

Bulletin

Entomological Society of Canada Société d'entomologie du Canada Volume 38 Number / numero 2



June / juin 2006



Published quarterly by the Entomological Society of Canada

Publication trimestrielle par la Société d'entomologie du Canada









Volume 38 (2), June / juin 2006

List of contents / Table des matières

| Up front / Avant-propos | 49 |
|--|----|
| Moth balls / Boules à Mites | |
| Meeting announcements / Réunions futures | |
| Tricks of the trade / Trucs et astuces | |
| The student wing / L'aile étudiante | 54 |
| Joint annual meeting / Congrès conjoint | |
| Book reviews / Critiques de livres | |
| In memory / En souvenir de | |
| Society business / Affaires de la société | |
| The advenutres of Ento-man/Les aventures d'Ento-homme | |
| People in the news / Gens font les manchettes | 77 |
| Officers of affiliated societies / Dirigeants des sociétés associées | |
| The Buzz / Bourdonnements | |
| Governing board / Conseil d'administration | |

Images

Sur le dos: Le Sphinx de l'euphorbe, *Hyles euphorbiae* (L.) (Sphingidae), un agent de lutte biologique introduit en Amérique du Nord dans les années 1960, photo: P. MacKay.

Sous le titre : La punaise de l'érable négondo, *Boisea trivittatus* (Say) (Rhopalidae), se nourrissant de graines d'érables negundo femelles, photo : B. Landry.

- $1. \ Le\ croquet\ biray\'e, \textit{Melanophus\ bivittatus}\ (Say)\ (Acrididae),\ unravageur\ important\ en\ Am\'erique\ du\ Nord,\ complétant\ sa\ mue,\ photo\ :\ T.\ Wist.$
- 2. Échantillonage du puceron du soya, Aphis glycines Matsumura (Aphididae), photo : J. Brodeur.
- 3. Stratiolaelaps scimitus (Womersley) (Laelapidae), un acarien prédateur utilisé comme agent de lutte biologique contre lesthrips et les sciarides en serre, photo : D. Walter.
- 4. *Perillus bioculatus* (F.) (Pentatomidae), la punaise bimaculée, un prédateur naturel du doryphore de la pomme de terre, photo : S. Marshall.
- 5. *Cydia piperana* (Kft.) (Tortricidae), un granivore obligatoire commun sur le pin ponderosa, photo : L. van Akker.

Verso : La punaise assassine, *Zelus luridus* Stal (Reduviidae), se nourrissant d'un syrphe, *Ocyptamus fascipennis* (Wiedemann) (Syrphidae), photo : S. Marshall.

| | 1 | |
|---|---|---|
| 5 | 4 | 2 |
| | | 3 |

Up front / Avant-propos

Dan Quiring, President of ESC / Président de la SEC



Mid-term report

iscussions at our annual mid-term executive meeting, which was held at the end of April, suggest that our society is doing well. Derna Lisi has been hired to replace Sandy Devine, our Ottawa office manager and only full-time employee. With assistance from Sandy and others in Ottawa, Derna should learn her new duties quickly.

Financially our society is in good shape, and the size of the scholarship fund continues to grow. The number of members in our society is a little higher than last year at this time, and includes a large number of students.

The Biological Survey of Canada (Terrestrial Arthropods), which is administered by the Canadian Museum of Nature and the Entomological Society of Canada, continues to carry out studies throughout the country and publish a large number of reports, articles and books, many of which are listed on their web site at http:// www.biologv.ualberta.ca/bsc/bschome.htm. Be sure to check their website for details of their new electronic journal on arthropod identification. This journal is largely the result of initiatives by Steve Marshall. Congratulations to both Steve, for the BSC ejournal, and to Don Ostaff, who recently created an electronic journal for the Acadian Entomological Society (http://www.acadianes.org/ journal.html).

I look forward to seeing everyone at the annual meeting, this year held jointly with the Entomological Society of Quebec, in Montreal in November.

Rapport de mi-terme

es discussions survenues lors de notre dernière réunion qui a été tenue à la fin avril nous laissent croire que la Société se porte bien. Derna Lisi a été engagée comme remplaçante pour Sandy Devine, notre gestionnaire du bureau d'Ottawa et notre seul employé à temps plein. Sandy et les autres membres d'Ottawa assisteront Derna pour quelques temps afin de la familiariser avec ses nouvelles fonctions.

Financièrement, notre Société va bon train et les fonds pour les bourses continuent d'augmenter. Notre effectif a légèrement augmenté depuis l'an passé et inclut un grand nombre d'étudiants.

La Commission biologique du Canada: (Arthropodes terrestres), administré par le Musée canadien de la Nature et la Société d'entomologie du Canada, continue d'effectuer des études dans tout le pays et de publier un nombre considérable de rapports, d'articles et de livres qui sont pour la plupart listés sur leur site Internet à http:// www.biologv.ualberta.ca/bsc/bschome.htm. On vous encourage d'aller consulter leur site web pour obtenir des détails sur leur nouveau journal électronique d'identification des arthropodes. Ce journal a été mis en place grâce à l'initiative de Steve Marshall, Félicitations à Steve ainsi qu'à Don Ostaff, qui a récemment créé un journal électronique pour la Société entomologique de l'Acadie (http://www.acadianes.org/journal.html).

J'espère avoir la chance de vous revoir à la réunion annuelle qui aura lieu à Montréal en novembre prochain. Cette réunion sera tenue conjointement avec la Société entomologie du Québec.

Moth balls / Boules à mites

By Andrew Bennett

Ento-Muggles: How to deal with the entomologically uninformed

nyone who studies insects has inevitably been pressed into conversation by members of the non-entomological community. Many people are genuinely interested in entomology, some are amazed that you can get paid to study insects, and a few are either phobic, close-minded towards insects or both. What follows is a brief guide to help deal with non-entomologists. This is not meant as a criticism of the vast majority of people on the planet who do not know their right mid trochanter from their left hind tarsus. Rather, it is an attempt to guide those of our community who continue to reinforce the stereotypes of entomologists as butterfly-netwaving, lab-coated nerds with their noses and minds planted firmly between the ocular lenses of their dissecting microscopes.

