head_entomo@umanitoba.ca).



Lisa Babey

The Department of Entomology "Oops!! Did I do that?" award.

# The student wing / L'aile étudiante

By Tonya Mousseau

**G**reetings! It was a pleasure to see everyone this year in Charlottetown at the 2004 ESC/AES meeting. Not only were the presentations stimulating and the mixers helpful for making contacts, but the actual scenery and culture of the island was something to remember. I think I was one of the lucky ones who was able to travel to the north shore of Cavendish beach and watch the foamy white-capped waves of the Atlantic ocean crash against terra cotta cliffs topped with lush green grass and sprinkled with golden leaves of the fall. An amazing sight.

This year was the first for a silent book auction. The students have agreed to be responsible for this activity in the upcoming meetings. There was also a job board, where CV's and job opportunities were posted.

Don't forget to create your own webpage with the ESC if you don't have one, or notify me if your page needs updating. Pictures always make a page more inviting as well!



M. Alperyn

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## Thesis roundup / Un foisonnement de thèses

Biernaskie, Jay; [jmbierna@sfu.ca](mailto:jmbierna@sfu.ca), MSc, October 2004. *Investment and allocation of nectar production in an animal-pollinated plant (bumblebees and fireweed)*. Supervisor: Elizabeth Elle, Simon Fraser University.

Mousseau, Tonya; [tmousseau@ucalgary.ca](mailto:tmousseau@ucalgary.ca), MSc, September 2004. *Taxonomy, classification, reconstructed phylogeny, biogeography, and natural history of Nearctic species of Brychius Thomson (Coleoptera: Haliplidae)*. Supervisor: R.E. Roughley, University of Manitoba, Department of Entomology.

Offman, Steven; [kaspyr0@hotmail.com](mailto:kaspyr0@hotmail.com), Msc, June 2004. *Factors influencing structure of communities associated with galls induced by Diptolepis spinosa (Hymenoptera: Cynipidae) in northern Ontario*. Supervisor: J. D. Shorthouse, Laurentian University.

Perry, Jen; [jperry@sfu.ca](mailto:jperry@sfu.ca), MSc, July 2004. *The behavioural ecology of trophic egg laying (Harmonia axyridis)*. Supervisor: Bernard Roitberg, Simon Fraser University.

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## New Journal for 2005

*Journal of Plant Interactions (JPI)* presents original research and reviews in the fields of the many aspects of interaction between plants and the surrounding environment. The main sections covered by *JPI* are: plant-plant interaction; plant-microorganism interaction; plant-insect interaction; plant-animal interaction; plant-environment interaction and plant-soil interaction (including plant-water interactions). For more details see: <http://www.tandf.co.uk/journals/titles/17429145.asp>

If you would like to be notified by e-mail when the latest issue of the Bulletin becomes available on the ESC web site, e-mail the Bulletin Editor, Paul Fields at [pfields@agr.gc.ca](mailto:pfields@agr.gc.ca).

*Vous aimeriez être informé par courriel de l'affichage du Bulletin sur le site web de la SEC. Envoyez un courriel à l'éditeur du Bulletin, Paul Fields, à [pfields@agr.gc.ca](mailto:pfields@agr.gc.ca)*



## Prix et bourses d'études de la Société d'entomologie du Canada

### Annuel

#### Bourses pour étudiants post-gradués

La Société d'entomologie du Canada (SEC) offre deux bourses d'une valeur de 2000 \$ chacune pour aider des étudiants qui débutent des études post graduées et des recherches en vue de l'obtention d'un diplôme d'études supérieures en entomologie (habituellement une à un(e) étudiant(e) à la maîtrise et l'autre à un(e) étudiant(e) au doctorat). Les bourses seront accordées aux étudiants ou étudiantes en raison des seuls critères de réussite académique. **Date limite : 16 juin 2005**

#### Subventions de recherche-voyage au niveau des études supérieures

Deux subventions de recherche-voyage, pouvant atteindre 2000 \$, sont offertes pour aider les étudiants et étudiantes à élargir le champ de leur formation supérieure. Les bourses seront accordées aux étudiants ou étudiantes en raison des seuls critères de réussite académique. **Date limite : 18 février 2005**

#### Bourse étudiante de voyage pour assister à la réunion annuelle de la SEC

Une ou plusieurs bourses de 500 \$ chacune seront offertes pour aider les étudiant(e)s, membres de la SEC, à assister à la réunion annuelle. Pour être admissible, les étudiant(e)s doivent faire une présentation ou présenter une affiche lors de la réunion annuelle. Les bourses seront accordées aux étudiants ou étudiantes en raison des seuls critères de réussite académique. **Date limite :** (le même date limite que celle pour soumettre un résumé). Note : Les récipiendaires seront avisés en août, ce qui leur donnera amplement le temps de planifier leur voyage.

Consulter <http://esc-sec.org/students.htm> pour les détails ou le *Bulletin de la SEC* 2003 35(4) 188-191 ou contacter :

Brian Van Hezewijk  
Président Comité des prix aux étudiants de la SEC  
Agriculture et Agroalimentaire Canada  
Case postale 3000, Lethbridge, AB T1J 4B1  
Courriel : [VanHezewijkB@agr.gc.ca](mailto:VanHezewijkB@agr.gc.ca)

### Special

#### Bourse Keith Kevan en systématique

En mémoire du D. Keith McE. Kevan, la Société d'entomologie du Canada offre une bourse d'étude de 1000 \$ pour aider les étudiant(e)s post-diplômé(e)s qui entreprennent des études en taxonomie des insectes. Cette bourse sera accordée, les années impaires, selon des critères d'excellence académique et de la prééminence en taxonomie des insectes. **Date limite : 16 juin 2005**

#### Bourse John Borden

Créée en 2000, cette bourse a été instituée en l'honneur de John Borden, dont l'enseignement et la recherche en écologie chimique ont influencé internationalement la lutte contre les insectes ravageurs et l'entomologie. Cette bourse de 1000 \$, pour souligner une recherche innovatrice en lutte intégrée. **Date limite : 16 juin 2005.**



Steve Marshall

This *Proctacanthus milbertii* has captured a rove beetle, and in doing so it has attracted some kleptoparasitic acalyptrate flies (*Olcella*: Chloropidae), just below the fly's beardlike mystax.



## Entomological Society of Canada awards and scholarships

### Annual

#### Postgraduate awards

Two postgraduate awards of \$2000 will be offered to assist students beginning study and research leading to a post-graduate degree in entomology (normally one to a MSc, and one to a PhD student). The postgraduate awards will be made on the basis of high scholastic achievement.

**Deadline: 16 June 2005**

#### Research-travel scholarship

Two research-travel scholarships of a maximum of \$2000 each will be awarded to help students increase the scope of their graduate training. Applications will be judged on scientific merit. **Deadline: 18 February 2005**

#### Student conference travel awards

One or more awards of \$500 each to be awarded as financial assistance for travel to the annual meeting by student members of ESC. To be eligible, students must present a paper or poster at the annual meeting. Applications will be judged on academic merit. **Deadline:** (same as deadline for abstracts to annual meeting). Note: winners will be notified in August, so travel plans can be made.

See <http://esc-sec.org/students.htm> for complete details or *Bulletin ESC* 2003 35(4) 188-191 or contact:

Brian Van Hezewijk  
Chair ESC Student Awards Committee  
Lethbridge Research Centre  
Agriculture and Agri-Food Canada  
P.O. Box 3000  
Lethbridge, Alberta T1J 4B1  
Email: [VanHezewijkB@agr.gc.ca](mailto:VanHezewijkB@agr.gc.ca)

### Special

#### Keith Kevan scholarship in systematics

In memory of D. Keith McE. Kevan, the Entomological Society of Canada offers a scholarship of \$1000 to aid students undertake postgraduate studies in insect taxonomy. This scholarship will be awarded in odd numbered years, with the selection criteria being academic excellence and taxonomical ability. **Deadline: 16 June 2005**

#### John Borden scholarship

Created in 2000, this scholarship was established in honour of John Borden, who's teaching and research in chemical ecology is recognized around the world for its impact on pest control and entomology. This scholarship of \$1000 will be offered to students to encourage innovative research in the field of IPM. **Deadline: 16 June 2005.**



*If you have a talent for drawing and humour, we are looking cartoons to publish in the Bulletin. Send us your master pieces. The cartoon above was drawn by Gaétan Moreau from New Brunswick.*

*Si vous avez du talent pour le dessin et l'humour, on cherche des dessine humoristiques cartoons pour le Bulletin. Envoyez-nous vos chef-d'oeuvres. Le dessin ici était fait par Gaétan Moreau, de Nouveau Brunswick.*



Paul Fields

The Award winners at the Entomological Society of Canada meetings in Charlottetown PEI. Standing from left to right: Rebecca Zeran, Jean-Phillipe Lessard, Marilyn Kullman, Kathleen Ryan, Sigrun Kullik, Heather Mattila, Susan Tilley and Wade Jenner. Kneeling from left to right: Robyn Auld, Hirondelle Varady-Szabo, Nicole Mckenzie, Tanya Latty and Tara Gariépy.

### Student award winners

President's Prize; Biological Control Section, Oral Presentations

**Wade Jenner**, CABI BioScience

President's Prize; Behaviour and Ecology Section, Oral Presentations

**Tanya Latty**, University of Calgary

**Melanie Hart**, Simon Fraser University (Honourable Mention)

President's Prize; Pest Management and Biodiversity Section, Oral Presentations

**Kathleen Ryan**, University of Manitoba

**Nicole McKenzie**, University of Guelph (Honourable Mention)

**Susan Tilley**, Memorial University (Honourable Mention)

President's Prize; Posters Presentations

**Rebecca Zerah**, McGill University

**Robyn Auld**, Memorial University (Honourable Mention)

**Sigrun Kullik**, University of Guelph (Honourable Mention)

Biological Control Network Oral Presentation Award

**Tara Gariépy**, University of Saskatchewan

Student Conference Travel Award

**Jean-Phillipe Lessard**, McGill University and **Hirondelle Varady-Szabo**, McGill University

Graduate Research-Travel Scholarship

**Heather Mattila**, Guelph University and **Katsky Venter**, UBC (not present)

Biological Survey of Canada Scholarship

**Zoë Lindo**, University of Victoria (not present)

Postgraduate Scholarship

**Heather Mattila** (PhD), University of Guelph and **Marilynn Kullman** (MSc), UBC

## Graduate Student Symposium

**Joint Annual Meeting of the  
Entomological Society of Canada  
and the Acadian Entomological Society  
17 October 2004, Charlottetown, PEI**

**Heather Proctor: Organizer**

### **Plant bugs (Hemiptera: Miridae) on seed alfalfa and buckwheat in southern Manitoba: A contrast in plant response**

Ayman M. Mostafa and Neil J. Holliday  
Department of Entomology, University of Mani-  
toba, Winnipeg, Manitoba

In alfalfa for seed production in Manitoba, insecticide applications are used to control mirid plant bugs near the end of June, and again in late August. The threshold for June applications has been used to justify late season insecticide applications despite the differences in plant stage and insect population structure. In a three-year research program, applications of lambda cyhalothrin in commercial field plots were used to manipulate plant bug populations to examine their impact on alfalfa seed yield. Late season plant bug populations had no significant effect on amount of seed yield or germination rate.

On buckwheat, high populations of *Lygus lineolaris* have been observed in recent years, but there is no information on yield effects. Therefore, seasonal occurrence and management of *Lygus* bugs on buckwheat were investigated. Small numbers of *Lygus* adults appeared in buckwheat in late July, and a generation of nymphs developed in the following month. In early September there were many more adults than had developed as nymphs, indicating migration from early-maturing crops. Lambda cyhalothrin, applied in late July, suppressed nymphs and resulted in yield weights averaging 59% higher than those in unprotected crops; the same insecticide applied to adult bugs in September did not significantly affect yield. In a trial of *Beauveria bassiana* against adults in September, seed yield and fungal infection of bugs were significantly high-

er in treated plots, although the number of bugs in treated and control plots did not differ.

Near end of the season, alfalfa seed and pods are tough, perhaps making feeding difficult for plant bugs, and limiting seed injury. In contrast, buckwheat continues to flower and develop its exposed seeds until the end of the season, and this may make it more vulnerable to Miridae, resulting in severely reduce yield quality and quantity.

### **Sex-biased variation in the intra-tree foraging behavior of a specialist herbivore: Influence of foliage quality, microclimate, and parasitism**

Robert Johns, Dan Quiring and Don Ostaff  
Department of Biology, University of New Brun-  
swick, Fredericton, New Brunswick,  
[rcjohns@hotmail.com](mailto:rcjohns@hotmail.com)

Over evolutionary time, some herbivorous insects may adapt foraging behaviors to overcome the heterogeneous distribution of suitable food within and among their host-plants. Most studies have focused on how variation among plants affects insect foraging and fitness, despite evidence for comparable variability within plants. Consequently, the proximate and ultimate factors influencing insect foraging behavior within their host-plant are still poorly understood.

I evaluated the effects of within plant variation in foliage quality on the foraging behavior and fitness of yellow-headed spruce sawfly, the most important pest of young black spruce in Atlantic Canada. Feeding larvae can cause severe growth loss or apical shoot mortality, due presumably to preferential feeding at the crown apices.

Based on field surveys, most eggs are laid in the lower two-thirds of the tree. Late-instar larvae, especially females, disperse acropetally throughout the crown of black spruce, beginning at inner mid-crown positions and dispersing upwards and outwards. Manipulative field experiments supported the hypothesis that the observed foraging strategy is adaptive, particularly for females: early and late instar larvae performed best when feeding in the lower and upper crown, respectively. The additive and/or interacting influ-

ences on performance of intra-tree variation in phenology, foliage quality, microenvironment, parasitism, and herbivore density were evaluated and will be discussed. This behavior, previously described for a caterpillar, has never been observed in a sawfly and further emphasizes the important influence on insect behavior and performance of within plant heterogeneity.

### Strategies for survival - Persistence of the moth-yucca mutualism at the northern edge of range

Donna D. Hurlburt and John Addicott

Department of Biological Sciences, University of Alberta, Edmonton, Alberta, [donna@ualberta.ca](mailto:donna@ualberta.ca)

The mutualism between the "Endangered" yucca moth (*Tegeticula yuccasella*) and its "Threatened" host, the soapweed (*Yucca glauca*) is risky in Alberta because neither moth emergence, nor flowering can be ensured. Moth population dynamics and behaviour were studied to determine how both species persist despite low and unpredictable densities. Results indicate that northern moths have less egg mortality and produce similar numbers of larvae relative to other sites. Further, moths may have evolved a unique oviposition behaviour that reduces ovule damage which enhances their survival. Despite low variable densities of moths and yuccas, the mutualism remains strong in the north suggesting that not all peripheral populations are subject to decline.

### Direct and indirect effect of ants on moth/yucca interactions.

Rebecca S. Snell and John Addicott

University of Calgary, Calgary, Alberta

The pollination/seed predation mutualism between yuccas and yucca moths is highly variable in terms of the costs and benefits to each partner. I studied how additional species interactions may account for some of the variability in yucca reproductive success. Specifically, how yuccas interact with two species of moths (yucca moths and cheater moths), and how ants and aphids modify these interactions.

*Yucca glauca* is solely pollinated by yucca moths (*Tegeticula yuccasella*). Female yucca moths lay their eggs in the flowers' ovary where their larvae hatch and consume some of the developing yucca seeds. Thus, yuccas need yucca moths for pollination and yucca moths need yucca fruit to feed their larvae. Cheater moths (*Tegeticula corruptrix*) exploit the mutualism by laying their eggs into developing fruit one to three weeks after pollination. As their larvae also consume yucca seeds, they have a direct negative effect on yucca fitness. At my study sites, ants (*Formica ravidata*) were commonly found foraging upon *Y. glauca*, either consuming yucca buds/flowers/fruit or tending aphids (*Aphis yuccae*). These aggressive ants may have an indirect effect on yuccas if they alter the pollination/seed predation behavior of *T. yuccasella* or the seed predation behavior of *T. corruptrix*.