- 1) When asked what you do, do NOT assume that everybody knows the definition of entomology. Simply telling people you are an entomologist can lead to embarrassment if the person is unwilling to admit that they don't know what entomology is, or worse still, could propel you into a lengthy conversation about the origin and history of words.
- 2) Do NOT discuss insects at the dinner table. Whereas some of your colleagues may delight in musing over the subtleties of parasitoid biology or the wonders of successional arthropod invasion of rotting corpses, most people do not (at least not while eating). Try introducing the following topics to your conversations instead: a) current events; b) recently read books (entomology texts don't count); c) the weather. If you are unable to discuss any of these topics intelligently,

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



then limit your conversation to adult butterflies which generally do not produce negative reactions from listeners during meal times.

- 3) Although the intricacies of your research may be fascinating to you, to almost everybody else on the planet, what you study is extremely esoteric and therefore, if expounded at length, becomes mind-numbingly dull. The following are symptoms to look for in your listeners that may help indicate that you have crossed that mysterious boundary from polite conversation to ceaseless, droning prattle: a) darting, pleading stares directed at passers-by; b) glazed look in the eyes; c) uncontrolled drooling; d) walking (running) away from you with hands clasped over ears; e) entering washroom, closing bathroom stall door and yelling "I'm not listening, I'm not listening"; f) snoring; g) unconsciousness; h) coma; i) death.
- 4) Whereas the study of insects is frightfully important, the well-adjusted entomologist should not forego any of the following in his/her pursuit of entomological enlightenment: a) eating; b) sleeping; c) bathing/showering; d) grooming; e) changing clothes. Guidelines concerning the optimal frequency of each of the preceding necessities can be gauged by observation of non-entomologists (although attempts at direct observation of c and e is not encouraged). It should also be recognized that creating ideal habitat for scabies, head lice and/or fleas is not generally accepted as a virtuous goal.
- 5) When courting a non-entomologically informed individual, use of insect metaphors to describe your feelings is acceptable within certain boundaries. Generally, phrases employing butterflies (Papilionoidea) or honeybees (Apidae), although potentially nauseating, are generally safe to use (e.g., you shine like a dazzling Morpho dancing in a sunlit glade) (ack, barf). In contrast,

usage of detritivore-based phrases (e.g., I'm the blow fly of love and you're a decomposing carcass) or parasites of any kind (e.g., you show me your follicle mites and I'll show you mine) should be avoided whenever possible. Remember that it's far better for you to become nauseated during courtship encounters than your non-entomologically informed potential partner.

Join me next time, for more tips on etiquette when discussing such delicate subjects as the comparative anatomy of tiny Moth Balls.



Four-spotted clover leafhopper (Agallia quadripunctata).

Meeting announcements / Réunions futures

57th Joint Annual Meeting of the Entomological Societies of Saskatchewan and Canada

Saskatoon, Saskatchewan 29 September to 3 October 2007

http://www.esc-sec.org/agm.htm

Dwyane Hegedus, hegedus@agr.gc.ca

53rd Annual Meeting of the Entomological Society of America

Indianapolis, Indiana, USA, 10-14 December 2006

http://www.entsoc.org/annual_meeting/

Tricks of the trade / Trucs et astuces

File too big to e-mail?

ave you ever tried to e-mail a Powero i n t
presentation or a video to someone and
had it bounce back? When you took a
closer look, the file was 37 MB, and much too
large to e-mail. There are number of ways to get
around this problem.

- 1. You can reduce the size of the file. You can compress the file, and this will reduce the file up to 3-fold. With Windows XP, go to Windows Explorer, right click on the file, choose "Send It" and "Compress (zipped) Folder". You can also use compression to gather a whole bunch of files into a single file.
- 2. You can use File Transfer Protocol or ftp to upload your file to a location on the Internet and give the people the ftp address. Windows Explorer and Internet Explore can use ftp sites, the same as you would use the path for a file or an Internet site. Agriculture and Agri-Food Canada provides an ftp service for its employees to send large files to people within and outside AAFC. So check to see if your work place offers this service. I find it rather cumbersome, so I have been using other services that are free.
- 3. Yousendit http://s65.yousendit.com/ is a service that allows you to post files to an Internet site where other people can download the file. I found it rather simple to use. The free version of the service allows 3 downloads over 7 days of a given file, maximum of 100 MB. Paid accounts allow for larger files, more downloads and longer availability.
 - 4. There are free e-mail systems, such as gmail

of Google fame, http://www.gmail.com, that allow you over 2 GB of storage space. So you can create an account specifically for storage, e-mail the file to yourself as an attachment and give people the username and password, so they can logon and download the attachment. Gmail is by invitation, so if you would like an account tell me and I will give you one. I forward my AAFC e-mail to my gmail account which, unlike the AAFC e-mail account, can be accessed via any computer with an Internet connection.

5. There are a number of Internet services that allow you to store files on an Internet server and allow people to download those files from the Internet. Think of it as Windows Explorer, but you or other people access from any computer with a link to the Internet. There are a number of these services, free or paid: http://www.elephantdrive.com/, http://www.drive.com/ http://www.filesanywhere.com/. You can use them to backup your files, share common files on a project, or as a file dropbox.

Files sizes are only going to get larger, so this will continue to be a problem.



Henri Goulet

An inch worn from the family Geometridae.

Paul Fields is a technophile for the days when you used cards to program computers. Today, he gets tips for computing from his three teenaged sons and podcasts. He works for Agriculture and Agri-Food Canada on stored-product entomology. He can be contacted at pfields@agr.gc.ca.

Grand reopening of Norman Criddle's first entomology laboratory on the prairies

hank you to all the entomologists across the country for your support of the restoration of Norman Criddle's first laboratory. The Criddle-Vane Homestead Heritage Committee (CVHHC) is planning a celebration to 'reopen' the laboratory - 13 August 2006, 12:30 to 3:30. We extend an invitation to you all to attend.

Restoring the little laboratory was no small undertaking. A year of planning, a year of fund raising and a year of carpentry. CVHHC hired a restoration carpenter to guide us with the work. Parks Canada was also generous with advice from their restoration department. From trying to sort out what was original building based on photos of only two sides, to milling cedar siding to match the original, it has been a challenge.

In the end we could save very little of the original outer siding as it crumbled when we worked

with it. The lab is looking very 'new' now, but a few years in the prairie sun will take some of the polish off. It was a continual balancing act between trying to save as much of the original as possible while trying to restore it to last another 100 years. It still needs to be painted and the screened addition added but we plan to have it completed by 13 August 2006.

The grand reopening event starts at 12:30 PM. There will be an entomology display at the lab, guided tours, wagon rides around the homestead, children's games and bug fun, golf, and a fundraising BBQ. At 3:00 PM there will be a few presentations and the ribbon cutting for the lab. We hope you can attend.