Although ants did damage and eat yucca buds/flowers, there was no effect on the proportion of flowers which set fruit. Yuccas produce many flowers, but typically mature less than 10% as fruit. Ants would have to consume more than 90% of the flowers to have a negative effect on yucca fruit production. However, ants did attack the fruit and consume yucca seeds. During 2003, 7% of the fruit in one population was completely destroyed by ants. Interestingly, yucca fruit was never damaged by ants when they were found tending aphids on that fruit.

Ants had a strong indirect effect on yuccas. There was an increase in the number of viable, uneaten seeds per fruit when ants were abundant. This increase in viable seeds per fruit is likely due to the interaction between ants and *T. corruptrix*. Ants significantly lowered the number of *T. corruptrix* ovipositions and larvae in the fruit, causing a reduction in seed predation. Although ants did reduce the number of *T. yuccasella* ovipositions in the flowers and in the fruit, ants had no effect on the number of *T. yuccasella* larvae. Any effect of ants on the pollination mutualism was largely filtered out in the end due to the selective abscission of flowers and the density dependant mortality of pollinator eggs.

When ants were present, they became the limiting factor in these systems, resulting in reduced

levels and very low variation of seed predation in yuccas. However, when ants were absent there was still considerable variability, suggesting that other unmeasured factors are important when ants are rare. It is clear that the reproductive success of moths and yuccas are not necessarily constrained by each other, but may be limited in some way by a variety of extrinsic factors.

### **A morphological analysis of higher-level phylogenetic relationships among sap beetles (Coleoptera, Nitidulidae).**

Charmaine E. Condy

University of Toronto, Department of Zoology,  
Toronto, Ontario

Nitidulids (Coleoptera: Nitidulidae) are a diverse family of cucujoid beetles with more than 3,000 species divided among approximately 271 genera and subgenera. Thirty-six genera and ca. 150 species occur in North America. They occupy a variety of ecological niches and many are economically important as vectors of pathogens or are pests of vegetables, fruits and grains. However, they also have important beneficial roles as pollinators and biological control agents. Historically, most references to nitidulid relationships lack an explicitly phylogenetic framework. This study presents the first comprehensive phylogenetic analysis of the Nearctic representatives of the nitidulid subfamilies. Eight subfamilies and 15 genera were represented by 26 exemplar species. Eighty-six characters derived from external morphology and genitalia were identified, and a maximum parsimony analysis yielded two most parsimonious trees (length=302, CI=0.37, RI=0.62). Results suggest that: (1) the Nearctic nitidulids are monophyletic; (2) the subfamily Nitidulinae is a grade-level taxon; (3) subfamily status of the Epuraeinae is not supported; (4) there is potential for further refinements to cladistic relationships within the Nitidulidae and (5) additional character systems (e.g., molecular data) and taxon sampling beyond the Nearctic Region should be explored before implementing formal revisions to the current taxonomy.

### **UQAM hires insect ecologist**

The Université du Québec à Montréal has hired Timothy Work to teach and conduct research in forestry in its Department of Biology. Tim Work research focuses on insect biodiversity and community ecology. At UQAM, he is a member of the GREFi (Groupe de recherche en écologie forestière interuniversitaire), an interdisciplinary research group focused on forest ecology and management, as well as a member of the NSERC Industrial Chair in Sustainable Forest Management research group. In this arena, he tries to bring an entomological perspective to conservation biology and the development of better forest management practices in boreal forests.

He would be interested in hearing from students looking to pursue in graduate studies in biodiversity, boreal forest ecology and conservation biology. If you are an enthusiastic person with a broad interest in ecology and entomology and are looking for a research opportunity please don't hesitate to contact me!

Timothy T. Work

Département des Sciences Biologiques,  
Université du Québec à Montréal,  
C.P. 8888, Succursale Centre-ville,  
Montreal, QC H3P 3P8, Canada  
514-987-3000 poste 2448

[work.timothy@uqam.ca](mailto:work.timothy@uqam.ca)



Paul Fields



## Members in the news / Membres faisant la manchette

### Ken Davey honoured at ICE

Ken Davey OC FRSC received the Wigglesworth Award for Outstanding Services to the Science of Entomology for 2004 from the Royal Entomological Society. As part of the award, Davey gave the prestigious Wigglesworth Memorial Lecture entitled "From insect ovaries to sheep red blood cells: A tale of two hormones." at the International Congress of Entomology (ICE), 17 August 2004 in Brisbane, Australia. Ken Davey is a professor in the Department of Biology, York University. His work has focused on the hormonal control of development in insects and nematodes.



Paul Fields

Ken Davey (left) receiving the Wigglesworth Award for Outstanding Services to the Science of Entomology for 2004 from Hugh Loxdale, President of the Royal Entomological Society.



J. Delisle

Jeremy McNeil (right) receiving a print from John Arnason in recognition for receiving the Silver Medal Award of the International Chemical Ecology meeting, Ottawa, July 2004.

### Jeremy McNeil wins award

Jeremy N. McNeil, currently professor in the department of Biology, University of Western Ontario, received the International Society of Chemical Ecology Silver Medal at the July 2004 meeting of the society in Ottawa. Jeremy was recognized for his outstanding contributions to the field of chemical ecology, his unique way of popularizing science, the numerous successful students he has supervised and his remarkable pedagogical skills. To this exceptional list of achievements one can also add all the meetings and symposia he has organized. The title of his presentation was: "Putting ecology back in chemical ecology."

Bernard Philogène

### Yves Mauffette gagne le Prix 3M

Yves Mauffette, professeur au département des sciences biologiques et vice-doyen aux études à la Faculté des sciences de l'UQAM, recevait en juin dernier l'un des dix Prix 3M pour l'excellence en enseignement pour l'année 2004. Il a reçu le Prix 3M 2004 pour sa contribution remarquable à la mise en place d'une méthode pédagogique innovante pour le baccalauréat en biologie de l'UQAM: l'apprentissage par problèmes (APP),

voir : [http://www.regis.uqam.ca/Pdf/particularites/gp\\_7013.pdf](http://www.regis.uqam.ca/Pdf/particularites/gp_7013.pdf). Cette nouvelle approche a connu un tel succès qu'Yves Mauffette est régulièrement appelé en Belgique, en France, au Royaume-Uni et en Australie afin d'aider à l'implantation de programmes en APP dans plusieurs disciplines. Rappelons que le professeur Mauffette est lauréat du Prix d'excellence en enseignement de l'Université du Québec pour l'année 2002. Toutes nos félicitations !

(tiré du site web de l'UQAM)



## Krista Ryall accepts position with CFS

Krista Ryall will focus her research around current insect pest issues in Newfoundland at the Canadian Forest Service at Corner Brook, Newfoundland. Her research may include examining predator-prey or parasitoid-host interactions at multiple spatial scales, threats of invasive species to forest biodiversity, effects of habitat loss or fragmentation on predator-prey interactions and pest outbreaks, and other ecological and entomological issues surrounding Newfoundland's forests.

Krista Ryall completed her BSc at Queen's University, her MSc and PhD at the University of Toronto. Her PhD research was on the responses of bark and wood-boring beetles to a sudden and large input of resources following a severe environmental disturbance, the 1998 ice storm.



Paul Fields

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## Mark Winston wins recognition from NSERC

Congratulations to Mark Winston who won a 2004 Michael Smith Award, given by the Science and Engineering Research Council. An acclaimed international scholar in the field of insect communication, Mark Winston of Simon Fraser University has used his passion as the Bee Man to effectively engage diverse audiences in the excitement of science, and beyond that, to stimulate debate about the role of science in our everyday lives. From community initiatives in urban landscapes, and active engagement of young people in classrooms, to films, interviews, popular articles and internationally lauded books, Winston has been an enthusiastic communicator of science. He urges his own students to be strong advocates and encourages others to participate in critical dialogue about social issues (from NSERC web site)



## Election Results / Résultats des élections



Barry Lyons

Second-Vice President, Peggy Dixon (right) being escorted on to the ESC Executive by Past-President Sandy Smith at the AGM in Charlottetown P.E.I., 17 October 2004.

La seconde vice-présidente, Peggy Dixon (droite) escortée par la présidente-sortante Sandy Smith sur le conseil exécutif à la réunion annuelle à Charlottetown, I.P.E., a été élue le 17 octobre 2004.

Peggy Dixon has been a Research Scientist with Agriculture and Agri-Food Canada (AAFC) since 1988, in St. John's, Kentville and Ottawa. She has worked at St-John's since 1992 and her primary focus is integrated pest management (IPM) in vegetables and small fruits. She is an Adjunct Professor in the Biology Department of Memorial University, where her responsibilities include teaching graduate courses and supervising graduate students. She is a Charter member of the Newfoundland Insectarium and founded the Newfoundland Entomologist's Club in 1994.

Peggy est chercheur scientifique à Agriculture et Agroalimentaire Canada depuis 1988 à Saint-Jean, Kentville et Ottawa. Elle travaille au Centre de recherche de Saint-Jean depuis 1992 et son principal intérêt porte sur la lutte intégrée contre les ravageurs des légumes et des petits fruits. Elle est professeur associée au Département de Biologie de l'Université Memorial où ses responsabilités incluent l'enseignement de cours gradués et la supervision d'étudiants gradués. Membre à charte de l'Insectarium de Terre-Neuve, Peggy a fondé en 1994 le Club des entomologistes de Terre-neuve.



Robin Underwood

Rob Roughley was elected Director-at-large. Rob Roughley a été élu conseiller.

Rob Roughley joined the Department of Entomology, University of Manitoba in 1982. His teaching and research has concentrated on agricultural entomology, evolution, insect systematics, biodiversity, habitat conservation and management. These career interests were enhanced by research leaves in Ottawa at the Canadian National Collection, Chinese Academy of Sciences, Beijing, China and CSIRO in Canberra, Australia as well as the Instituto Nacional de Biodiversidad (INBio) in Santo Domingo, Costa Rica.

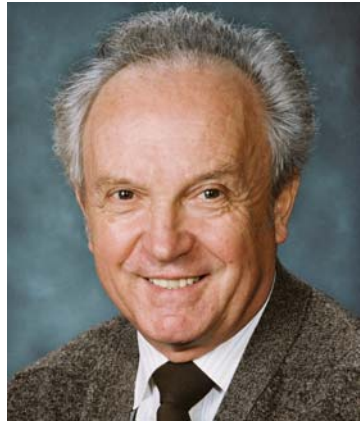
Rob Roughley s'est joint au Département d'entomologie de l'Université du Manitoba en 1982. Son enseignement et ses travaux de recherche portent sur l'entomologie agricole, l'évolution, la systématique des insectes, la biodiversité, la conservation et la gestion des écosystèmes. Ses intérêts de carrière ont été influencés par ses congés sabbatiques à la Collection nationale du Canada à Ottawa, à l'Académie chinoise des sciences de Beijing, Chine et du CSIRO à Canberra, Australie ainsi qu'à l'Instituto Nacional de Biodiversidad (INBio) à Santo Domingo au Costa Rica.

## The Entomological Society of Canada's newest Fellow

At the 2004 Joint Meeting of the Entomological Society of Canada and the Acadian Entomological Society, Imre Otvos was named a Fellow of the Entomological Society of Canada. This honour recognizes important contributions by Imre Otvos to forest entomology, particularly his research on the role of predators, parasitoids and pathogens in controlling insect pest populations, and also his participation in the activities of the Entomological Societies of Canada and British Columbia.

In a forest entomology career spanning 40 years, Imre Otvos has written more than 96 research publications. The first, based on his MSc work on avian predators of bark beetles, was published in *The Canadian Entomologist* in 1965. His first degree was a Bachelor of Science in Forestry from U.B.C., and his MSc and PhD in entomology were from the University of California, Berkeley. In 1969, he joined the Canadian Forestry Service in Newfoundland, where he spent 11 years elucidating the roles of natural enemies in the control of eastern hemlock looper, among other projects. Perhaps it is appropriate that we named him a Fellow in the Maritimes where he began his working career. In 1980 he moved to the Pacific Forestry Centre, and became a Senior Research Scientist there in 1988. In B.C., Imre Otvos continued research on natural control of forest defoliators such as the winter moth, and larch casebearer where he used parasitoids. Then he expanded his expertise to the use of nucleopolyhedrovirus of the Douglas-fir tussock moth, and the use of *Btk* to reduce losses caused by the western spruce budworm and blackheaded budworm. Other major work included the development of a pest management system for the Douglas-fir tussock moth with one of his colleagues. This management system is used operationally by the province in BC.

Throughout his career Imre Otvos maintained strong links with universities and contributed much to the training and research of graduate students at these institutions. He continues these associa-



Imre S. Otvos F.E.S.C.

tions as an Adjunct Professor at the University of Victoria, University of British Columbia and Northeastern Forestry University in China. Imre Otvos also maintains a strong international presence particularly at forest research laboratories in China, and through contributions to many international symposia and congresses of entomology. He also found the time to contribute to The Entomological Societies of Canada and British Columbia. He served as Associate Editor for *The Canadian Entomologist* for many years, and as Regional Director to ESC. He also served as the Secretary-Treasurer and Editor of the newsletter for the Entomological Society of B.C.

The Entomological Society of Canada is not the first to recognize and honour Imre Otvos's achievements. Among other honours and awards, he has been elected a Fellow of the Royal Entomological Society of London, Elected into the Hungarian Academy of Sciences, was named a Research Professor of Key Laboratory of Forest Protection by the National Forestry Administration in China, and received an Honourary Life Membership in the Entomological Society of British Columbia. This illustrious career in entomology makes Imre Otvos eminently qualified as a Fellow of the Entomological Society of Canada.

Robert J. Lamb

Chair, Achievement Awards Committee

## Gold Medal Award

Judy Meyers

The 2004 recipient of the Entomological Society of Canada's Gold Medal for Outstanding Achievement in Canadian Entomology is Judith H. Myers, University of British Columbia, Vancouver. This award is presented in recognition of her contributions to research in insect ecology, particularly her work on the theory and practice of biological control, graduate education and scientific leadership.

Judy Myers came to the University of British Columbia in 1972 from a Miller Post-doctoral Fellowship at the University of California, following a PhD in ecology at Indiana University. Judy began her academic career in the Department of Plant Science and Institute of Animal Resource Ecology, subsequently joining the Zoology Department, and rising to the rank of Professor in 1989. She has maintained an active involvement in research, education and administration at this institution, with sabbatical periods in Australia, United Kingdom and USA.

Throughout this busy academic career, Judy Myers made and continues to make important contributions on the population dynamics and evolutionary ecology of insects. Judy has published over 100 papers on research on more than 20 different species of insects, using them to address specific ecological hypotheses with an experimental approach. Perhaps best known is her work on biological control, both control of pest plants by insect herbivores and pest insects by parasitoids and microbes. Her thinking on the planned introduction of exotic organisms, and the possibility of eradicating accidental introductions, has also been influential. In addition, she and colleagues have made unique contributions to understanding the ecology and evolution of viral disease in cyclic populations of tent caterpillars.

This research places applied entomology within a strong theoretical framework of population dynamics, bringing clarity to and sometimes challenging our basic assumptions on how humans can use interactions between organisms to their benefit. These thoughtful, well-crafted projects



Barry Lyons

Judy Meyers giving the Gold Medal Address in Charlottetown P.E.I. at the Joint Annual Meeting of the ESC and AES, 15 October 2004.

have resulted in many widely cited publications, and invitations to organize symposia, and present lectures and symposia papers in Europe and North America. Recently she co-authored a book titled *Ecology and Control of Introduced Plants*.

Those of us who first encountered Judy Myers when we were graduate students know how important a role she plays in training Canadian entomologists. Not only has Judy been a dedicated advisor to 32 graduate students and 5 postdoctoral fellows, she fostered a stimulating and collegial atmosphere for many other students of insect ecology who passed through UBC over the past 32 years. She introduced many to the study of insects in her courses on *Insect Ecology*, *Biological Control*, *Conservation Biology*, *Population Ecology and Ecological Genetics*. Judy's students have gone on to prominent careers at the University of Toronto, University of Alberta and Simon Fraser University in Canada, at the University of Chicago and University of San Diego in USA, and in Agriculture and Agri-Food Canada, the Department of Fisheries and Oceans, and the Canadian Forest Service, as well as in private business.

Judy Myer's scientific and academic leadership is illustrated by her contributions to ecological, entomological and conservation organizations. Judy has served on international editorial boards of *Biocontrol Science and Technology*, *Ecoscience*, *Oecologia*, and *Annual Review of Entomology*.

She has been a reviewer of research and academic programs for organizations as diverse as the USDA Forest Service Biological Control Programs in Hawaii, the Queens University Department of Biology, and the Weed Control Program for the Nature Trust of Canada. From 1991-1998 Judy served as Associate Dean at UBC She has actively fostered the role of women in science, and has served as Chair of the B.C. Science Council Committee on Women in Science and Technology from 1996-1999, and as a board member of the Society of Canadian Women in Science and Technology.

These outstanding contributions to entomological research, to the education of entomologists and ecologists, to the application of biological control, and to many scientific institutions make Judith H. Myers eminently qualified to receive the Society's Gold Medal.

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### La Médaille d'Or Judy Meyers

La récipiendaire de la Médaille d'or de la Société d'entomologie du Canada, pour l'année 2004, est Judith H. Myers, de l'Université de Colombie-Britannique (UBC) à Vancouver. Cette distinction lui est attribuée pour souligner ses réalisations remarquables dans le domaine de la recherche en écologie des insectes, particulièrement pour ses travaux portant sur les aspects pratiques et théoriques de la lutte biologique, son rôle de formatrice auprès d'étudiants gradués et son leadership scientifique.

Judy Myers est arrivée à l'Université de Colombie-Britannique en 1972, après avoir complété un stage post-doctoral à l'université de Californie, précédé d'un doctorat en écologie à l'Université d'Indiana. Judy a débuté sa carrière académique au Département de la Science des Plantes et l'Institut des Ressources Animales en Écologie. Par la suite, elle s'est jointe au Département de Zoologie. Elle y est devenue professeur titularisé en 1989 et y est demeurée active dans les secteurs de la recherche, de l'enseignement et de l'administration, avec des périodes sabbatiques en Australie, en Grande-Bretagne et aux États-

Unis.

Au cours de sa carrière académique, Judy Myers a contribué et continue de contribuer au secteur de la dynamique des populations et de l'écologie évolutive des insectes. Judy a publié plus de 100 articles scientifiques portant sur plus d'une vingtaine d'espèces d'insectes dont elle s'est servie pour tester des hypothèses écologiques avec une approche expérimentale. Elle est surtout connue pour ses travaux en lutte biologique que ce soit au niveau de la répression des plantes nuisibles par des insectes herbivores ou de la répression des insectes nuisibles par des insectes parasitoïdes ou des agents pathogènes. Ses opinions sur les introductions planifiées d'organismes exotiques et sur la possibilité d'éradiquer des introductions accidentelles ont été marquantes. De plus, avec ses collègues elle a contribué de manière unique à la compréhension de l'écologie et de l'évolution des maladies virales dans le cycle vital des populations de chenilles à tentes.

Ces travaux de recherche ont permis de faire une place à l'entomologie appliquée au niveau des bases théoriques de la dynamique des populations, d'apporter de la clarté, et parfois même de remettre en question nos hypothèses de base relativement à la manière dont les humains utilisent les interactions entre les organismes pour leur propre bénéfice. Ces projets bien réfléchis et bien montés ont résulté en de nombreuses publications, abondamment citées, en invitations à l'organisation de symposiums et à la présentation de conférences en Europe et en Amérique du Nord. Récemment elle a été co-auteur d'un livre intitulé *Ecology and Control of Introduced Plants*.

Ceux d'entre nous qui ont d'abord rencontré Judy Myers quand ils étaient étudiants gradués savent le rôle important qu'elle a joué à la formation des entomologistes canadiens. Non seulement Judy a supervisé avec grande attention 32 étudiants gradués et 5 stagiaires postdoctoraux, mais elle a su favoriser un climat stimulant et collégial pour plusieurs autres étudiants en écologie des insectes qui ont étudié à UBC au cours des 32 dernières années. Elle a initié plusieurs d'entre eux à l'étude des insectes dans ses cours sur l'écologie des insectes, la lutte biologique, la biologie de la conservation, l'écologie des popula-

tions et la génétique écologique. Les étudiants de Judy ont poursuivi de brillantes carrières à l'Université de Toronto, à l'Université de l'Alberta et à l'Université Simon Fraser au Canada, à l'Université de Chicago et à l'Université de San Diego aux États-Unis et, à Agriculture et Agroalimentaire Canada, à Pêches et Océans Canada, au Service Canadien des Forêts, ainsi que dans le secteur privé.

Le leadership de Judy Myer s'est illustré dans le cadre de ses contributions à des organisations écologiques, entomologiques et de conservation. Judy a siégé sur les comités d'édition internationaux des revues *Biocontrol Science and Technology*, *Ecoscience*, *Oecologia*, et *Annual Review of Entomology*. Elle a été réviseure des programmes de recherche et académique d'organisations aussi diverses que le USDA Forest Service Biological Control Programs à Hawaii, le département de

biologie de l'Université de Queens et le Weed Control Program du Nature Trust of Canada. De 1991 à 1998 Judy a agité à titre de doyen associé à l'Université de Colombie-britannique. Elle a activement fait la promotion du rôle des femmes en science et de 1996 à 1999, elle a présidé le Comité des femmes en science et technologie du Conseil scientifique de la Colombie-Britannique. Elle a également été directrice au sein de la Société canadienne des femmes en science et en technologie.

Judith H. Myers a contribué de manière exceptionnelle à la recherche en entomologie, à la formation d'entomologistes et d'écologistes, à l'application de la lutte biologique et elle s'est impliquée au sein de plusieurs institutions scientifiques. C'est pourquoi elle mérite d'être la récipiendaire de la médaille d'or de la Société d'entomologie du Canada.

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## Gold Medal for Outstanding Achievement in Canadian Entomology and The C. Gordon Hewitt Award

Members of the Society are invited to nominate individuals whom they regard as eligible for these awards (for the year 2005). The information should include a statement of relevant achievements (three pages maximum) and a *curriculum vitae*. Nominations should be sent in an envelope marked "Confidential" to the following address:

Achievement Awards Committee  
Entomological Society of Canada  
393 Winston Avenue, Ottawa, Ontario  
K2A 1Y8

and should comprise: (1) the name and address of the nominee(s); (2) a statement of relevant achievements; and (3) the name of the nominator and at least one seconder. To be considered by the Achievement Awards Committee, nominations must bear a postmark no later than **28 February 2005**.

### The following conditions govern these awards:

1. Outstanding contributions should be judged on the basis of

(a) superior research accomplishment either as a single contribution or as a series of associated endeavours and which may be either in entomology or a related field where the results obtained are of great consequence; or (b) dedicated and fruitful service in the fields of Society affairs, research, administration or education.

2. No more than one of each award shall be granted per year but, where circumstances warrant, more than one individual may be mentioned in a single award.

3. Recipients need not be members of the Society providing their contribution is judged to have a major impact on entomology in Canada.

4. The award may be granted on different occasions to the same recipient but for different contributions to entomology in Canada.

**5. Nominees for the C. Gordon Hewitt Award must be less than 40 years of age throughout the calendar year in which the award is both announced and awarded.**



## 2004 Criddle Award Winner

Henry Hensel

Acadian Entomological Society

**H**enry Hensel worked in a lumber mill in Edmundston, NB, for about 30 years until his retirement about 15 years ago. He developed a love of insects, especially the Lepidoptera, as a child growing up near Dresden, Germany. Trained as a cabinet maker, Henry has made all of his own cabinets for his extensive insect collection; they are not only labours of love but works of art! Henry is a collector extraordinaire.

He has collected for many years in the Edmundston area, has spent full seasons in Labrador and Kuglugtuk (formerly Coppermine) in Nunavut/NWT, and for the last ten years he has spent his summers at Churchill, MB and Aqviat, Nunavut. Henry has a very good eye for species and draws the attention of professional entomologists to things that "don't fit"; he usually turns out to be right and has either uncovered a misidentification, or a new species. Henry collected and detected correctly two new species of *Euxoa*, one at Churchill and one at Aqviat - and that is a group where we thought we had them all - especially in northern Canada!

Henry's specimen preparation is second to none in all of North America - with particular attention to even getting the antennae "just right." He is also excellent at rearing the larvae of rare and unusual species with great pains taken to try to have the rearing conditions just right so that he can successfully rear bog species and even arctic species at his home in New Brunswick. Henry's genuine love of insects and the care and attention he gives to collecting and preparing specimens makes him a deserving recipient of the Criddle Award in 2004.



## Lauréat du Prix Criddle de 2004

Henry Hensel

Société entomologique acadienne

**H**enry Hensel a travaillé pendant près de 30 ans dans une scierie à Edmundston (N.-B.) jusqu'à ce qu'il prenne sa retraite il y a environ 15 ans. Il a grandi près de Dresden en Allemagne, et lorsqu'il était enfant, il a développé une passion pour les insectes, notamment la chenille tisseuse (Lepidoptera). Grâce à sa formation d'ébéniste, Henry a pu lui-même fabriquer ses armoires pour son immense collection d'insectes. C'était un travail d'amour, mais ces armoires sont aussi de véritables œuvres d'art. Henry est un grand collectionneur.

Il a amassé des insectes pendant bien des années dans la région d'Edmundston. Il a aussi passé des saisons entières au Labrador ainsi qu'à Kuglugtuk (anciennement Coppermine), au Nunavut (dans les anciens Territoires du Nord-Ouest). Il a passé les dix dernières périodes estivales à Churchill (Manitoba) et à Aqviat (Nunavut). Henry sait bien distinguer les espèces et il attire l'attention des entomologistes professionnels sur les choses « inhabituelles ». La plupart du temps, il a raison et il a soit réussi à relever une fausse identification, soit à découvrir une nouvelle espèce. Henry collectionne les insectes de la famille *Euxoa*, et il a décelé correctement deux nouvelles espèces de ce groupe, une à Churchill et l'autre à Aqviat. Nous pensions avoir répertorié toutes les espèces de cette famille, surtout dans le Nord du Canada!

La façon dont Henry prépare ses échantillons est la plus efficace qui soit en Amérique du Nord. Il accorde même une attention particulière aux antennes; elles doivent être « parfaitement » placées. Henry élève aussi des larves d'espèces rares et inhabituelles en prenant soin de travailler dans des conditions optimales pour réussir à reproduire des espèces des tourbières et de l'Arctique à son domicile au Nouveau-Brunswick. C'est en raison de sa passion pour les insectes et de l'attention qu'il prête à sa collection et à la préparation de ses échantillons qu'il mérite le Prix Criddle de 2004.

## Médaille d'Or pour Contributions Exceptionnelles à l'Entomologie Canadienne et Prix C. Gordon Hewitt

La Société invite les membres à lui faire parvenir les noms des personnes qu'ils considèrent éligibles à ces deux prix. L'information devrait comprendre un énoncé pertinent des accomplissements (three pages maximum) et un *curriculum vitae*. Veuillez envoyer vos nominations (pour l'année 2005) au:

Comité des décorations  
La Société d'entomologie du Canada  
393 Winston Avenue, Ottawa, Ontario  
K2A 1Y8

dans une enveloppe portant la mention "Confidentiel". La nomination doit contenir: (1) le nom ainsi que l'adresse du (ou des) candidat(s) désigné(s); (2) un compte rendu des réalisations pertinentes; et (3) le nom du parrain et celui d'au moins une deuxième personne appuyant la mise en nomination. Pour être acceptées par le Comité, les nominations devront porter un sceau postal d'au plus tard le **28 février 2005**.

### Les conditions suivantes régissent le choix des récipiendaires de ces prix:

1. Les contributions exceptionnelles devraient être jugées dans le contexte; (a) d'un accomplissement hors pair en recherche, soit comme résultat d'une seule contribution ou d'une série d'efforts reliés et ayant abouti à des résultats de grande valeur. Cette recherche aura été réalisée en entomologie ou tout autre domaine connexe; ou (b) de service dévoué et fructueux au profit de la Société, de l'administration de recherche, ou de l'éducation.

2. Chaque prix ne sera décerné qu'une seule fois par année. Cependant, lorsque les circonstances le justifient, plusieurs personnes peuvent collectivement devenir récipiendaires d'un prix.

3. Les récipiendaires ne doivent pas nécessaire-

ment être membres de la Société pour autant que l'on juge que leur contribution à eu un impact majeur sur l'entomologie au Canada.

4. Chaque prix peut être décerné plus d'une fois au même récipiendaire mais pour différentes contributions à l'entomologie au Canada.

5. **Le candidat désigné pour le prix C. Gordon Hewitt doit être âgé de moins de 40 ans pour toute la durée de l'année** au cours de laquelle le prix est annoncé et décerné.

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## Books to be reviewed

If you are interested in reviewing one of the following books, please contact Allan Carroll, Chair of the Publications Committee.

Anderson NM, Weir TA. 2004. *Australian water bugs: Their biology and identification (Hemiptera-Heteroptera, Gerromorpha & Nepomorpha)*. Apollo Books, CSIRO Publishing, Australia

Hajek A. 2004. *Natural enemies: An introduction to biological control*. Cambridge University Press, New York, NY

Heckman CW. *Encyclopedia of South American aquatic insects: Plecoptera*. Dordrecht, The Netherlands: Kluwer Academic Publishers

Morón MÁ (Editor). 2003. *Atlas de los escarabajos de México. Coleoptera: Lamellicornia. Vol. II familias Scarabaeidae, Trogidae, Passalidae y Lucanidae*. Barcelona, Spain: Argania editio, S.C.P.

Oberhauser KS, Solensky MJ (eds). 2004. *The monarch butterfly*. Cornell University Press, Ithaca, NY

van Emden HF, Service MW. 2004. *Pest and Vector Control*. Cambridge University Press, New York, NY

Please send correspondence concerning book reviews to the Chair of the Publications Committee:

Allan Carroll  
506 West Burnside Rd, Pacific Forestry Centre  
Victoria, BC, Canada V8Z 1M5  
Tel: (250) 363-0639, Fax: (250) 363-0775  
E-mail: [acarroll@pfc.cfs.nrcan.gc.ca](mailto:acarroll@pfc.cfs.nrcan.gc.ca)

*Sex wars: genes, bacteria, and biased sex ratios*. Majerus, Michael E.N. 2003, Princeton University Press, Princeton, USA. xxii+250 pp., ISBN 0-691-00981-3, US \$45.00, cloth.

With few exceptions, sex ratios in animals are assumed to be more or less equivalent, with reproduction requiring two forms of a species; males and females. However, things are not always that simple. Lopsided sex ratios, most commonly female-biased, occur more regularly among animals than I previously imagined, and the reasons behind these asymmetries are especially amazing. In several lineages, males have been rendered nearly useless or have been altogether eliminated.

*Sex wars: genes, bacteria, and biased sex ratios*, by Michael E. N. Majerus, is a fascinating book concerning sexual reproduction in the invertebrates, with the core subject matter essentially being how symbiotic bacteria and other microorganisms (called ultraselfish symbionts), in the interests of self-replication, are able to control host reproductive systems and consequently manipulate host sex ratios. Taking host sex gametes hostage can be shown to have positive or detrimental implications to a host population as a whole. Majerus is an evolutionary geneticist at the University of Cambridge and has worked extensively with the bacterium *Wolbachia*. This bacterium exploits host gametes and ensures its continued existence through vertical transmission in a number of taxa, including butterflies. Conflict between the sexes and the struggle to exist occurs on many levels, between genes and chromosomes but also between organisms themselves. However, an unusual conflict can also occur between symbiotic organisms and their hosts, each of which is struggling to maximize their long-term fitness by altering or, in the case of the host, resuming the sex determination system. An evolutionary 'arms race' is the inevitable result and in some instances the process of host evolution is changed.

*Sex Wars* is separated into two parts, the first of which covers the theoretical foundations of sex determination, competition and selective forces

operating on the sexes, why sex is important (and not so important), sex ratios, and gene theory upon which the second part follows. The second half of this book is an exploration of how these systems of sex determination are altered: feminization of genetically male hosts into functional females, the consequence of 'male-killing', symbiont-mediated evolution of hosts and their consequences, and symbiont-induced secondary parthenogenesis in hosts by *Wolbachia*. Each chapter is forwarded by a summary that helps to acquaint the reader with the forthcoming material. Numerous figures and tables are provided throughout. In addition, eight high-quality color plates provide the reader with excellent visual aids that greatly enhance the value of this book. A comprehensive glossary is also included, which many readers will appreciate, since many terms can be unfamiliar.