Note: We are still looking for photographs or sketches of the inside of the lab for restoration and interpretation. If you know of any please contact the CVHHC.

Sherry Dangerfield Sherryd@mts.net



Norman Criddle in front of the first entomology laboratory (cira 1918)

The student wing / L'aile étudiante



Hello once again. We hope everyone is having a productive and interesting summer/field season. We want to remind everyone of the upcoming joint annual meeting with the Entomological Society of Quebec in Montreal this November. It promises to be an exciting and fun filled meeting. Don't forget that if you are going to defend this year or have



Greg Smith

Chris Borkent

Jike Borkent

defended in the past year you can submit an application to be part of the graduate student symposium. This year those students selected to present will have their conference registration fees paid by the Lyman museum. For more info on this symposium see pages 58-59.

We are also in need of items for our silent auction, which is held during the meetings. If you know of anyone who is looking to get rid of any entomology related books, trinkets, art work or field gear, please suggest that they wait and bring it to the meetings. All of the profits from the silent auction go towards funding student scholarships, so more items = more money = more scholarships.

We also want to remind everyone to make use of the ESC website. The student affairs section lists all of the scholarships available through the society as well as a directory of entomological education in Canada. There is also a page with a list of the student members who have submitted descriptions of their projects and backgrounds. If you would like to be included on this page please download the form at the bottom of the web page and follow the instructions and send a photo of yourself as well.

Please don't hesitate to contact us if there is anything you think the ESC should be doing to further help or interest students in the society and entomology. We hope you all enjoy the rest of your summer!

Thesis roundup / Un foisonnement de thèses

Danci, Adela; adela-danci@sfu.ca, MSc, April 2006. Intra- and interspecific communication in three species of Glyptapanteles parasitic wasps (Hymenoptera: Braconidae). Supervisor: Gerhard Gries, Simon Fraser University.

Derksen, Shannon Jean; shannon j derksen@sfu.ca, MPM, April 2006. Semiochemical-mediated oviposition behaviour by peachtree borer, Synanthedon exitiosa (Lepidoptera: Sesiidae). Supervisor: Gerhard Gries, Simon Fraser University.

Hart, Melanie; mhart@sfu.ca, MSc, March 2006. The role of sonic signals in the sexual communication of peach twig borers, Anarsia lineatella Zeller (Lepidoptera: Gelechiidae). Supervisor: Gerhard Gries, Simon Fraser University.

Lawlor, Laura; MSc, January 2006. *Chironomidae (Order Diptera) as hypolimnetic oxygen indicators in brook trout lakes of Nova Scotia: A paleolimnological investigation.* Supervisors: Brian F. Cumming and John P. Smol, Queen's University.

McMahon, Scott; tapeworm21@hotmail.com, MSc, April 2006. The role of tires in providing suitable habitats for mosquitoes in Manitoba. Supervisors: Terry Galloway and Rob Anderson, University of Manitoba.

Selby, Duncan; MSc, August 2005. Diversity of saproxylic Cecidomyiidae (Diptera) in a Quebec hardwood forest. Supervisor: Terry Wheeler, McGill University.

Application for membership (new members only) Demande d'adhésion (nouveaux membres seulement)

Entomological Society of Canada / Société d'entomologie du Canada

393 Winston Ave., Ottawa, Ontario, Canada K2A 1Y8 Tel: (613) 725-2619, Fax: (613) 725-9349

| Name & Address (please print | :): / Nom & Adre | sse (lettres moulées SVP) : | _ |
|---|--|--|------|
| Telephone (bus.) / Téléphone | (au travail): (_ |) | _ |
| E-mail/courriel: | E-mail/courriel: Fax:() | | |
| Membership is a personal affiliation s'adresse aux individus; les publicati | | ne personal property of the individual member. / Cette cotisat la propriété personnelle du membre. | tion |
| Membership Dues with / Co The Canadian Entomologist and/et Bulletin | | mprimé □Web or/ou or/ou □ Both/Les deux mprimé | |
| □ REGULAR / RÉGULIER OR □ STUDENT / ÉTUDIANT The Canadian Entomologist: 1 Si i | Canada: USA & Int'l: Canada: USA & Int'l: If print and web mprimé et web | \$85.60 Cdn (GST/TPS incl.) or/ou \$92.00 Cdn (HST/TVH incl.) \$74.00 US or/ou \$100.00 Cdn \$42.80 Cdn (GST/TPS incl.) or/ou \$46.00 Cdn (HST/TVH incl.) \$36.00 US or/ou \$45.00 Cdn \$10.00 Cdn or/ou \$10 US | |
| | Print/Imprimé | OCdn (GST/TPS incl.) or/ou | |
| 51622.17 2162.11.1 | USA & Int'l: | \$23.00 Cdn (HST/TVH incl.) \$18.00 US or/ou \$25.00 Cdn | |
| Endorsement / Signature du pr | ofesseur | TOTAL PAID / PAYÉ | |
| Official receipt / reçu officiel [Name and contact information Nom et vos coordonnées dans | on the ESC Web | Membership Directory? | |
| Canadian or US Chèque ou mandat pos | Institution to t te payable (\$ Ca | adian or US Funds as detailed above, through the Entomological Society of Canada. anadiens ou US, ci-dessus) par établissement iété d'entomologie du Canada. | |
| Credit card payments will be p | Exp. Date rocessed using the | □VISA/ Signature | |

Seeking Graduate Students

University of Alberta

I am seeking one or two qualified students interested in pursuing graduate studies in insect behavior and chemical ecology at either the MSc or PhD level. The Department of Biological Sciences at the University of Alberta has a large graduate program (>200 students), and substantial strength in entomology and ecology. Applications will be accepted until positions are filled.

Our research examines factors influencing mate finding in several moth mating systems in managed and natural landscapes. Projects could include both basic behavior and the application of semiochemicals to Integrated Pest Management. Suitable applicants are eligible for teaching and research assistantships (minimum \$17 700 per year). Operating funds are provided in part by existing support (NSERC). Students would also be expected to pursue additional sources of funding. If interested, please contact me at:

Maya Evenden (780) 492-1873 mevenden@ualberta.ca www.biology.ualberta.ca/faculty/maya_evenden/

University of Victoria

I am seeking graduate students who are interested in insect evolutionary ecology and/or host-parasite interactions. I use a number of approaches (including experimental, molecular, and phylogenetic methods), in the lab and the field, to study the evolution and ecology of associations between insects and their symbionts.