Dobzhansky's quote: "Nothing in biology means anything, except in the light of evolution", is particularly relevant to the subject matter of *Sex Wars*. Majerus follows this axiom and provides an evolutionary framework for these peculiar genetic digressions. Not being an evolutionary geneticist, I nevertheless considered *Sex Wars* to be a lucidly-written synthesis of varied subject matter, one with practical significance to entomology, as insects figure in many examples. Majerus provides clear explanations for numerous difficult concepts and also does a commendable job of building upon each chapter in a logical manner. The last two pages ("Six Impossible Things") are worth reading in themselves. I highly recommend this book, not only as an exceptional primer in genetics and evolutionary biology, but also for attempting to reveal such an extraordinary process of sex determination in animals to a broader audience.

Don Henne  
Baton Rouge, LA, USA

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*The Canadian Entomologist* and past issues of the *Memoirs* are available from the Ottawa office, and may be purchased by Mastercard, Visa, cheque or money order.

# CANMORE 2005 JAM

Entomological Society of Alberta  
Entomological Society of Canada

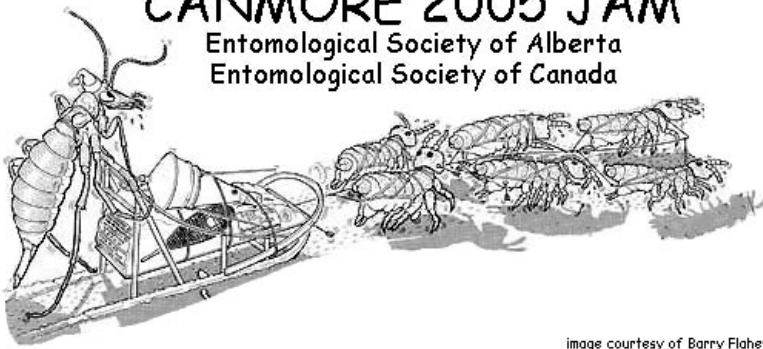


image courtesy of Barry Flahey

**November 3-6, 2005**

**Radisson Hotel & Conference Centre Canmore, Alberta**

**Meeting Theme: Entomology: A Celebration of Life's Little Wonders**

**Proposed symposia:**

Plenary: A celebration of life's little wonders

Fire and arthropods (Rob Roughley)

Forestry and arthropods (John Spence & Dave Langor)

The individual as a community: insect/microbe interactions (Andy Keddie)

Arachnids (Heather Proctor & Derrick Kanashiro)

Wheat-stem sawflies (Hector Cárcamo)

Graduate student symposium

**Organizing committee:**

John Acorn (President, Entomological Society of Alberta): [janature@compusmart.ab.ca](mailto:janature@compusmart.ab.ca)

Dan Johnson, Stephanie Erb, Derek Sikes (local arrangements): [dan.johnson@uleth.ca](mailto:dan.johnson@uleth.ca)

Dave Langor & Felix Sperling (scientific program): [DLangor@NRCan.gc.ca](mailto:DLangor@NRCan.gc.ca), [felix.sperling@ualberta.ca](mailto:felix.sperling@ualberta.ca)

Maya Evenden (awards): [mevenden@ualberta.ca](mailto:mevenden@ualberta.ca)

Greg Pohl (registration): [GPohl@NRCan.gc.ca](mailto:GPohl@NRCan.gc.ca)

Kim Rondeau (treasurer): [kimberly.rondeau@ualberta.ca](mailto:kimberly.rondeau@ualberta.ca)

Heather Proctor & Derrick Kanashiro (publicity & printing): [hproctor@ualberta.ca](mailto:hproctor@ualberta.ca),  
[kanashirod@agr.gc.ca](mailto:kanashirod@agr.gc.ca)

John Spence, Jan Volney & Mike Dolinski (fundraising committee): [john.spence@ualberta.ca](mailto:john.spence@ualberta.ca),  
[JVolney@NRCan.gc.ca](mailto:JVolney@NRCan.gc.ca), [mdolinski@agritrend.com](mailto:mdolinski@agritrend.com)

Tonya Mousseau & Tyler Cobb (student affairs): [tonyabeetle@hotmail.com](mailto:tonyabeetle@hotmail.com), [tcobb@ualberta.ca](mailto:tcobb@ualberta.ca)

**Hotel contact details:**

Radisson Hotel & Conference Centre Canmore: (403) 678-3625;

<http://www.radisson.com/canmoreca>

Information about the mountain town of Canmore:

<http://www.discovercanmore.com>, <http://canmore.canmorealberta.ca/canmorethingstodo.html>

Transportation from Calgary to Canmore: <http://www.discovercanmore.com/Transportation/>



Dan Johnson

## **2005 Congrès conjoint des Sociétés d'entomologie du Canada et de l'Alberta 2005**

**3 au 6 Novembre, 2005**

**Radisson Hotel & Conference Centre Canmore, Alberta**

### **Entomologie : Une Célébration des Petits Mystères de la Vie**

#### **Symposia proposés :**

Plénier : Une célébration des petits mystères de la vie

Feux et arthropodes (Rob Roughley)

Sylviculture et arthropodes (Dave Langor & John Spence)

Interactions entre arthropodes et microbes (Andy Keddie)

Arachnide (Heather Proctor & Derrick Kanashiro)

Cèphe du blé (Hector Cárcamo)

Le symposium des étudiants gradués

#### **Comité organisateur :**

John Acorn (Président, Société d'entomologie de l'Alberta) : [janature@compusmart.ab.ca](mailto:janature@compusmart.ab.ca)

Dan Johnson, Stephanie Erb, Derek Sikes (arrangements locaux) : [dan.johnson@uleth.ca](mailto:dan.johnson@uleth.ca)

Dave Langor & Felix Sperling (programme scientifique) : [DLangor@NRCan.gc.ca](mailto:DLangor@NRCan.gc.ca),  
[felix.sperling@ualberta.ca](mailto:felix.sperling@ualberta.ca)

Maya Evenden (récompenses) : [mevenden@ualberta.ca](mailto:mevenden@ualberta.ca)

Greg Pohl (inscription) : [GPohl@NRCan.gc.ca](mailto:GPohl@NRCan.gc.ca)

Kim Rondeau (trésorier) : [kimberly.rondeau@ualberta.ca](mailto:kimberly.rondeau@ualberta.ca)

Heather Proctor & Derrick Kanashiro (publicité et impression) : [hproctor@ualberta.ca](mailto:hproctor@ualberta.ca),  
[kanashirod@agr.gc.ca](mailto:kanashirod@agr.gc.ca)

John Spence, Jan Volney & Mike Dolinski (levée de fonds) : [john.spence@ualberta.ca](mailto:john.spence@ualberta.ca),  
[JVolney@NRCan.gc.ca](mailto:JVolney@NRCan.gc.ca), [mdolinski@agritrend.com](http://mdolinski@agritrend.com)

Tonya Mousseau & Tyler Cobb (affaires étudiantes) : [tonyabeetle@hotmail.com](mailto:tonyabeetle@hotmail.com), [tcobb@ualberta.ca](mailto:tcobb@ualberta.ca)

#### **Pour contacter l'hôtel :**

Radisson Hotel & Conference Centre Canmore : (403) 678-3625;

<http://www.radisson.com/canmoreca>

Informations de Canmore : <http://www.discovercanmore.com>, <http://canmore.canmorealberta.ca/canmorethingstodo.html>

Transport de Calgary à Canmore : <http://www.discovercanmore.com/Transportation/>



### Charlton (Charlie) George Devlin 1913-2004

Charlie Devlin passed away at Saskatoon City Hospital, on July 3, 2004. He is survived by his wife, Gertrude, a son and daughter, two grandchildren, a great grandson and a brother.

Though born in Cranbrook, B.C., Charlie grew up in the Conquest area of central Saskatchewan. In 1928, he left the family farm for The Pas, Manitoba, then Island Falls, Saskatchewan, where he worked on the construction of the hydroelectric dam. In 1931, Charlie returned to farming at Lucky Lake, Saskatchewan.

At the outbreak of World War II, Charlie joined the South Saskatchewan Regiment, rising to the rank of Company Sergeant Major. He participated in both the Dieppe (1942) and the Normandy (1944) invasions. Wounded at Dunkirk, he was repatriated, and after recuperation and restorative surgery, was discharged in January 1945. Charlie was a charter member of the Royal Canadian Legion, Nutana Branch 362, where he served as Branch President and Zone Commander. One of his proudest moments was to be presented with a Life Time Service Award from the Legion. In the later part of his life, he spent considerable time speaking to children in Saskatoon Schools about Dieppe, his war experiences and the need to find alternative means of conflict resolution.

Charlie had a deep love of sport. He was one of the early organizers and coaches in the Saskatoon Playground Hockey League, receiving life membership in recognition of his contributions. He also coached baseball in the late 1950s and early 1960s and was associated with the Saskatoon Lions Speed Skating Club.

On 1 April 1946, Charlie began a 30-year stint as an entomological technician at the Dominion Entomological Laboratory, Saskatoon, specializing in cutworm biology and control, under the direction of Lloyd Putnam. Charlie was responsible for the operation of light traps, counting and identification of moths, population assessment, and outbreak forecasting. He was also involved in early field trials for chemical control using chlo-



rinated hydrocarbons, testing of bran baits against red-backed cutworm (*Euxoa ochrogaster*), and control of rapeseed pest insects (with Alf Arthur). In one such trial, Charlie's sergeant major experience came to the fore, when he commandeered a highway 'in the name of Her Majesty', to allow the spray plane to land for refuelling, following a sudden outbreak of bertha armyworm (*Mamestra configurata*)!

Charlie retired on 30 December 1976, to enjoy to the full his grandchildren, gardening, fishing, and hunting.

Cedric Gillott,  
Saskatoon, Saskatchewan



*Neocurtilla hexadactyla*, the northern mole cricket (Orthoptera: Grylotalpidae).

Steve Marshall

## Recently deceased

Compiled by Ed Becker

**Chet Neilson**, husband of Ruby, 1178 Beach Dr., Victoria BC, V8S 2M9, 250-592-3754, died on 26 July 2004 at age 88. Chet served as an officer in the Canadian Army's Rocky Mountain Rangers, participating in the assault on Kiska Alaska and later, as a member of the Oxford Rifles Battalion of Victoria, he participated in the liberation of Holland. Chet worked for many years with Agriculture Canada conducting research in southern Saskatoon, Alberta, Peace River and central interior of B. C. Then he transferred to the Provincial Agriculture working in Vernon, as well as teaching at U.B.C. He was an avid outdoors man, faithful sports fisherman, and a dedicated golfer.

**Marion Ives**, wife of Bill Ives, 11459 - 42 Avenue NW, Edmonton AB, T6J 0W2, 750-435-6809, died on 8 August 2004. Marion suffered a stroke a year ago that left her unable to swallow.

**Leo Dionne**, Fredericton NB, died on 2 September 2004 after a long illness. He worked in Jean Adam's laboratory from 1944 to 1967. He was a geneticist, but had an invaluable role in entomology particularly insects and disease resistance in potatoes, according to Ellen MacGillivray, and he knew his botany well. His wife Margaret predeceased him in 1978.

**Gordon H. Hamilton**, Winnipeg, died on 5 October 2004 at age 62. Gordon worked as a technician at the Belleville Laboratory in 1962 and transferred to the Cereal Research Centre, Winnipeg, in 1972. He never married and retired in 1997. He suffered from cancer. A funeral service was held in Winnipeg and another one the next day in Belleville.

**Dave Pengelly**, husband of Fran Pengelly, P. O. Box 359, Erickson MB, R0J 0P0, 204-636-2619, [fpengelly@erickson-mb.com](mailto:fpengelly@erickson-mb.com), died on 1 November 2004 of cancer.

## Environmental Reviews Seeking Submissions

*Environmental Reviews* is a publication of the National Research Council of the Canadian Research Council. The overall goal of *Environmental Reviews* is to present authoritative literature reviews on a wide range of environmental science topics, with emphasis on the effects on and response of both natural and human-made ecosystems to anthropogenic stress. Specific topics include (but are certainly not limited to) climatic change, harvesting impacts, air pollution, ozone, acid rain, pesticide use, lake acidification, marine pollution, ecology of oil spills, biological control, food chain biomagnification, exotic species, polluted aquatic systems, erosion, agroforestry, and bio-indicators of environmental stress.

*Environmental Reviews* does have several important advantages for potential authors. For example, it is published by NRC, a very well respected publisher, known for delivering an excellent product. *Environmental Reviews* is freely accessible to anyone with a Canadian internet address. It is also sold to foreign libraries as part of the consortia packages with NRC's other journals.

For more information, contact the Editor, John Smol, at [smoj@biology.queensu.ca](mailto:smoj@biology.queensu.ca), or visit the website at: [http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2\\_desc\\_e?er](http://pubs.nrc-cnrc.gc.ca/cgi-bin/rp/rp2_desc_e?er)



Steve Marshall

A male *Dasymutilla vesta* (Hymenoptera: Mutillidae) of the family of velvet ants.

## Standing committees / Comités permanents

### Nominations / Nominations

C. Vincent, Chair St.-Jean-sur-Richelieu  
R. Bennett, Victoria  
J. Delisle, Ste.-Foy  
R. Lamb, *ex officio*, Winnipeg

### Elections / Élections

R. Hallett, Chair, Guelph  
C. Cutler, Guelph  
S. Goodfellow, Guelph  
R. Lamb, *ex officio*, Winnipeg

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## Continuing committees / Comités en cours

### Achievement Awards / Prix d'excellence

D. Quiring, Chair, Fredericton  
S. Fitzpatrick, Agassiz  
Y. Pelletier, Fredericton  
R. Roughley, Winnipeg  
R. Lamb, *ex officio*, Winnipeg

### Annual Meeting / Réunion Annuelle

T. Shore, Chair, Victoria  
R. Lamb, *ex officio*, Winnipeg

### Bilingualism / Bilinguisme

M. Roy, Chair, Québec  
H. Chiasson, St.-Jean-sur-Richelieu  
V. Martel, St.-Jean-sur-Richelieu  
R. Lamb, *ex officio*, Winnipeg

### Bylaws, Rules & Regulations / Règlements

R. Footitt, Chair, Ottawa  
G. Gerber, Winnipeg  
R. Lamb, *ex officio*, Winnipeg  
R. West, *ex officio*, Portugal Cove-St Philips

### Finance / Finance

D. Gillespie, Chair, Aggassiz  
B. Broadbent, London  
P. Mason, Ottawa  
D. Parker, Ottawa  
P. Bouchard, Treasurer, Ottawa  
R. Lamb, *ex officio*, Winnipeg

### Fund Raising / Levée de fonds

N. Bostanian, Chair, St.-Jean-sur-Richelieu  
R. Lamb, *ex officio*, Winnipeg

### Headquarters / Siège social

V. Behan-Pelletier, Chair, Ottawa  
J. Cumming, Ottawa  
P. Bouchard, *ex officio*, Ottawa  
R. Lamb, *ex officio*, Winnipeg

### Heritage / Patrimoine

C. Gillott, Chair, Saskatoon  
E. Becker, Ottawa  
J.-P. Bourassa, Trois-Rivières  
R. Lamb, *ex officio*, Winnipeg

### Insect Common Names / Noms communs d'insectes

C. Buddle, Saint-Anne de Bellevue  
H. Goulet, Ottawa  
J-F Landry, Ottawa  
M. Roy, Ste.-Foy  
R. Lamb, *ex officio*, Winnipeg

### Marketing / Comité du marketing

O. Olfert, Chair, Saskatoon  
L. Braun, Saskatoon  
K. Heller, Salt Lake City  
H. White, Winnipeg  
R. Lamb, *ex officio*, Winnipeg

### Membership / Adhésion

J. Sweeney, Chair, Fredericton  
H. Carcamo, ESA, Lethbridge  
A. Carroll, ESBC, Victoria  
L. Braun, ESS, Saskatoon  
D. Hunt, ESO, Harrow  
S. Le Tirant, SEQ, Montreal  
P. MacKay, ESM, Winnipeg

K. MacKenzie, AES, Kentville  
R. Lamb, *ex officio*, Winnipeg

### **Publications / Publications**

A. Carroll, Chair, Victoria  
R. Bennett, Victoria  
G. Boivin, St.-Jean-sur-Richelieu  
P. de Groot, Sault Ste. Marie  
L. Gilkeson, Victoria  
P. Kevan, Guelph  
K. MacKenzie, Kentville  
P. Fields, *ex officio*, Winnipeg  
B. Lyons, *ex officio*, Sault Ste. Marie  
R. Lamb, *ex officio*, Winnipeg  
R. Ring, *ex officio*, Victoria

### **Science Policy and Education / Politique scientifique et éducation**

P. Dixon, Chair, St-John's  
H. Carcamo, ESA, Lethbridge  
A. Carroll, ESBC, Victoria  
L. Braun, ESS, Saskatoon  
D. Hunt, ESO, Harrow  
S. Le Tirant, SEQ, Montreal  
P. MacKay, ESM, Winnipeg  
K. MacKenzie, AES, Kentville  
R. Lamb, *ex officio*, Winnipeg

### **Student Affairs / Affaires étudiantes**

T. Mousseau, Chair, Winnipeg  
A. Henderson, Vancouver  
M. Marcotte, Quebec  
J. Peterson, Vancouver  
J. Perry, Vancouver  
J. Savage, Montreal  
S. Wilkerson, Victoria  
R. De Clerck-Floate, *ex officio*, Lethbridge  
R. Lamb, *ex officio*, Winnipeg

### **Student Awards / Prix aux étudiantes et étudiants**

R. De Clerck-Floate, Chair, Lethbridge  
B. Van Hezewijk, Interim Chair, Lethbridge  
J. Delisle, Ste Foy  
J. Myers, Vancouver  
N. Holliday, Winnipeg  
T. Wheeler, Ste-Anne-de-Bellevue  
D. Currie, Toronto

D. Larson, St. John's  
R. Lamb, *ex officio*, Winnipeg

### **Ad hoc Committees / Comités ad hoc**

#### **Joint Meeting Document / Document du congrès conjoint**

T. Shore, Chair, Victoria  
J. Sweeney, Fredericton  
R. Lamb, *ex officio*, Winnipeg

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### **À la recherche de nouveau membre honoraire**

La Société invite les membres actifs à lui faire parvenir les noms des personnes qu'ils considèrent admissibles à être Membre honoraire. Un membre honoraire peut être un membre actif ou un ancien membre actif de la Société qui a apporté une contribution exceptionnelle au progrès de l'entomologie. Les membres honoraires ne sont pas obligés de payer les cotisations. Veuillez soumettre vos nominations (pour l'année 2005) au :

Comité des décorations

La Société d'entomologie du Canada  
393, avenue Winston, Ottawa, Ontario  
K2A 1Y8

dans une enveloppe portant la mention "Confidentiel". La nomination doit contenir : (1) le nom ainsi que l'adresse du candidat désigné ; (2) un compte rendu des réalisations pertinentes ; et (3) les noms d'au moins cinq parrains, qui sont des membres actifs. Pour être acceptées par le Comité, les nominations devront porter un sceau postal d'au plus tard le **28 février 2005**.

## Annual Meetings of the Governing Board and Membership

By Rick West, Secretary

### Governing Board Meeting, Charlottetown, P.E.I., 15 October 2004

#### Executive Council

The Executive Council met briefly prior to the meeting and agreed that a strategic review of the operations of the Society was due. It has been about eight years since the last strategic review, and another is warranted to address communications, web profile and content, membership, publications and membership. **Action: R. Lamb.**

#### Treasurer

The Society is getting little from its contract with ProQuest to market microfiches copies of journal articles and is advised not to renew the contract in 2007. The Treasurer will contact ProQuest at least 180 days prior to the 2007 renewal date to terminate our relationship with ProQuest. **Action: P. Bouchard.**

Requests for PDF copies of journal articles from universities need to be addressed in a timely fashion but the Society needs to ensure that copies are not distributed without authorization. The Publications Committee will review this issue and see how other societies such as the Entomological Society of America handle such requests. **Action: A. Carroll.**



The 2003-2004 Governing Board of the Entomological Society of Canada, enjoying the sun in Charlottetown, P.E.I., 17 October 2004. From left to right, top row; Dan Quring (Second Vice-President), Dave Gillespie (Director-at-Large), Greg Pohl (Regional Director, ESA), Charles Vincent (President), Gary Gibson (Treasurer), middle row; Terry Shore (Regional Director, ESBC), Nubar Bostanian (Fund Raising Chair), Sandy Smith (Past President), Barry Lyons (Webmaster), Dave Hunt (Regional Director, ESO), second middle row; Patrice Bouchard (Finance Chair), Lorraine Braun (Regional Director, ESS), Tonya Mousseau (Student Representative), Richard Ring (Editor-in-Chief of *The Canadian Entomologist*), front row; Paul Fields (*Bulletin* Editor), Pat MacKay (Regional Director, ESM), Rick West (Secretary) and Bob Lamb (First Vice-President).



For the near future, requests from universities received by the ESC office will be forwarded to the President for action. **Action: S. Devine, R. Lamb.**

Negotiations are currently underway between the Canadian Phytopathological Society (CPS) and Heritage Canada to obtain a grant to cover costs of reissuing French copies of the *DPVCC* book. D. Quiring suggested, to general agreement, that a CD version of the book would be a good idea to explore with the CPS. **Action: Owen Olfert.**

Lapsed subscribers should be contacted to determine the reason(s) why subscriptions were not renewed. A draft of a letter intended to be signed by the President for distribution to lapsed subscribers was sent to President Vincent for review. **Action: C. Vincent, S. Devine.**

### Finance Committee

Report received. Major challenges for next year include finding ways to increase revenue for the Society and the renegotiation of the contract with the NRC which expires at the end of 2005. D. Parker and P. Mason will remain as committee members, but a new chair needs to be appointed. **Action: R. Lamb.**

### Scientific Editor

NRC Press indicated that the number of journal articles per issue would have to increase if two column papers were published because the number of pages would otherwise be less, resulting in less room to label the journal spine. The Publication Committee disputes this claim, and this matter will be addressed by C. Vincent in future meetings with NRC Press. **Action: C. Vincent.**

### Web Site

B. Lyons summarized information provided on the web site. Web content, access and design needs to be included in any strategic review. **Action: R. Lamb.**

Requests for photos on the web site should be tracked to determine whether or not a market for photo use is realistic, and page hits should be tracked to determine which pages are the most popular. **Action: B. Lyons.**

Nomination forms for the Gold Medal and C. Gordon Hewitt Awards need to be provided by the Awards Committee for posting on the web site. **Action: D. Quiring, B. Lyons.**

Chairs of the Achievement Awards and Student Awards Committees shall submit announcements and guidelines of awards, and annually update list and biographies of winners to the webmaster and *Bulletin* editors and this duty should be stated in the Guidelines for both committees. **Action: D. Quiring, R. De Clerck-Floate, R. Footitt.**

### Publications Committee

The electronic review process used by other societies such as the Entomological Society of America will be investigated. **Action: A. Carroll.**

The problem associated with copyright of the content of papers in *The Canadian Entomologist* prior to 2002 has been addressed through an explicit statement to be placed on the website and a proposed modification to the copyright statement on the inside cover of the journal. The need for a legal assessment of the copyright disclaimer will be discussed with NRC Press. **Action: C. Vincent, P. Bouchard, G. Gibson.**

A document, outlining conditions of use for downloading documents and photos from the web site, will be prepared by April. **Action: A. Carroll.**

The strategic review will assess whether it is feasible and desirable to establish a data repository on the ESC web site as a benefit to members. **Action: R. Lamb.**

A proposal to modify the format and content of *The Canadian Entomologist* cover was formulated

for submission to the Executive Council and distributed to the Board. The Board endorsed the Publication Committee's choice for the journal cover. Photos for the journal cover will be chosen by the Publications Committee and replaced annually. The source of photographs may include those used in photo contests at annual meetings.

The *Bulletin* cover needs to be harmonized in black and white with the journal cover. **Action: P. Fields, A. Carroll.**

The issue of dispensing with blank pages will be discussed with NRC. **Action: C. Vincent.**

Versions of the ESC colour logo were circulated to the Board for discussion. The logo with black latin lettering, the grylloblattid in grey, the bicolour maple leaf (left red, right gold) and teal background was approved by the Board after considerable discussion. **Action: C. Vincent.**

### **Achievement Awards Committee**

No C. Gordon Hewitt award will be bestowed in 2004. The Committee reviewed the Hewitt Award guidelines and concluded that they are clear as they stand. The important issue remains to ensure that nominators read and understand the guidelines by stating those guidelines more clearly in the Award Announcement. Nomination instructions need to be posted on the web site. **Action: D. Quiring, B. Lyons.**

A list of Criddle Award Winners needs to be made and posted on the web site. **Action: D. Quiring, B. Lyons.**

### **Bilingualism Committee**

B. Lyons requests that the Bilingualism Committee contact him to prioritize items that need to be translated for the web site. **Action: M. Roy.**

All Societal documents have been translated and will be posted on the web site. **Action: B. Lyons.**

### **Bylaws, Rules and Regulations Committee**

Future chairs of the Achievement Awards Committee should monitor very closely the recommendations of award proponents and their accuracy with respect to the calculation of the age requirement for the C. Gordon Hewitt Award. **Action: D. Quiring.**

Duty 5 was added to the duties of the Bylaws, Standing Rules and Committee Guidelines Committee:

"5. Following the Annual Meeting, provides the Bilingualism Committee with a list of any changes to the Bylaws, Standing Rules and Committee Guidelines for translation." **Action: R. West, R. Footitt.**

Duty 3 in the Guidelines for the Heritage Committee was replaced from "The Heritage Committee shall preserve artifacts through the Heritage Committee." to "The Committee shall preserve artifacts from the Annual Meetings." **Action: R. West, R. Footitt.**

The Contract Research Committees' preamble in the Committee Guidelines changed "the Federal Department of Supply and Services (DSS)" to "the offices of Public Works and Government Services Canada". **Action: R. West, R. Footitt.**

The board approved that Standing Rule VIII (4c) be edited to read, "...Changes in the By-Laws after approval of the membership by a mail vote shall be submitted by the Secretary to the Department of Consumer and Corporate Affairs for approval".... with "...Changes in the By-Laws after approval of the membership by a mail vote shall be submitted by the Secretary to Industry Canada for approval....". A ballot on this rule change will be included with the election ballots sent to members in June 2005. **Action: R. West, R. Footitt.**

The board approved that ARTICLE XX - AMENDMENT OF BY-LAWS be changed as follows:

"1. The By-Laws may be repealed or amended by a two-thirds majority vote of a quorum of Active Members, providing that such repeal or amendment shall not be in force nor acted upon until approved

as required by the Minister of Consumer and Corporate Affairs. The vote shall be by mail ballot."  
replace with

"1. The By-Laws may be repealed or amended by a two-thirds majority vote of a quorum of Active Members, providing that such repeal or amendment shall not be in force nor acted upon until approved as required by Industry Canada. The vote shall be by mail ballot."

A ballot on this rule change will be included with the election ballots sent to members in June 2005.  
**Action: R. West, R. Footitt.**

### **Insect Common Names and Cultures Committee**

The Committee intends to update and correct the entire common names list and upload it to the ESC website after verifying scientific names, including new additions from 2004, begin working on French common names, discuss plans to update and modify common names on the web-site, to make the list more available, accessible, and more user-friendly, ensure all relevant forms for requesting common names are updated on the ESC web-site and will continue to field requests for common names. The Committee is requested to confirm whether or not it has representation on the common names committee of the Entomological Society of America. **Action: C. Buddle.**

### **Membership Committee**

The questionnaire that was sent to ESC members last year was sent to members of the ESO and AES who are not currently members of the ESC and will be sent to members of the other regional societies later this fall. The responses to the questionnaire will be tallied and reported in 2005. **Action: J. Sweeney.**

Kenna MacKenzie an ESC member and an AAFC scientist involved with negotiations between the Professional Institute of the Public Service of Canada and Treasury Board indicated that federal scientists are encouraged to support professional societies such as the ESC. Talks between the Canadian Phytopathological Society and other societies are encouraged to pursue the issue of scientific memberships in collective bargaining. **Action: R. Lamb.**

The board approved an amendment to Standing Rule I (Membership) (3) to read:

Honorary Members shall receive all the benefits and voting privileges of Regular members, including the *Bulletin* and *The Canadian Entomologist*, either as print copy or online access. A ballot to approve this amendment will be sent to the general membership with the election ballots. **Carried. Action: R. Footitt, R. West.**

There is now room for an additional honorary member to be nominated by the Achievement Awards Committee. **Action: D. Quiring.**

### **Student Awards Committee**

Two new student awards were added to the pre-existing list of three already administered by the Student Awards Committee. The committee helped in establishing the NSERC Biocontrol Network award for best student presentation on biological control and will soon be establishing the John Borden Award. The two newly established awards handled by the Student Awards Committee are the Biological Survey of Canada (BSC) Scholarship and the Student Conference Travel Award.

### **Science Policy Committee**

The Committee is asked to provide feedback on a possible role of the ESC in the Canadian Academies of Sciences and determine if there are opportunities for operational funding from this organization. **Action: P. Dixon.**

The committee is asked to recommend a policy for nominating individuals for external awards and soliciting external funds including advertising. **Action: P. Dixon.**

### Student Affairs

E-mail reminders and notes in the student section of the *Bulletin* have been placed to encourage students to produce web pages on their entomological research for the ESC website. The student committee and student members have started the task of updating the Directory of Entomological Information in Canada.

The Student Affairs Committee will take the lead on raising money for the Scholarships Fund through silent auctions of donated books at annual meetings. **Action: T. Mousseau.**

### Marketing Committee

Order forms for the *Memoirs* have been developed in both languages and will be made available for the webmaster in the near future. **Action: O. Olfert, B. Lyons.**

### Reprinting Editions of the *DVPCC* Book

The Committee is asked to provide cost estimates for scanning and producing PDF-CD versions of the book. **Action: O. Olfert.**

### Annual Meeting Committee

The Fundraising Committee and Hosting Society are asked to consult with each other well in advance of contacting sponsors for Annual Meetings to avoid conflicts. **Action: N. Bostanian, H. Carcamo.**

### Biological Survey of Canada (Terrestrial Arthropods)

Continued contact with Canadian Museum of Nature managers is needed to preserve the strong association of the BSC and the ESC, particularly with regard to H. Danks' retirement in a few years. **Action: R. Lamb.**

## Annual General Meeting, Charlottetown, P.E.I., 17 October 2004

### Standing Rule Addition

Emeritus Members must have been an Active Member of the Entomological Society of Canada for at least 10 years before requesting Emeritus status.

### President's Prize Competition

Financing student awards contested at Annual Meetings will be addressed during the upcoming Strategic Review and involve consultation between the Student Affairs Committee, Finance Committee, Annual Meeting Committee and the Regional Directors. **Action: Strategic Review Committee.**

### Data Repository

N. Holliday expressed a need to make an entomological data repository available for members. This item was identified for action at the meeting of the Governing Board on October 15th and will be addressed in the upcoming strategic review. **Action: Strategic Review Committee.**

## Governing Board Meeting, Charlottetown, P.E.I., 17 October 2004

### Electoral Ballots for 2004

The Board authorized the destruction of the 2004 ballots. **Action: R. Hallett.**

## Minutes of the 54th Annual General Meeting 17 October 2004 Rodd Charlottetown Hotel Charlottetown, P.E.I.

President C. Vincent called the meeting to order at 17:10 PM. Fifty-nine members were present.