Steve Perlman (250) 721-6319, stevep@uvic.ca

http://web.uvic.ca/biology/People/perlman/perlman.htm

University of Winnipeg

We are looking for two (2) students to enter into a Master research program in the laboratories of Andy Park and Richard Westwood, Biology Department. The research projects will include studies of the effects of livestock grazing on aspen regeneration, a comprehensive analysis of forest health in regenerating aspen forests subject to grazing and a detailed investigation on the effects of soil and climatic factors on aspen regeneration and survival.

Prospective students should have undergraduate experience in one or more of the following areas: general biology, entomology, plant pathology, botany, forestry, forest ecology, environmental science or a related discipline, and have an interest in doing research in forest ecosystems. Students need to be highly motivated and able to work independently. MSc candidates will be expected to supervise summer student assistants and spend considerable periods of the summer working in remote areas in western Manitoba. Field expenses including food costs are provided. An annual graduate stipend will be provided for two years (minimum of \$15,000.00 per annum). Experience reading maps, use of GPS, understanding aerial photographs, orientation with a compass and GIS is helpful, knowledge of boreal forest plants, insects and disease is an asset, but students will be trained as required. Physical requirements include the ability to walk over rough terrain carrying a backpack and other equipment and the ability to work in inclement weather. You must possess a valid driver's license.

Students seeking an interview should provide a detailed resume and a photocopy of marks. The deadline for applications is August 15, 2006.

Interested students should contact either:

Andrew Park

Dept. of Biology, University of Winnipeg (204) 786-9407, a.park@uwinnipeg.ca

Richard Westwood

Depts. of Biology and Environmental Studies, University of Winnipeg

(204) 786-9053, r.westwood@uwinnipeg.ca

University of New Brunswick

A graduate student position (MSc or PhD) is available for a student interested in entomology, and particularly in crop resistance to insects and insect-plant interaction. This research project involves studying the mode of resistance of wild *Solanum* species to aphids. The position is available beginning May 2006. An annual stipend of \$16.500 (minimum) is available.

The project is a collaboration between several institutions including Université du Québec à Montréal, University of New Brunswick, Université Picardie Jules Verne, Cavendish Farms, Ferme Michel Auger and Agriculture and AgriFood Canada. The overall project objective is to identify parents and study their mode of resistance in order to develop potato cultivars resistant to aphids. Interested students should submit their CV including a brief description of their research interests, copies of transcripts (can be unofficial) and contact information for 3 references to:

Yvan Pelletier Potato Research Centre, AAFC 850 Lincoln Rd, Fredericton, NB. E3B 6E1 Fax: 506-452-3316 pelletiery@agr.gc.ca



A tiger beetle from the family Cicinelidae

University of Northern British Columbia

A Master's student position is available May 2006 in the Ecosystem Science and Management Program at the University of Northern British Columbia. The research project involves investigating how spatial patterns of salvage harvesting affect Warren root collar weevil pressure in regenerating stands. In coming years, the province of British Columbia will have expansive areas of regeneration following the current mountain pine beetle outbreak (8.5 million ha). Warren root collar weevil (*Hylobius warreni*) concentrating in and migrating from residual stands is a growing threat to post-salvage regeneration.

Suitable candidates will have a BSc in forestry or biology or similar degree at a recognized, postsecondary institution. The ideal candidate will be a team player with experience in field research settings and an interest in spatial ecology. The project will be supervised by Brian Aukema (Canadian Forest Service at UNBC; http:// web.unbc.ca/~aukema) and Staffan Lindgren (UNBC; http://web.unbc.ca/~lindgren) and Michael Gillingham (UNBC; http://web.unbc.ca/ ~michael). Support is available for two years minimum. Applicants will also have opportunities to obtain support and teaching experience through teaching assistantships available within the Ecosystem Science and Management Program. Aside from university resources, the student will receive research support from Canadian Forest Service staff.

Interested applicants should send a CV, statement of interest, and names of 2 references to Brian Aukema (<u>baukema@nrcan.gc.ca</u>) as soon as possible.

The University of Northern British Columbia is situated in scenic Prince George, British Columbia, Canada. UNBC provides wonderful opportunities to students interested in forest research, such as its unsurpassed access to a variety of forest ecosystems, its maintenance of two dedicated research forests within two hours of the campus, and the diverse expertise of its faculty members in a wide range of topics in forest ecosystem research.

Entomological Society of Canada Graduate Student Symposium 2006:

Call for submissions

Graduate Student Symposium will take place this year in Montréal, Québec, during the Joint Annual Meeting of the Entomological Society of Canada and the Société d'entomologie du Québec, 18-22 November 2006. The symposium is currently scheduled for the morning of Sunday the 19th of November and will be the only session running at this time.

The principal goal of the symposium is to give a higher profile to graduating students as they move to the next stage in their careers by providing them a longer time slot to talk about their research.

To be eligible, students must have either defended their thesis in the past year or be planning to defend within one year of the meeting. The degree may be either MSc or PhD.

Students from all disciplines are encouraged to submit an abstract. Ideally, the symposium will follow the general theme of the meeting, "Diversity"; however, depending on the submissions a different focus may be selected.

- four to six presentations will be selected depending on the amount of time allotted to the symposium.
- Those selected will have their conference registration fees paid through a generous donation made by the Lyman Museum, McDonald College, McGill University.
- presentations will be approx 25 minutes in length with an additional 5 minutes for questions (30 minutes total).
- papers that are included in the Graduate Student Symposium will not be eligible for the President's Prize, however speakers may also submit a paper on a more specific topic to the President's Prize competition. See also point 3 below.

If you are eligible and want to be considered for the symposium please submit the following information by 15 June 2006:

- 1. An **expanded abstract** (200-300 words) describing your proposed presentation and how it relates to the theme of the meeting "Diversity".
- 2. A **letter (or email) of support** from your principal supervisor that confirms the anticipated or actual date of graduation, and comments on your proposed presentation.
- 3. Also include a **standard abstract** (70 words) and title. If not selected for the Graduate Student Symposium, your presentation will automatically be included in the President's Prize Competition.

Students who have been selected to speak will be contacted by 31 July 2006. When notified they will receive a list of the other speakers, email addresses and a copy of all initial abstracts to identify points for discussion in the talks and elimination of potential overlap.

Expanded abstracts of chosen speakers will be published in the December issue of the *Bulletin of the Entomological Society of Canada*.