1. **Notice of Meeting.** Notices of the meeting were published in the March and June 2004 issues of the *Bulletin* (Vol. 36).
2. **Proxies.** C. Vincent for N. Larocque (SEQ)
3. **Additions to the Agenda and Approval of the Agenda.** P. MacKay moved and D. Giberson seconded that the agenda be accepted. Carried.
4. **Deceased Members of the Entomological Community.** R. West thanked Ed Becker who kindly writes letters of condolence to the families of the deceased on behalf of the Society. Ed Becker was congratulated by President Vincent and warmly applauded by the members present in recognition of his attendance at 45 consecutive meetings of the Society.

A moment of silence was observed in memory of the following members of the Entomological Community who passed away during the past year: Catherine Smith, Virginia Pickett, Paul Wilkinson, Dean Read, Paul Morrison, Tony Musgrave, Mildred Paul, Mary Charles, Doug Peterson, Ray Morris, Iva Roadhouse, Glenn Gilkeson, Ruth Finlayson, Hubert (Mac) MacCarthy, Rajwant (Raj) Sohi, Terence Laverty, Alexandrina (Nina) Townsend, Rosemonde Perron, Ronald Prokopy, Margaret McBride, Ken Graham, Sridhar Polavarapu, Hazel Matthewman, Tony Goodson, Charlie Devlin, Ken Deane, Bill Baldwin, Marion McLintock, Leo Dionne, Chet Neilson, Marion Ives, and Tom Burnett.



Barry Lyons

The Executive of the Entomological Society of Canada for 2004-2005 at the 54th Annual General Meeting of the ESC, 17 October, Charlottetown, P.E.I., from left to right; Rick West (Secretary), Bob Lamb (President), Charles Vincent (Past President), Dan Quiring (First Vice-President) and Peggy Dixon (Second Vice-President).



**4.1 Senior Entomologists Newsletter.** Ed Becker reminded members to keep him informed of any recent deaths in the entomological community. This information is published regularly in the *Senior Entomologists Newsletter*.

**5. Minutes of the 53rd Annual General Meeting.** Minutes of the 53rd Annual General Meeting were printed in the December 2003 issue of the *Bulletin* (Vol. 35) and posted on the web site. C. Lucarotti moved and K. MacKenzie seconded that the minutes be accepted. **Carried.**

**6. Business Arising from the Minutes.** There was no business arising from the previous minutes.

**7. Report from the Governing Board.** President C. Vincent presented a report on behalf of the Governing Board and indicated that a strategic review of the Society's operations with particular respect to technological change will be initiated over the next few months. The report from the Governing Board and regular updates are published in the *Bulletin*. This particular report will be published in the December, 2004 *Bulletin* (Vol. 36).

### **7.1 Changes to Standing Rules.**

P. MacKay moved and F. Sperling seconded that the following changes (noted in italics) to the Standing Rules be approved:

#### I. Membership (By-Laws IV)

##### 4. Emeritus Member

*(a) Emeritus Members must have been an Active Member of the Entomological Society of Canada for at least 10 years before requesting Emeritus status.*

*(b) Emeritus Members shall, upon request, receive the Bulletin of the Entomological Society of Canada for twenty dollars (\$20.00).*

**Carried. Action: R. West, R. Foottit, M. Roy.**

**8. Auditor's Report.** G. Gibson presented the Auditor's Report for 2003 as published in the September 2004 issue of the *Bulletin*. G. Gibson moved and K. MacKenzie seconded that the Auditor's report be accepted. **Carried. No action required.**

**9. Elections Committee Report.** R. West read the Elections Committee report. Those elected were: Peggy Dixon, Second Vice-President; and Rob Roughely, Director-at-Large.

**10. Installation of Officers.** President Vincent called on S. Smith to escort P. Dixon, Second Vice-President, to the dais then congratulated R. Lamb as incoming President of the Entomological Society of Canada. The new President assumed office and thanked the Members for the honour of being elected President.

**11. Presentation of Service Awards.** President Lamb thanked C. Vincent, outgoing President, and Gary Gibson, outgoing Treasurer for their service to the Society and presented them with service awards. President Lamb welcomed P. Bouchard as the new Treasurer.

**12. Appointment of Auditor.** P. Bouchard moved and J. Sweeney seconded that McCay, Duff, and Company be retained as Auditors for 2004. **Carried. Action: P. Bouchard.**

**13. Resolution.** At the request of President Lamb, H. Danks presented the following resolution on behalf of the Entomological Society of Canada:

**13.1 Thanks to Organizing Committee:**

Whereas the Entomological Society of Canada has met jointly with the Acadian Entomological Society at the Rodd Charlottetown Hotel, Charlottetown, P.E.I., October 15-18, 2004; and Whereas there has been a full and interesting meeting of lectures, symposia, and papers; and Whereas the meeting has been planned with care and concern for those attending; and Whereas there has been ample opportunity for social interaction and visits to Charlottetown and surrounding areas;

Be it resolved that the Entomological Society of Canada express its sincere thanks to the Organizing Committee for their hard work and skill in arranging a worthwhile and entertaining program; and

Be it further resolved that the Society thank the Organizing Committee and meeting contributors for their generous assistance; and

Be it further resolved that the Society express its thanks to the Management and Staff of the Rodd Charlottetown Hotel for their courteous assistance during the Meeting."

The resolution was accepted with a round of applause. **Action: R. West**

**14. New Business.**

**14.1 President's Prize Competition.** Hosting societies administer the President's Prize competition for students. The ESC contributed \$400.00 to this year's competition. Financing student awards contested at Annual Meetings will be addressed during the upcoming Strategic Review and involve consultation between the Student Affairs Committee, Finance Committee, Annual Meeting Committee and the Regional Directors. **Action: Strategic Review Committee.**

**14.2 Data Repository.** N. Holliday expressed a need to make an entomological data repository available for members. This item was identified for action at the meeting of the Governing Board on 15 October and will be addressed in the upcoming strategic review. **Action: Strategic Review Committee.** This item is discussed in an article in the current issue of the *Bulletin* (Sept 2004) and members are invited to send their comments and suggestions to President Lamb.

**15. Notice of 55th Annual General Meeting.** The 55th Annual General Meeting will be held 3-5 November 2005 with the Entomological Society of Alberta at the Radisson Hotel in Canmore, Alberta. Further notices for the meeting will be published in the March and June 2005 issues of the *Bulletin* (Vol. 37) and on the ESC web site.

**16. Adjournment.** President Lamb adjourned the 54th Annual General Meeting at 6:00 PM following a motion by J. Shorthouse seconded by B. Broadbent.

## Summary of Committee Reports

By Paul Fields, *Bulletin* Editor

The full report version of the committee reports are available on the Entomological Society of Canada's web site <http://esc-sec.org/>. Committee Chairs and members for 2003-2004 were published in the March *Bulletin* 36(1) 41-42, see page 188-189 for current Committee Chairs and members.

### Treasurer (Gary Gibson and Patrice Bouchard)

The Auditor's Report for the year 2003 was published in the September *Bulletin* 36(3) 134-148. The Society has a sound financial basis overall (small net revenue of \$9 635) although a careful examination of the Society's activities (i.e. strategic review) will be needed to avoid a net deficit in the coming years. The revenue of the Society has been decreasing in recent years caused by ever increasing costs of running societal business, ever decreasing numbers of *The Canadian Entomologist* subscribers and members and, in 2003, significantly less gain on currency exchange because of increased strength of the Canadian dollar relative to the US dollar. The strong Canadian dollar in 2004 will have an even greater impact on revenue. The budget for 2005 shows a net deficit for the year of about \$10 000 taking into account a 1.20 exchange rate. The exchange rate has already surpassed our "worst case scenario" figure. Gary Gibson was replaced as the Treasurer of the Society by Patrice Bouchard at the Annual General Meeting in Charlottetown.

### Finance Committee (Patrice Bouchard, Chair)

The 2003 audit revealed a generally good financial health for the Society although some points should be monitored closely in the near future. The expenditure for 2003 exceeded the revenue of the Society by approximately \$4 000. The only reason why the Society had a positive net revenue for 2003 was because of the interest on investments. If the gap between the expenditure and revenue continue to increase in the future (as it is expected to in 2004), the Society is looking at a possible net expenditure in coming years.

The budget for 2005 indicates a projected decrease in the expenditures (approximately \$7 500 less than in the 2004 budget) for the general operations of the Society, but this is overshadowed by an even greater decrease in receipts (approximately \$22 000 less than in the 2004 budget). This major decrease in receipts, caused in part by the decreasing number of members and subscribers as well as a decrease in revenues from currency exchange on subscriptions, leads to a predicted net deficit for the Society of approximately \$10 000 in 2005. We propose that the Board explore ways to increase revenue in 2005. This could be done by making changes to the membership dues, increasing new membership aggressively, increasing subscription rates or all of the above. Possible ways to increase memberships could be to offer discounts for members who find new members or to ask members to bring promotional information and membership forms to meetings they attend other than the ESC annual meeting. Although unpopular, a raise in the membership costs would be the first one since 1989. We should always keep in mind that the most significant revenue for the Society comes from the institutional subscriptions.

As requested by the Board in 2003, the Finance Committee explored the idea of increasing the amount of page charge waivers from the current 4%. We recommend delaying an increase in page charge waivers until the financial status of the Society is revisited. Also as requested, a letter for the Charities Directorate was drafted in collaboration with the treasurer to find out primarily if scholarships given by the Society could be restricted to Society members. A reply was received in August confirming that scholarships given by the Society could not be restricted to members only as this would eliminate the element of public benefit from the awards program. Another issue raised in 2004 was how to deal with access to multi-site institutional subscriptions for *The Canadian Entomologist*.

Major challenges for next year include finding ways to increase revenue for the Society and the renegotiation of the contract with the NRC (which expires at the end of 2005). The 2004 audit will give an important summary of the current status of the Society's finances - a net expenditure could occur based on current numbers.

### Publications Committee (Allan Carroll, Chair)

1. Together with members of the Executive, significant progress was made on two important issues. First, the problem associated with copyright of the content of papers in *The Canadian Entomologist* prior to 2002 has been addressed through an explicit statement to be placed on the website and a proposed modification to the copyright statement on the inside cover of the journal. Second, pending the renegotiation of the NRC publishing contract, a proposal to modify the format and content of *The Canadian Entomologist* cover was formulated for submission to the Board of Directors.

2. During the year, monthly meetings were held with Richard Ring. Discussions focused primarily on facilitating the Editor-in-chief transition, *The Canadian Entomologist* format changes (see item 1), Divisional Editor vacancies, and the electronic review process. Considerable progress was made on the first three items, but until the new Editor-in-Chief can become established in the position, development of an electronic review process was considered premature. **Action:** Discussions surrounding an electronic review process should continue in 2005.

3. The Publications Committee was charged with producing a copyright and license to publish form for the *Bulletin* similar to the one in use by *The Canadian Entomologist*. Although a draft form has been constructed it has yet to be circulated to the Committee for comments prior to submission to the Executive. **Action:** Finalize copyright and license to publish form for the *Bulletin*.

4. The Executive requested that the Publications Committee develop a "conditions of use" document to ensure proper acknowledgment by users of electronic materials from the ESC website. Development of this document was delayed in 2004 due to the efforts required in item 1. **Action:** Prepare conditions of use statement for downloaded documents and photos from the ESC website.

5. In terms of renegotiation of the NRC contract, the Publications Committee has made contributions on relevant issues as requested throughout 2004 in support of this effort and will continue to do so until the contract is finalized. In addition, as outlined in item 1 a proposed modified format for *The Canadian Entomologist* has been constructed and awaits the Board's input.

Book reviews: Ten books were received for review during 2004, and seven reviews have been published in the first three issues of Volume 36 of the *Bulletin*. Copies of the *Bulletin* have been sent to all publishing houses whose books were reviewed in that volume.

### Scientific Editor (Richard Ring)

**Submissions:** The number of submissions to date (30 September 2004) is 91, roughly the same as last year (2003). This is an average of about ten per month, again the same as in 2003. There have been no delays in the publication of the five issues of *The Canadian Entomologist* so far, thanks due to the "backlog" of papers from the former Editor-in-Chief. The *The Canadian Entomologist* operates as one of the few remaining general journals of entomology in the world. It thus has a general audience and readership. The majority of the manuscripts still originate in Canada (52%), followed by the United States of America (23%), Europe (11%), Asia (9%) and Latin America (4%).

**Divisions:** The distribution in subject area of submissions is still heavily weighted to Ecology (Division 4, 38%) and Systematics (Division 2, 27%), with the balance being in IPM (Division 5, 11%), Physiology and Genetics (Division 3, 8%), Techniques (Division 6, 5%) and Forum (Division 7, 1%). This topic will come up for discussion during the meeting of the Editorial Board at the JAM in Charlottetown, 17 October 2004. Do we have to change our Divisions? Do we have to encourage submissions of manuscripts from the other areas?

**Assessment:** Again the scenario so far is almost the same as 2003, with 20% being deemed suitable and 22% unsuitable. The remainder (58%) is in the mill i.e. returned to the authors for re-submission, major revisions or minor revisions.

**Handling Costs:** These can't yet be accounted for, but seems to be the same (or even less) than last year.

**Electronic Reviewing:** This remains a contentious issue, and will be discussed and debated further at the Editorial Board meeting, 17 October 2004.

### **Bulletin Editor (Paul Fields)**

The *Bulletin* is now being printed in Winnipeg at BW Imaging and mailed using the cheaper, but slower, Publication Mailing. With these changes, I estimate that the cost of the *Bulletin* for 2004 will be approximately \$11 000, compared with \$17 710, \$20 487 and \$18 891 for 2001, 2002 and 2003 respectively. The cost per page in 2004 is about \$50/page.

Finally, I would like to welcome Lucie Royer aboard as Assistant Editor. Initially, she will be helping me by handling the obituaries. She has done a great job of copy editing the last three issues. Andrew Bennett has started off a new column, entitled *Moth Balls*, that will cover issues of interest in taxonomy.

### **Web Site (Barry Lyons, Webmaster)**

The various sections of the web page were described: Main Page, Member Area, Membership, Executive, Committee, Affiliated Societies, Student Affairs, Annual Meetings, Publications, Insect Photos, Common Names, Entomology Links and Entomology Events. These pages were updated with new publications, executive and committee members as well meeting announcements. The French language pages of the website continue to be neglected when upgrades are made. The several new items of note on the web page are detailed below.

**Main Page:** The awards section was updated for 2004, but relevant biographical links are missing. This will be corrected in the near future. A complete listing of the Honorary Members and Fellows of the Entomological Society of Canada has been linked to the homepage.

**Member Area:** The password-protected area currently contains the following new sections: By-Laws/ Standing Rules/ Committee Guidelines, Minutes of Meetings (Governing Board and Annual Meeting Minutes for 2003), Committee and Trustee Reports (report for 2003) and Board Members (introductory notes for new members). The French language version currently only links to an English language menu.

**Student Affairs:** This module contains: 1) Student Members of the Society (revised for 2004 but only contains profiles for 12 students); 2) Directory of Entomological Education in Canada (4th edition, revised October 2002); and current applications and descriptions of the ESC awards (2004 versions). New additions for 2004 include The Biological Survey of Canada Award and the Entomological Society Student Conference Travel Awards.

**Insect Photos:** The gallery currently contains the works of six photographers, although additional photographs by H. Goulet and D. Giberson still need to be processed for display. The photographs are displayed as simulated slides that, when clicked by the mouse, expand to large format images. Creating the appropriate sized images is labour-intensive process. H. Goulet's collection alone consists of several hundred images. The French version of this module needs to be updated to include the D. Giberson image gallery.

### **Nominations Committee (Sandy Smith, Chair)**

Peggy Dixon and David Langor were nominated as Second Vice-President. Robert Roughely and Michèle Roy were nominated as Director-at-Large.

### **Elections Committee (Rebecca Hallet, Chair)**

Peggy Dixon was elected as Second Vice-President and Robert Roughley was elected as Director-at-Large.

### **Achievement Awards Committee (Bob Lamb, Chair)**

The 2004 ESC award winners are: 1) ESC Gold medal, Judy Meyers; 2) Hewitt Award, not given; 3) Fellow of the ESC, Imre Otvos; 4) Criddle Award, Henry Hensel.

**Gold Medal, Hewitt and Fellowship Awards:** Two nominations for the Gold Medal, one nomination for the Hewitt, and one nomination for a Fellow were received. Unfortunately the Hewitt nominee was 10 months too old, and the nomination was withdrawn in consultation with the nominators. No Hewitt Award will be presented in 2004.

**Review of Hewitt Award guidelines:** I reviewed the guidelines, and conclude that they are clear as they stand. The important issue remains to assure that nominators read and understand the guidelines, probably by stating those guidelines more clearly in the Award Announcement. Changing the age criterion would probably not prevent nominees occasionally being rejected because they are too old.

**Award Information on the Website:** The President requested that the Committee work with Barry Lyons (Webmaster) to assure that information on ESC Awards appear on the website. Barry Lyons anticipated this request and is announcing the Award Winners and providing images of the awards ceremony on the Website. The lists of Fellows and Honorary Members and past Award Winners has been added to the site. The Committee recommends that as part of the Awards page or pages, readers be directed to the Award guidelines in the Standing Rules and Committee Guidelines

### **Bilingualism Committee (Michèle Roy, Chair)**

Hélène Chiasson was assigned to look at the Web site in order to make sure that it is as bilingual as possible. Three documents would need to be translated, i.e. Butterfly Workshop, ESC Awards: Previous Award Recipients and Scientific Policy and Education.

Finally our biggest task was to make sure that the Entomological Society of Canada Standing Rules (2003) and the Committee guidelines were translated into French. The difficulty was to find a qualified and interested person to accomplish the work, but we have finally found someone, Serge Gagné. These should be presented at the ESC meeting in Charlottetown.

In the coming year we will try to get two more volunteers to help us out. We will continue to provide our help to translate the ESC documents, and we will put more emphasis in the Bilingualism of our Web site.

### **Bylaws, Standing Rules and Committee Guidelines Committee (Bob Footitt, Chair)**

This committee was asked to review the Hewitt Award guidelines to "more clearly indicate the age eligibility requirement". The committee is of the opinion that the guidelines are quite clear, having been made more clear in the past, after an incident of confusion by proponents over the age requirement. Rather than change wording, this committee is of the opinion that future chairs of the Achievement Awards Committee should monitor very closely the recommendations of award proponents and their accuracy with respect to the calculation of the age requirement.

This committee, along with the Membership Committee, has reviewed a draft set of changes to the Standing Rules to accommodate proposed changes to the benefits received by Honorary Members. These changes can be approved by the membership at the 2004 Annual General Meeting.

### **Heritage Committee (Cedric Gillott, Chair)**

The following actions have been taken: A copy of the Program for the Joint meeting of the ESC and ESBC, held in Kelowna, November 2003, was sent to the National Archives of Canada in July 2004.



The Heritage Lecture, given by Richard Ring at the Kelowna meeting, was published in the March 2004 ESC *Bulletin*. A short biography commemorating the retirement of Bob Randell (University of Saskatchewan) has been prepared by Cedric Gillott for publication in the *Bulletin*. Obituary notices for Leo Dionne (Fredericton) and Charlie Devlin (Saskatoon) have been submitted by Doug Eid and Cedric Gillott, respectively, to the *Bulletin*. At the suggestion of Paul Fields (*Bulletin* Editor), articles on previous editors of *The Canadian Entomologist* and *Bulletin* will be prepared for publication in the *Bulletin*. Cedric Gillott has agreed to assist with those for former editors of *The Canadian Entomologist*, perhaps in cooperation with other members of the Heritage Committee.

### **Insect Common Names Committee (Chris Buddle, Chair)**

The first key task for the committee is to ensure the validity of all the scientific names on the current list of Insect Common Names. As anticipated, this is a large task, and has taken some time to initiate. However, we have communicated closely with the Biological Survey of Canada (terrestrial arthropods), and thanks to Terry Wheeler, and to other members of the Biological Survey, we have identified the taxonomic experts to consult for validation of scientific names. To date, experts for the following orders have been contacted and/or been sent the scientific names for validation: Lepidoptera, Diptera, Thysanoptera, Psocoptera, Acari, Araneae, Mallophaga, Anoplura, Siphonaptera and Collembola. We have received positive feedback from taxonomists and anticipate completing the validation process by the end of the calendar year.

Additionally, the committee has handled various corrections to the common names list, and handled requests from the Translation Bureau (Public Works and Government Services of Canada) in Ottawa about clarification for various French common names. The committee has also gained approval for the addition of 25 common names for Arachnids. This bulk proposal was forwarded by C. Buddle, and D. Buckle and R. Bennett were consulted as external experts for these requests. These common names were adapted from, or taken directly from, the American Arachnological Society's common names list for Arachnids. More requests for common names for Arachnids are forthcoming.

The projected activities for the Insect Common Names committee have not changed dramatically since the last report, and this is because the large task of verifying the scientific names is taking precedence. The future plans, and tentative deadlines, for the Insect Common Names committee are as follows:

1. Complete task of verifying scientific names (projected completion time of December 2004),
2. Update and correct the entire common names list and upload to ESC website after verifying scientific names, including new additions from 2004 (i.e., the hoary squash bee, and 25 arachnid common names); expected early in 2005,
3. Begin working on French common names (i.e., for species with only an English common name),
4. Discuss plans to update and modify common names web-site, to make the list more available, accessible, and more user-friendly,
5. Ensure all relevant forms for requesting common names be updated to the ESC web-site,
6. Continue to field requests for common names.

### **Membership Committee (Jon Sweeney)**

**Membership Trend.** The number of renewals as of 28 September 2004 is 44 (about 8%) fewer than the total membership recorded in October 2003. This is disappointing, as membership had leveled off last year after two years of decline. Except for a peak of 591 members in 2000, largely as a result of the joint annual meeting with the ESA in Montreal, membership has been on a downward trend. Sandy Devine noticed fewer ESC members among student scholarship applicants this year, as membership is no longer a requirement.

Year	Regular	Student	Emeritus	Total
1997	404	79	70	553
1998	396	76	76	548
1999	382	72	72	526
2000	400	114	77	591
2001	386	98	82	566
2002	364	90	65	519
2003	357	87	74	518
2004*	330	68	77	475

\* as of September 28

**Benefits to Honorary Members:** Last fall the Membership Committee reviewed the benefits of ESC Honorary Members and recommended they be awarded the full benefits of Active Membership. The Committee also felt that Emeritus Members must be regular members for at least 10 years before being eligible to request Emeritus status, and that the rules/by-laws regarding Fellows should remain unchanged. An amendment to the Standing Rules concerning membership was drafted and sent to the ESC Executive and the By-Laws Committee for review.

**Amateur Entomologists:** The committee had several suggestions as to how the ESC might encourage more involvement of amateur entomologists, as follows. 1) Create a special category of membership for amateurs at a much reduced rate, for which they would receive the *Bulletin*, but not *The Canadian Entomologist*. The ESO currently has free membership for amateurs and they are not swamped with applications, nor is the system abused. 2) Encourage amateur participation at Annual Meetings by suggesting that they include more things of interest to amateurs and naturalists, e.g., an insect photo contest and/or a slide show by a prominent insect photographer, and also offer free or reduced registration for access to presentations and posters only. The number of free passes could be limited to control costs, and if an amateur wished to attend the banquet, he or she would be required to pay an additional fee. Ultimately, the hosting Regional Society would decide whether or not, or how to implement any of the suggestions involving the Annual Meeting.

**Soliciting members from Regional Societies:** The questionnaire that was sent to ESC members last year, has been sent to members of the ESO and AES who are not currently members of the ESC. We plan to do the same with members of the SEQ, ESA, ESS, ESBC and ESM later this fall. These people will receive a cover letter from Charles Vincent that lists some of the benefits of membership, invites them to visit the website to learn more about the ESC, and asks them to fill out the questionnaire to let us know how the ESC might serve them better. The responses to the questionnaire will be tallied and reported in 2005.

### Science Policy and Education Committee (Dan Quiring, Chair)

Each regional Society has the right to request \$200 per year for Public Education, or to 'save-up' and request \$600 every three years. During the past year Entomological Societies of Saskatchewan, Manitoba, Ontario, and the Acadian Entomological Society received between \$200 and \$600.

The only major policy issue that emerged during the year, which concerned the appropriateness of advertising in the *Bulletin*, was raised and addressed at the spring meeting of the Executive. This issue could, however, be revisited by the committee during the next year. The committee may also wish to consider: whether our Society should nominate someone for the Gerhard Herzberg Canada Gold Medal for Science and Engineering; and the role of the ESC in the "Canadian Academies of Science"

that was mentioned in the recent federal throne speech.

### **Student Affairs Committee (Tonya Mousseau, Chair)**

At this time (21 September 2004), there are 63 students enrolled in the ESC, however, only 12 have produced a webpage of their entomological research for the ESC website. It is unfortunate that more student members do not take advantage of the webpage. E-mail reminders and notes in the student section of the *Bulletin* have been placed in the hopes to get students motivated to produce a page.

With the suggestion from Paul Fields, the student committee and student members have started the task of updating the Directory of Entomological Information in Canada. Many of the provinces are now completed, and our goal is to finish the entire directory by January 2005 to be posted on the website.

### **Student Awards Committee (Rose De Clerck-Floate, Chair)**

Details of the award and the award winners were published in the *Bulletin* and on the website. The following awards were made in 2004:

Award	Number Submitted	Amount (\$)	University	Recipient(s)
Postgraduate Scholarship	9	2000	Guelph	Heather Mattila (PhD)
		2000	UNB	Marilynn Kullman (MSc)
Graduate Research Travel	6	1750	Guelph	Heather Mattila (PhD)
		2000	UBC	Katsky Venter (MSc)
Student Conference Travel	8	500	McGill	Hirondelle Varady-Szabo (MSc)
		500	McGill	Jean-Philippe Lessard (BSc)
Biological Survey of Canada	5	1000	Victoria	Zoë Lindo (PhD)

This year we have added two new student awards to the pre-existing list of three already administered by the Student Awards Committee, helped in establishing the NSERC Biocontrol Network award for best student presentation on biological control (i.e. by placing appropriate people in contact; this award is being administered by the meeting organizing committees of 2004 and 2005), and will soon be establishing the John Borden Award (name and details to still be worked out).

Changes in the guidelines/eligibility for the Postgraduate Scholarship were made in fall 2003 to meet the conditions of Revenue Canada. The award was officially called a "scholarship" and is no longer restricted to ESC student members. Any student enrolled at a Canadian university and who conducts research leading to a post-graduate degree in entomology is eligible to apply. The Student Awards Committee also will try to award annually one of the two amounts of \$2000 to a PhD student and the second to an MSc student, because of the difficulties of assessing the academic standings of the two groups together.

There are some issues yet to be worked out by the Student Awards Committee in terms of logistics of award application review, and particularly, in the timing of awards. For instance, three of the annually-posted awards now have deadlines in June/July (Postgraduate, Student Conference Travel Award, and Keith Kevan /Biological Survey of Canada Scholarship), and if it is true that the Keith Kevan Scholarship may now be offered annually versus every second year alternating with the Biological Survey of Canada Scholarship, this will produce a glut of award applications during a busy time of year for field-based/meeting-going entomologists who volunteer to serve on our review committees. It may be best to have the same deadline (i.e., 16 June or there-about) for all of the awards with summer deadlines in order to make the work as condensed as possible for reviewers, students and their

supervisors (Note that tying the application deadline for the Student Conference Travel Award to the deadline for meeting paper abstracts, was confusing this year). The new John Borden Scholarship perhaps would be best served with an application deadline at the same time as the Graduate Research-Travel Scholarship (i.e. mid-February) for the same reason.

Whatever is worked out, the feeling is that we may have reached a limit on the number of awards to be offered unless further committees are established to deal with future awards, and unless these awards are distinctly different from those that are already in place. Another suggestion for additional funds that come available for student awards is to simply increase the amounts of those already in existence. However, having said this, based on the relatively large and widely distributed response of students to the student awards this year, and the excellent calibre of some of the award applicants, it is apparent that the intent of the awards is reaching home. We have done well in fostering entomology among our youth.

### **Annual Meeting Committee (Terry Shore, Chair)**

A number of revisions were made to the guidelines for Organization of the Annual Meeting of the Entomological Society of Canada and the most recent version was provided to the Secretary, the upcoming annual meeting chair and posted on the website. The sequence and status of upcoming meetings is firming up as follows:

2005: Alberta (contact: John Acorn), Canmore AB, Radisson 3-5 November, 2005

2006: Quebec (contact: Nancy Larocque), location to be identified

2007: ESS (contact: Jack Gray)

2008: Ontario? Their turn, but no invitation yet.

2009: Manitoba? Their turn, but no invitation yet.

Through discussion with Syncroscopy, a five year sponsorship arrangement has been made between the company and the ESC for \$2000 US per year towards support of the annual meetings.

One area that requires some attention is a need to resolve conflicts between the ESC Fundraising Committee and the Joint Annual Meeting Fundraising Committee. Instances have occurred where the Regional Society is unable to get sponsorship funds for the JAM because the ESC Fundraising Committee has already solicited potential sponsors. Either the ESC Fundraising Committee should only be allowed to solicit companies that are not on the list of the JAM (but they could still cause problems for subsequent years JAM), or they should do the solicitation and make a contribution to the JAM. Another possible solution may be to line up a group of permanent sponsors such as we have with Syncroscopy that have a long term contract with ESC to contribute funds to the JAM in exchange for promotion of their products. This would provide stability in sponsorship to the JAM, and reduce the solicitation effort of the Regional Societies.

### **Marketing Committee (Owen Olfert, Chair)**

The PowerPoint presentations (both official languages) on *Benefits of Membership in the ESC* has been in circulation for the past year. The committee would like to encourage society members to contact the Marketing Committee with any suggestions for improvement or updates that may be required.

Once again, the Marketing Committee would like to remind ESC Board members that our Society can be advertised for free in various links on the web. If you are aware of entomological web sites which do not include a link to ESC, we suggest you either notify the Marketing Committee, or send our ESC web address directly to their webmaster. In all cases that we've dealt with, they are happy to add new addresses to their lists.

In our spring report, we presented an update from Karen Bailey (Canadian Phytopathological Society, Information Products Marketing Committee) that a quote was obtained from St. Joseph's printing Company (M.O.M printing) for 500 copies of *Diseases and Pests of Vegetable Crops in*

Canada French edition (MRCLC) soft cover. The cost of printing was estimated to be \$80.91 per book. Presently the current stock of the French edition has all but run out, while there are still approximately 650 copies of the English edition. The French edition has been a relatively big seller so we are asking the ESC Board for direction regarding the continued printing and sale of this edition. As an alternative, we may explore how to make the English version more attractive to the French-reading population, for example, having a list of the photo descriptions in French available may help sell a few more books. Our committee encourages all society members to actively market the English version whenever possible. For example, they can include sales information in letters that are sent out to extension services or make flyers available at country/county fairs, garden clubs, etc. We also suggest advertising the book in the *Bulletin* - whole page or page + order form.

We have updated the list of ESC *Memoirs* to include information on availability and price. Order forms have been developed in both languages and will be made available for the web master in the near future.

### **Fund Raising Committee (Noubar Bostanian, Chair)**

In 2003/2004 we managed to raise \$ 4720 for the Student Scholarship Fund (travel money to ESC meetings). This was done by sending letters describing what entomologists do and their role in the Canadian society. The letters were sent to multinational pesticide companies, laboratory and field equipment suppliers, software and microscope manufacturers, small consulting firms etc... A few that we contacted never bothered to answer us, while others claimed they had no funds for us. The following companies in descending order contributed to the \$ 4720. Dupont Canada > Bayer Canada > BASF Canada > Syngenta > Agcord Inc.= Co-Lab R & D = Distributions Solida >Inrex. We have to aggressively advertise the role of entomologists to the people we do business with if more money is to be collected.

### **Biological Survey of Canada (Hugh Danks, BSC Secretariat)**

The large cooperative project on grasslands is proceeding with several activities, including completion and editing of chapters for a book on grassland habitats. Among other Biological Survey of Canada (BSC) projects, those on forest arthropods, insects of Newfoundland and Labrador, and invasions and reductions in the Canadian insect fauna are under particularly active development.