Submission for the graduate student symposium should be sent in Word or Rich Text format to:

Chris Borkent: email: cborkent@primus.ca
or

Greg Smith: email: gregsmith@telus.net



Henri Goulet

Symposium des étudiants gradués de la Société d'Entomologie du Canada 2006:

Invitation générale

n Symposium des étudiants gradués est organisé à l'occasion de la réunion annuelle conjointe de la Société d'Entomologie du Canada et de la Société d'Entomologie du Québec qui aura lieu à Montréal, Québec, du 18 au 22 novembre 2006. Jusqu'à présent, il est prévu que le symposium aurait lieu dans la matinée du dimanche 19 novembre, et il serait la seule session en marche.

Le but principal de ce symposium est de mettre en lumière les travaux de recherche des étudiants gradués alors qu'ils passent à la prochaine étape de leur carrière en leur fournissant une période plus longue afin de présenter leurs recherches.

Pour être admissibles, les étudiants doivent avoir soutenu leur thèse au cours de la dernière année, ou planifier de le faire dans l'année suivant la réunion. Les étudiants à la maîtrise et au doctorat sont admissibles.

Les étudiants de toutes les disciplines sont encouragés à soumettre un résumé. Idéalement, le Symposium devrait correspondre au thème général de la réunion, soit "Diversité". Toutefois, selon les sujets proposés, il sera possible de lui donner une orientation différente.

- 4 à 6 présentations seront sélectionnées en fonction du temps alloué pour le Symposium.
- Les frais d'inscription de la réunion des étudiants dont la présentation aura été sélectionnée seront payés grâce à un don généreux du musée Lyman du campus MacDonald de l'Université McGill.
- Les présentations seront approximativement de 25 minutes avec une période de questions addditonnelle de 5 minutes pour un total de 30 minutes.
- Les présentations incluses dans le Symposium des étudiants gradués ne seront pas admissibles au Prix du président. Cependant, les conférenciers peuvent également soumettre un résumé

sur un sujet plus précis afin de participer au Prix du président. Voir le point 3 plus bas.

Si vous êtes admissible et souhaitez être considéré pour le Symposium, veuillez nous faire parvenir les informations suivantes au plus tard le 15 juin 2006:

- 1. Un **résumé détaillé** (200-300 mots) décrivant la présentation proposée et faisant le lien entre le sujet de l'exposé et le thème de la réunion "Diversité".
- 2. Une **lettre** (ou courrier électronique) **d'appui** de votre directeur de thèse confirmant votre date prévue ou réelle de graduation, et commentant la présentation proposée.
- 3. Inclure également un **résumé régulier** (70 mots) et un titre. Si votre présentation n'est pas retenue pour le Symposium des étudiants gradués, votre présentation sera automatiquement incluse pour le Prix du président.

Les étudiants dont l'exposé sera sélectionné seront contactés au plus tard le 31 juillet 2006. Ils recevront alors la liste des autres conférenciers du Symposium avec leur adresse électronique ainsi qu'une copie de leur résumé initial afin de se préparer aux discussions et d'éviter les chevauchements éventuels

Les résumés détaillés des conférenciers seront publiés dans le numéro de décembre du *Bulletin de la Société d'Entomologie du Canada*.

Les soumissions pour le Symposium des étudiants gradués doivent être envoyées en format Word ou Rich Text à:

Chris Borkent: cborkent@primus.ca

ou

Greg Smith: gregsmith@telus.net



Henri Goulet

Seven-spotted lady beetles, *Coccinella* septempunctata

Congrès conjoint de la Société d'entomologie du Canada et de la Société d'entomologie du Québec

18 au 22 novembre 2006 l'Hôtel Holiday Inn Midtown Montréal, Québec

Le thème de la réunion : Diversité



L'équipe de l'organisation :

Responsable principal et relations avec l'hôtel : Charles Vincent, <u>vincentch@agr.gc.ca</u> Programme scientifique et décorations : Terry Wheeler, <u>terry.wheeler@mcgill.ca</u>

Correspondance scientifique, résumés et équipements audio-visuel : Chris Buddle, chris.buddle@mcgill.ca

Trésorerie, suivi des finances et administration : Michel Cusson, cusson@cfl.forestry.ca

Levée de fonds : Jacques Brodeur, jacques.brodeur@plg.ulaval.ca

Webmestre: Thierry Poiré, poiret@inspection.gc.ca

Arrangements locaux, photographies et programme connexe: Pierre Lemoyne, lemoynep@agr.gc.ca Coordination du banquet: Johanne Landry, johanne-landry@ville.montreal.qc.ca

Le programme comportera cinq Symposia, dont les thèmes seront :

L'impact écologique des espèces invasives (Dave Langor)

Le symposium des étudiants gradués (Chris Borkent et Greg Smith)

Nouvelles tendances en protection de la pomme de terre

(Philippe Giordanengo et Yvan Pelletier)

Arachnologie : un hommage à Charles Dondale (Nadine Dupérré et Pierre Paquin)

Les arthropodes des canopées (Chris Buddle).

Des informations seront disponibles prochainement sur les sites de la Société d'entomologie du Québec : http://www.seq.qc.ca/ et de la Société d'entomologie du Canada, http://www.esc-sec.org/

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 Société, à assister à la réunion annuelle de 2006 à Montréal. Pour être admissible, les étudiant(e)s doivent faire une présentation orale ou une affiche lors de la réunion annuelle. Les bourses seront accordées aux étudiant(e)s en raison des seuls critères de réussite académique. **Date limite : la même que celle de soumission d'un résumé** (i.e. juillet ; vérifier le *Bulletin* ou le site Internet de la Société pour plus d'information, http://esc-sec.org). Note : les récipiendaires seront avisés en septembre 2006 ce qui leur donnera amplement le temps de planifier leur voyage.

Consulter http://esc-sec.org/students.htm pour plus de détails ou contacter Rose De Clerck-Floate à Floate@agr.gc.ca

Joint annual meeting of the Entomological Society of Canada and Entomological Society of Quebec

18-22 November 2006 Holiday Inn Midtown Hotel Montreal, Quebec

Meeting theme: Diversity



The organisational team:

General chair and hotel related matters: Charles Vincent, vincentch@agr.gc.ca Scientific program and awards: Terry Wheeler, terry.wheeler@mcgill.ca

Scientific correspondence, abstracts and audio-visuals: Chris Buddle, chris.buddle@mcgill.ca

Treasurer, finance tracking and administration: Michel Cusson, cusson@cfl.forestry.ca

Fund raising: Jacques Brodeur, jacques.brodeur@plg.ulaval.ca

Webmaster: Thierry Poiré, poiret@inspection.gc.ca

Local arrangements, photographs & side program: Pierre Lemoyne, lemoynep@agr.gc.ca Coordination-banquet: Johanne Landry, johanne landry@ville.montreal.gc.ca

The program will have five Symposia, whose themes will be:

Ecological impact of invasive species (Dave Langor),

Graduate Student Symposium (Chris Borkent et Greg Smith),

New trends in the protection of potatoes (Philippe Giordanengo et Yvan Pelletier),

Arachnology: A tribute to Charles Dondale (Nadine Dupérré et Pierre Paquin),

Arthropods of the canopy (Chris Buddle).

Information will be soon available on the Entomological Society of Quebec website: http://www.seq.qc.ca/, as well as the Entomological Society of Canada website http://www.esc-sec.org/

Student Conference Travel Awards

One or more awards of \$500 each to be awarded as financial assistance for travel by student members of ESC to the 2006 annual meeting in Montreal. 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** (i.e., July; watch for more information in the *Bulletin* or on the ESC website, http://esc-sec.org). Note: winners will be notified by September 2006 so travel plans can be made.

 $See \ \underline{http://esc-sec.org/students.htm} \ for complete \ award \ details, or contact \ Rose \ De \ Clerck-Floate \ at \ \underline{Floate@agr.gc.ca}$

Book reviews / Critiques de livres

Insects: Their natural history and diversity with a photographic guide to insects of eastern North America. Marshall S.A. 2006, over 4000 color photographs, 28 picture keys with illustrations, 720 pp. Firefly Books, Richmond Hill, ON. ISBN: 1-55297-900-8, CAN \$95.00, hardcover with jacket, http://www.fireflybooks.com.

This remarkable book is a testament to author Steve Marshall's vast interest in insects in all their diversity, and in his ability to vividly photograph them in their natural settings. With over 4000 color photographs taken virtually all in the wild, this book is the most comprehensive photographic overview of insects ever published. The species treated cover all orders and families of insects found in eastern North America and include numerous representatives of both adults and immatures to illustrate the diversity within each group. Species from western North America and the tropics are occasionally included to better characterize certain groups that are rarely encountered in eastern North America. Many of the species that are included in the book have never been photographed before. The photographic plates of pictures and accompanying captions comprise the bulk of the book and contain a wealth of information. This is because each caption identifies the species photographed, explains behaviors and/or ecological associations depicted, and often provides additional notes on diagnostic, distributional and seasonal information. The book is written for a wide audience. including non-specialists, trained naturalists and professional entomologists.

The book is mostly organized taxonomically by order and family, followed by a section of over 50 pages consisting of simple easy-to-use illustrated keys to the insect orders and main families. These keys are primarily to adults, but also include keys to commonly encountered larvae and freshwater nymphs. The preface and introduction briefly provide the reader with instructions on how to use the book to identify insects, as well as information on classification and scientific names, insect structure, and the phylogenetic re-

lationships of all the hexapod orders (including those that do not occur in eastern North America. but that are still discussed and usually illustrated within the text). Most of the book is devoted to extensive chapters covering each of the major insect lineages. These chapters are organized into the (1) the wingless insects, (2) mayflies, dragonflies and damselflies, (3) stoneflies, (4) cockroaches, termites, mantids and other orthopteroids, (5) grasshoppers, crickets and katydids, (6) true bugs and other hemipteroids, (7) butterflies and moths, (8) caddisflies, (9) lacewings, antlions, fishflies and related insects, (10) beetles, (11) flies, scorpionflies and fleas, (12) sawflies, wasps, bees and ants, and finally because the book is also aimed at non-specialists, a chapter devoted to (13) terrestrial and freshwater noninsect arthropods. Each chapter begins with an engaging treatment of all the major included lineages and families, discussing the key characteristics, behaviors and biology of each group, followed at the end of each chapter by an extensive section of photographic plates illustrating the most common or especially interesting genera and species. To allow easy navigation within each chapter and between the keys toward the back of the book, the photographs, captions and text are all cross-referenced, wherever applicable.

Additional concluding chapters provide information on observing, collecting and photographing insects, the chapter of picture keys already mentioned, a chapter listing selected references for further reading on each of the included chapters, and finally an extensive list of acknowledgements. The book also contains an index to the photographs, as well as an extensive general index.

The breadth of this book, covering all the insect diversity in eastern North America, including a tremendous amount of biological information that is explained and captured with wonderful photographs, will ensure that the book is a landmark reference in entomology for years to come. The taxonomic organization of the book makes it extremely useful for identifying insects, even beyond the focus area, and the extensive general index still allows users to locate biological information on various subjects that is scattered

throughout the text. Consequently, I recommend it to all biologists and naturalists interested in insects. It is well printed with a quality binding and is offered at a very reasonable price (it is also listed at a bargain release price of CAN \$67.00 if ordered from amazon.com). The author should be congratulated on completing and publishing such a monumental work.

Jeffrey Cumming Agriculture & Agri-Food Canada Ottawa, Ontario

Pyraloidea I (Crambidae: Acentropinae, Evergestinae, Heliothelinae, Schoenobiinae, Scopariinae). Goater, B., Nuss, M., & Speidel, W. 2005. pp. 1-304 In Microlepidoptera of Europe 4. Edited by P. Huemer and O. Karsholt. Apollo Books, Stenstrup, Denmark (www.apollobooks.com). ISBN 87-88757-33-1, ISSN 1395-9506. DKK580.00 (approximately CAN \$115).

espite its issue number, this volume is actually the fifth to be published in the series "Microlepidoptera of Europe" (volume 5 on the Momphidae was published in 2003). It is part of a fine series of extremely useful works that bring together and summarize a vast amount of scattered taxonomic and faunal information on the microlepidopterous fauna of Europe. Previously, identification and known information on the Microlepidoptera of Europe has been widely scattered in the literature because it was often published in different countries in a variety of languages, which made it inconvenient to access at best, particularly for non-Europeans.