Day-to-day coordination and information exchange continues through the Secretariat, including the production of newsletters, information leaflets and other documents, as well as site visits. French-language versions of briefs relevant to collections were widely distributed. Extensive information about the BSC on the Internet continues to be updated and expanded: <http://www.biology.ualberta.ca/bsc/bschome.htm> [English], and <http://www.biology.ualberta.ca/bsc/cbchome.htm> [French]

The recent review by the BSC of its activities, and recommendations for succession when the current head of the secretariat retires, were transmitted to the Canadian Museum of Nature, which is responding by consulting widely with professional societies, government representatives and others.

#### **ESC linkages**

**BSC Award:** The BSC student award to be given every two years by the ESC has been fully capitalized through donations from a Trust Fund controlled by H.V. Danks, ensuring that funds will be available for the 2006 award and all future awards. Individual donations, chiefly from past and present members of the BSC's Scientific Committee, have also been received and will help to fund the first (2004) award. The award will encourage interest in the study of faunistics in Canadian habitats by providing further support to students working on the biodiversity of insects or other terrestrial arthropods in Canada.

**BSC Annual Report:** The BSC annual report for 2004 was submitted to the Canadian Museum of Nature through the ESC President.

**BSC meetings in conjunction with ESC meetings:** Holding the fall 2003 meeting of the BSC Committee immediately following the ESC/ESBC meeting in Kelowna was successful. This concept was therefore continued: the fall 2004 meeting of the Committee will take place immediately after the ESC/AES meeting in Charlottetown.

**BSC symposia at ESC annual meetings:** The 2004 Joint Annual Meeting includes a symposium about the BSC's arctic project. Further Survey symposia are planned for the 2005 and 2006 JAMs, and contacts have been made or will be made with the meeting organizers.

**Information for ESC members:** An account of BSC activities is published each March and September in the *Bulletin*. (A more detailed report appears in the BSC Newsletter, available on line at <http://www.biology.ualberta.ca/bsc/english/newsletters.htm#arthropods>).

### **Affiliated Societies (Regional Directors)**

The Regional Directors described the meetings of the Regional Societies. The members of the Executives of the Regional Societies are found on the inside cover of the *Bulletin*.

**Entomological Society of British Columbia:** The Society lost two of its elder statesmen this year, H.R. "Mac" MacCarthy and Ken Graham.

**Entomological Society of Alberta:** The Society remains in sound financial shape, with approximately 150 members. The society has completely overhauled our Bylaws and Rules and Regulations; revisions will be presented and (hopefully!) adopted at our AGM later this month.

**Entomological Society of Saskatchewan:** Members volunteered at the Saskatoon Prairieland Exhibition Corp. Gardenscape "Little Green Thumbs School Tour Program", and at the ESS trade booth from 25 - 28 March 2004. Displays included live and pinned insects, posters and a video ("Discover Entomology"). The Entomological Society of Saskatchewan recently lost two long-time members, Glenn Gilkeson and Charlton Devlin, both retired entomology technicians at AAFC in Saskatoon.

**Entomological Society of Manitoba:** The membership has now stabilized at between 105 and 110 after two years of ongoing review and updating to remove individuals who have moved away or otherwise dropped their involvement with entomology. The ESM continues planning for the 2007 meeting of the North Central Branch of the Entomological Society of America (NCB-ESA). ESM expects to hold the meeting in late March, as is traditional for NCB-ESA, and as a joint meeting of the ESM and NCB-ESA.

The Youth Encouragement and Public Education Committee has been very active, as usual. Since the report of the Regional Director last October, the graduate students of the Department of Entomology at U. of M., who make up the majority of the committee, have made six presentations to elementary school classes and they and other members have made a similar number to other interested groups. They have also provided a workshop on pest insect collection and identification for Assiniboine Community College; supervised several stations for the Manitoba Envirothon; organized an all-day event called Insect Day at a local Nature Centre; and participated in the Amazing Grains program which exposed over 1200 school children to agricultural issues including entomology.

In early June, a two day BioBlitz was held at Aweme, the Criddle/Vane Family Homestead, which was the home of Norman Criddle and the site of much of his entomological work. Several members of the Entomological Society of Manitoba participated, along with many others, including visitors from as far away as South Dakota and Alberta. Later in the summer the Homestead was dedicated as a Heritage Provincial Park.

**Entomological Society of Ontario:** The ESO continues to be in sound financial shape, and membership numbers have been steadily increasing. There are currently 257 members, including 127 regular members, 91 students, 21 retired, 11 amateur and 6 fellows. Volume 134 of the *Journal of the Entomological Society of Ontario* is about to be mailed, and manuscripts are being accepted for Volume



135.

**Acadian Entomological Society:** The executive of the AES rotates between the four Atlantic provinces and the state of Maine, to ensure representation of the whole region. The current Executive of the Society is from New Brunswick. The lack of a permanent address for the society can, however, make it difficult for AES and ESC members to remain in contact, and the membership has dwindled in recent years. A recent membership drive has resulted in a number of new members. The AES has tried to improve its accessibility in recent years by developing a web page, but that website has moved a couple of times to accommodate different webmasters, and was less than ideal. In the past year, Rick West has taken over as Society Webmaster, and he redesigned and updated the site, which is now the permanent link of the Society. The new site has received a number of favourable comments, and is growing to be a positive link among entomologists in the region, as well as a site for non-entomologists to obtain information about entomology in the Atlantic region.

A major initiative of the Society in the past year has been to develop an on-line journal, and it is currently accepting papers, with the first issue planned for December 2004. Papers will be peer-reviewed and posted as soon as the review process is complete, and there are no page charges. Don Ostaff is Editor-in-Chief, and there are 5 associate editors, covering the fields of Integrated Pest Management and Pathology; Systematics, Morphology, and Evolution; Ecology and Behavior Agriculture; Forestry, and Chemical Ecology, Physiology, Biochemistry. The web address for the journal is: <http://www.acadianes.org/journal.html>.

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## Request for Applications in Systematics and Biodiversity Research

The Nature Discovery Fund (NDF), administered by the Canadian Museum of Nature, invites applications for funding in support of "discovering and naming Canada's insect biodiversity". Established in December of 1998, NDF is a non-profit fund seeking to provide resources to recognized entomologists in support of field-based scientific exploration and research in systematics within Canada. The NDF is financed through individual donations in support of Biodiversity research.

Projects which will document the fauna by field work in previously unexplored or poorly explored areas or habitats are preferred. Support is also available for the completion and publication of already existing projects with a similar focus, but for which additional field work is not necessary. Recipients of NDF financing will be encouraged to support the continuation of the program by recognizing NDF donors in the naming of newly discovered species.

All applications will be assessed by a review panel composed of three Canadian systematists. Various levels of funding are possible (generally \$500-3000), but the number and level of awards are contingent upon resources available within the Fund.

Deadline for receipt of applications is 31 January 2005. Results will be made known to applicants by 1 April 2005.

Application materials and more information can be obtained from:

Robert Anderson,  
Canadian Museum of Nature,  
P.O. Box 3443, Station D  
Ottawa, ON K1P 6P4,  
Telephone: (613) 364-4060  
e-mail: [randerson@mus-nature.ca](mailto:randerson@mus-nature.ca)

## **Bulletin of the Entomological Society of Canada**

Editor: Paul Fields  
Assitant Editor: Lucie Royer

The *Bulletin of the Entomological Society of Canada*, published since 1969, presents quarterly entomological news, opportunities and information, details of Society business, matters of wider scientific importance and book reviews.

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<http://esc-sec.org>  
[entsoc.can@bellnet.ca](mailto:entsoc.can@bellnet.ca)

The Entomological Society of Canada was founded in 1863 primarily to study, advance and promote entomology. It supports entomology through publications, meetings, advocacy and other activities.

Send correspondence to:  
Paul Fields  
*Bulletin* Editor  
Cereal Research Centre  
195 Dafoe Road  
Winnipeg, MB, Canada R3T 2M9  
Telephone: (204) 983-1468  
Fax: (204) 983-4604  
E-mail: [pfields@agr.gc.ca](mailto:pfields@agr.gc.ca)

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## **Bulletin de la Société d'entomologie du Canada**

Rédacteur : Paul Fields  
Rédactrice adjointe : Lucie Royer

Le *Bulletin de la Société d'entomologie du Canada*, publié depuis 1969, présente trimestriellement des informations entomologiques, des occasions, des renseignements sur les opérations de la Société, des dossiers scientifiques d'importance et des analyses d'ouvrages.

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<http://esc-sec.org>  
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La Société d'entomologie du Canada a été établie en 1863 principalement pour promouvoir l'étude et l'avancement de l'entomologie. Elle soutient l'entomologie par l'entremise de publications, de réunions et d'autres activités.

Envoyer vos soumissions à :  
Paul Fields  
Rédacteur du *Bulletin*  
Centre de recherche sur les céréales  
195, chemin Dafoe  
Winnipeg, MB, Canada R3T 2M9  
Téléphone : (204) 983-1468  
Télécopieur : (204) 983-4604  
courriel: [pfields@agr.gc.ca](mailto:pfields@agr.gc.ca)

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prochain numéro :  
31 janvier 2005**



December 2018

It is with great regret that I announce the disbandment of the Entomological Society of Canada, 155 years after its inception. With the steady decline in the membership beginning at the turn of the century, coupled with the loss in revenue with the advent of electronic publishing, the society was forced to sell *The Canadian Entomologist* to NRC Research Press in 2011. Although the Society had tried to maintain the journal by liquidating the Endowment Fund, and selling the headquarters, it was to no avail.

With the decline in revenues and assets, the Society was unable to give the numerous awards and scholarships that it had in the past; two Post-graduate Awards (\$2000), two Research-travel Scholarships (\$2000), Student Conference Travel Awards (\$500), along with several specialized scholarships and the youth encouragement grants to the Regional Societies. The last meeting of the ESC was held in 2015.

The above may seem far fetched, but if the decline in membership is not reversed, the Entomological Society of Canada will cease to exist. If current trends continue, by 2018 there will be only 200 regular ESC members, about the size of some of the Regional Societies. So if you are reading this and aren't a member of the ESC, and your principle professional activity is dealing with insects, then I invite you to join the ESC. The membership application form is found on page 167 of this issue. For about \$90 in annual membership dues, you receive two excellent publications, this one and *The Canadian Entomologist*. Also you will belong to an organization that is the prime vehicle to promote entomology in Canada.

décembre 2018

C'est avec grand regret que j'annonce la dissolution de la Société d'entomologie du Canada (SEC), 155 ans après sa création. Vu le déclin lent, mais constant, de ses effectifs, jumelé avec la perte de revenus due à la publication électronique, la SEC n'avait pas de choix, et il a vendu *The Canadian Entomologist* aux Presses scientifiques du CNRS en 2011. Avant de vendre, la Société avait liquidé l'argent du Fonds de Fondation et vendu le siège social, mais en vain.

Sans le Fonds de Fondation et ses autres biens, la SEC n'était plus en mesure de décerner les prix et les bourses comme autrefois; deux bourses pour étudiants post-gradués (2000 \$), deux subventions de recherche-voyage (2000 \$), bourse étudiante de voyage pour assister à la réunion annuelle de la SEC (500 \$); ni les prix spécialisés ou les octrois aux sociétés régionales. Le dernier congrès de la SEC a eu lieu en l'an 2015.

Ce qui précède peut paraître fantaisiste, mais si le déclin de nos effectifs n'est pas arrêté, la SEC cessera d'exister. Si la tendance à la baisse continue comme présentement, en 2018, il y aura seulement 200 membres réguliers de la SEC, pas plus que certaines sociétés régionales. Alors, si vous lisez ce message, et vous n'êtes pas membre de la SEC, mais votre principal intérêt professionnel est l'étude des insectes, je vous invite à vous joindre à la SEC. Le formulaire d'adhésion se trouve à la page 167 de ce numéro. Pour environ 90 \$ de cotisation, vous recevrez deux excellentes publications, celle-ci et *The Canadian Entomologist*. Aussi, vous serez membre d'une organisation qui est le principal moyen de promouvoir l'entomologie au Canada.

**Officers of Affiliated Societies, 2004-2005**  
**Dirigeants des sociétés associées, 2004-2005**

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**Entomological Society of British Columbia**

President Dave Raworth  
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Editor (Journal) Ward Strong  
Editor (*Boreus*) Cris Guppy  
Sec.-Treasurer Robb Bennett  
B.C. Ministry of Forests, 7380 Puckle Rd.  
Saanichton, BC V8M 1W4  
Tel: (250) 652-6593, Fax: (250) 652-4204  
E-mail: [robb.bennett@gems6.gov.bc.ca](mailto:robb.bennett@gems6.gov.bc.ca)  
<http://www.harbour.com/commorgs/ESBC/>

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9th Floor, 9920 108 St.  
Edmonton, AB T8C 1C6  
E-mail: [undershultz@gov.ab.ca](mailto:undershultz@gov.ab.ca)  
Tel: (780) 422-1508  
<http://www.biology.ualberta.ca/courses.hp/esa/esa.htm>

**Entomological Society of Saskatchewan**

President Jack Gray  
President-Elect Philip Curry  
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Newsletter Editor Brian Galka  
Secretary Larry Grenkow  
Agriculture and Agri-Food Canada  
107 Science Place, Saskatoon, SK S7N 0X7  
Tel: (306) 956-7293  
E-mail: [grenkow1@agr.gc.ca](mailto:grenkow1@agr.gc.ca)  
<http://www.usask.ca/biology/ess/>

*Editor's note: Society Directors and Officers are reminded to check these lists, and submit corrections, including the names and positions of new officers.*

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Member-at-Large Manhood Iranpour  
Secretary Noel White  
Agriculture and Agri-Food Canada  
195 Dafoe Rd., Winnipeg, MB R3T 2M9  
Tel: (204) 983-1452, Fax: (204) 983-4604  
E-mail: [nwhite@agr.gc.ca](mailto:nwhite@agr.gc.ca)  
<http://home.cc.umanitoba.ca/esm/>

**Entomological Society of Ontario**

President Jim Corrigan  
President-Elect Fiona Hunter  
Past-President Bruce Gill  
Treasurer Blair Helson  
Editor (Journal) Yves Prévost  
Secretary David Hunt  
Agriculture and Agri-Food Canada  
2585 Country Rd. 20, Harrow, ON N0R 1G0  
Tel: (519) 738-2251 ext 427  
E-mail: [HuntD@agr.gc.ca](mailto:HuntD@agr.gc.ca)  
<http://www.entsocont.com>

**Société d'entomologie du Québec**

Président Jacques Brodeur  
Président-sortant Michel Cusson  
Vice-président Eric Lucas  
Trésorier Nancy Larocque  
Rédacteur (*Antennae*) Christine Jean  
Secrétaire Mireille Marcotte  
1055, rue du PEPS, C.P. 3800  
Sainte-Foy, QC G1V 4C7  
Tél. : (418) 648-4928, Fax : (418) 648-5849  
E-mail: [secretariat@seq.qc.ca](mailto:secretariat@seq.qc.ca)  
<http://www.seq.qc.ca/>

**Acadian Entomological Society**

President John Sweeney  
Vice-President Reginald Webster  
Treasurer Don Ostaff  
Secretary Don Ostaff  
Natural Resources Canada  
P.O. Box 4000  
Fredericton, NB E3B 5P7  
Tel: (506) 452-3579  
E-mail: [dostaff@nrcan.gc.ca](mailto:dostaff@nrcan.gc.ca)  
<http://www.acadianes.org/index.html>

Illustrated on the front cover is the life cycle of the northern house mosquito, *Culex pipiens*. Mosquitoes have always been a topic of conversation in Canada, but with the advent of the West Nile Virus, mosquitoes have been even more prevalent in discussions. *Culex pipiens* is a major vector of both St. Louis equine encephalitis and West Nile Virus in central and eastern North America. Drawing by B. Flahey. Reproduced with permission from Department of National Defence, Canada.

La page couverture illustre le cycle biologique du moustique domestique boréal, *Culex pipiens*. Les moustiques ont toujours fait l'objet de discussions au Canada, mais encore plus depuis l'apparition du virus du Nil occidental. *Culex pipiens* est un vecteur important de l'encéphalite équine de Saint-Louis et du virus du Nil occidental dans le centre et l'est de l'Amérique du Nord. Dessin par B. Flahey. Reproduit avec la permission du ministère de la Défense nationale, Canada.

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