The volume on Pyraloidea, the first of several planned volumes on this superfamily, treats 113 species out of a total fauna of 914 pyraloid moths so far recorded for Europe, or about 12% of the fauna. It covers five subfamilies of the Crambidae: Acentropinae (13 species; by Speidel), Evergestinae (39 species; by Goater), Heliothelinae (1 species; by Nuss), Schoenobiinae (6 species;

by Speidel), and Scopariinae (54 species; by Nuss). The three authors are each responsible for the treatment of different subfamilies, with Nuss and Speidel co-authoring the introduction.

It is worth noting that the former family Pyralidae has been split into two families by recent authors, the Crambidae and the Pyralidae (sensu stricto), which together constitute the superfamily Pyraloidea (see Kristensen 1998).

The introductory chapter covers generalities on the morphology of the adult in some detail, illustrated with SEM photographs and diagrams, as well as includes a comparison of the Pyralidae and Crambidae characters in tabular format, a summary of the subfamilies of both Crambidae and Pyralidae, and sections on preparation techniques.

This is followed by a useful checklist of all taxa treated, with full synonymy.

After this come the taxonomic treatments of the five subfamilies. Each begins with a short introductory subsection presenting an overview of diversity, life history, and morphology, before proceeding with the genera and species. The introduction of the chapter on Acentropinae is more extensive and encompasses topics such as morphological adaptations to the fascinating aquatic way of life of members of this subfamily, immature stages, cladistic hypotheses of relations h i p s among member genera, and a generic key to the larvae.

The treatment of each genus and species follows a similar pattern throughout the book: nomenclatural listing; a diagnosis that covers external characters as well as male and female genitalia; geographical distribution; biology; and a 'Remarks' paragraph that contains miscellaneous additional information and notes.

There are few taxonomic changes: only one species is newly described (in the Scopariinae), and two new combinations and two new synonymies are introduced.

The chapters on Acentropinae and Schoenobiinae include keys to species for each genus; that on Scopariinae presents a comparative table of diagnostic characters for genera as an aid to identification but no keys proper. There are no keys nor comparative table in the chapter on Evergestinae. Despite the lack of full keys in some subfamilies, the reader should have no difficulty in achieving identifications through use of the highquality illustrations and generally clear diagnoses with cross-comments on similar species, and aid from the comparative tables.

The species are numbered sequentially throughout the book, and the same numbering is used also in each of the plates of illustrations, which are organized into three groups: colour plates of the adults; male genitalia illustrations; and female genitalia illustrations. For example, to species #6 correspond figures 6a (a male) and 6b (a female) on the adult colour plates, as well as figure 6 for each of the male and female genitalia. This is a most efficient way of referring to different sets of illustrations for a particular taxon. This numbering scheme has been used in all volumes of the Microlepidoptera of Europe series.

A distributional catalogue indicating occurrence of species by country in a well laid out tabular format (with much appreciated cell divider lines for improved readability) follows the taxonomic chapters. The book concludes with full references, and three indexes (one for genus names, one for species-group names, and one for host plant names).

The adult moths are photographed in colour on seven high-quality plates with excellent colour fidelity. Plates 1-4 show moths at natural size. While this affords a good appreciation of the real insect, it has the disadvantage that very small species are shown in correspondingly small size and the exquisite details of the colour pattern of several of them is somewhat difficult to distinguish. Fortunately, the fine line screen, high quality of the printing, and selection of impeccable specimens ensure that a good amount of details is shown. Plates 5-7 show moths at 1.75 times natural size, rendering details of complex and subtle wing patterns more obvious. It is not clear why two different scales were applied to the moth plates.

Genitalia illustrations show a combination of line drawings (Acentropinae, Evergestinae, Schoenobiinae) and halftone photographs (Heliothelinae, Scopariinae). Both types are of excellent quality although one can see different hands involved in the line drawings. Photographs render more accurately texture, sclerotization, melanization, and the inevitable artefacts and distortions of slide-mounted genitalia preparations, providing that the preparations themselves are of high quality, which is the case here. The genitalia photos are impeccably clean and show excellent contrast and detail.

The book is hard covered, sewn, printed on high-quality semi-glossy paper, and stays flat open, which facilitates consultation. The text is in single column, nicely laid out and easy to read.

It is remarkable that several of the authors of volumes in the series, including the first author of the present volume, are amateur lepidopterists in the purest and noblest sense of the word. They have attained an impressive degree of scientific accuracy and authoritative mastery of the taxonomy of a diverse and technically difficult group of insects.

This is a high quality work that will benefit anyone interested in these insects. It should garnish the shelves of any library striving to reference insect faunas, and of anyone dealing with introduced and alien species. In fact the continued influx of accidentally introduced species and the need to recognize and identify alien organisms accurately make the acquisition of such books indispensable. It is definitely worth getting the whole series. I look forward with anticipation to all upcoming volumes.

Apollo Books is to be commended for fostering such a fine series, which seems to have spurred in the wake of its 1996 publication of the first European checklist of Lepidoptera in a century (Karsholt and Razowski 1996). The scientific editors of the series also are to be commended for maintaining a remarkable degree of constancy in the quality of the treatments in the volumes published so far. Another 15 volumes are currently in preparation as indicated on the back cover of volume 4, to extend taxonomic coverage to another 12 superfamilies and families of Microlepidoptera, including volumes that are a continuation of already published but partial treatments (such as for the Pyraloidea and the Gelechiidae).

I cannot conclude without mentioning a very

useful companion resource to be found in the online world catalogue of the Pyraloidea (http://globiz.sachsen.de/pyrdat_prototype/GlobiZglobiz_start/index_start.html) that is being developed by Matthias Nuss, with the support of the German Federal Ministry of Education and Research (BMBF) as part of the German contribution on insects to the Global Biodiversity Information Facilities (GBIF). While still incomplete, this professionally designed searchable database provides the most up-to-date information on the nomenclature, classification, and literature of pyraloids.

References cited

Karsholt, O. and Razowski, J. (eds.). 1996.
The Lepidoptera of Europe. A Distributional Checklist. Apollo Books, Stenstrup, Denmark. 380 pp.

Kristensen, N.P. (ed.). 1998. Lepidoptera,
Moths and Butterflies. Volume 1: Evolution,
systematics, and biogeography. Handbuch
der Zoologie/ Handbook of Zoology, vol.
IV, Arthropoda: Insecta, Part 35. Walter de
Gruyter, Berlin and New York. 491 pp.

Jean-François Landry Agriculture and Agri-Food Canada landryjf@agr.gc.ca

Tortricidae (Lepidoptera). Compiled by Brown, J.W. 2005. In World Catalogue of Insects, Volume 5. 741 pp. Apollo Books, Stenstrup, Denmark (www.apollobooks.com). ISBN 87-88757-41-2, ISSN 1398-8700. DKK960.00 (approximately CAN \$185).

his taxonomic catalogue covers one of the largest and most economically important families of Lepidoptera, with over 9000 valid species included. Given the economic importance of the Tortricidae, there has never been a truly comprehensive, global catalogue of the family. In recent years there have been a number of

significant nomenclatural and classificatory changes in the Tortricidae, particularly with respect to the fauna of the Northern Hemisphere, due to increasing efforts to harmonize the North American and European nomenclatures. Yet most of these changes are scattered in specialized technical and scientific publications, many not always easily accessible. The present catalogue brings all of this information into a single, authoritative source, and includes all scientific names of tortricids published to the end of 2004. It is a purely taxonomic catalogue, it does not include references and citations of an economic, ecological, or applied nature.

In the benedictine task of assembling such a work, John Brown, the principal compiler who is at the Systematic Entomology Laboratory of the USDA in Washington, D.C., was assisted by seven collaborators. The collaborators, listed on the title page, are from different parts of the world, and are established experts in tortricid taxonomy and nomenclature: Joaquin Baixeras, Richard Brown, Marianne Horak, Furumi Komai, Eric Metzler, Jósef Razowski, and Kevin Tuck. The acknowledgements further provide an extensive list of people who contributed information and helped with the resolution of problems, attesting to the efforts of the compiler to give breadth and depth to this catalogue.

The introductory section is relatively brief (five pages), and provides a summary of the development of the catalogue, its structure, and its data sources. This is followed by a relatively short 'Literature Cited' section which contains only references cited in the introduction, a list of institutional abbreviations which are used throughout the catalogue in reference to type depositions, and a 'References and their abbreviations' section. A two-page part named 'Synonymy of subfamilial and tribal names' closes the introductory sections.

The main body of the catalogue is laid out in two-column format and offers excellent readability. The catalogue proceeds by listing valid genera, under which are listed generic synonyms, followed by valid species and their synonyms under each valid genus. Taxa are presented in strict alphabetical order, including all invalid names under each valid one. After the taxon name,

a typical entry includes its author(s), year of publication, abbreviated original reference, and page number; for genus names, the current subfamilial and tribal placement follow; for species names, the original generic placement, type locality, and type depository follow. Valid names are bolded, all other names are in normal type. The full references corresponding to the abbreviations are given in the introductory section under 'References and their abbreviations'. This arrangement was undoubtedly chosen to conserve space. To facilitate navigation in this voluminous book, evenpage headers display the genus name that begins a current page while odd-page headers display the genus name that ends a page, much like in a dictionary.

There are some new synonymies and new combinations introduced; unfortunately they are not summarized separately, which makes them difficult to notice. All nominal genera and species currently placed in the Tortricidae are listed, including fossils. Misspellings and unavailable names are also provided, as well as infrasubspecific names, which have no status in zoological nomenclature (unavailable) and are so indicated.

The authors of valid species names that currently are not in their original generic combination are not placed in parentheses, as is customary and required by the International Code of Zoological Nomenclature. This omission in the body of the catalogue is a little puzzling. However, the parentheses around authors, where required, can be found in the index entries.

The catalogue is completed by an index of more than 120 pages, where supraspecific taxon names are in capitals to distinguish them easily from species-group names. All indexed entries comprise the author(s) and dates, and for species names, the genus in parentheses. The last short section that follows the index is made of 32 numbered notes that are referenced in the catalogue and that provide more extensive explanations or comments for some nomenclatural and taxonomic issues pertaining to certain names.

In recent years, Apollo Books has specialized as a foremost publisher of taxonomic catalogues, monographs, and faunal works. The 'World Catalogue of Insects' presently stands at eight vol-

umes covering various families of Lepidoptera and Coleoptera, with several more in preparation. While it would be highly desirable to have such taxonomic catalogues available in electronic form, preferably as searchable databases on the Internet, where they could be kept up to date more easily, this contribution constitutes an invaluable, indeed essential, resource to anyone who deals with insects and needs to verify or ensure the accuracy of scientific names.

Jean-François Landry Agriculture and Agri-Food Canada, landryif@agr.gc.ca

Fauna de Tenebrionidae de la Península Ibérica y Baleares. Vol. I. Lagriinae y Pimeliinae. Vinolas, A. and Cartagena, M. C. 2005. 428pp. Argania Editio. Barcelona, Spain. Hardcover. ISBN 84-934400-0-0. Available at http://entomopraxis.com/argania/.

he family Tenebrionidae is one of the more diverse groups of beetles on the planet. Although it is species-rich and includes significant pest species, this family has received relatively little taxonomic attention recently compared to other large groups of Coleoptera such as Staphylinidae, Scarabaeidae and Curculionidae. For this reason alone, it is good to see new monographic treatments being published, such as the new book by Vinolas and Cartagena.

The first author is an experienced coleopterist from the Museu de Zoologia de Barcelona who has published extensively on the families Anobiidae, Carabidae and Tenebrionidae. Being an avid photographer as well, he has provided all of the many illustrations in this volume. The second author is a younger taxonomist who has recently published on the systematics and conservation of Tenebrionidae.

This book represents the first volume of a twobook series and deals with the subfamilies Lagriinae and Pimeliinae. It includes an introductory section that summarizes the classification, morphology (adults and larvae), natural history, conservation and sampling of the tenebrionid fauna of the area. This is followed by the formal description of a small number of new taxa, a list of nomenclatural changes (nearly 200 taxonomic changes and new synonyms) and a list of higher groups (subfamilies and genera) that will be treated in the two books. The remainder of the book includes taxonomic treatments of the subfamilies Lagriinae and Pimeliinae (pp. 46-304), a bibliography, a taxonomic index and more than 80 plates containing black and white pictures of all species treated.

A total of 314 taxa (species and subspecies) are covered in this book. Each is described briefly and is accompanied by a distribution map. The morphological characters that are used to separate the taxa are illustrated with a small number of line drawings at the bottom of each page and a few photographs showing close-ups of microsculpture (in addition to the habitus photographs mentioned above).

At first glance, this book looks like the result of a very professional and competent team of authors. However, once the contents are subjected to scrutiny, it becomes evident that this publication includes some significant shortcomings. The authors seem to have a poor knowledge of nomenclatural rules that deal especially with familygroup and genus-group names. For example, of the 55 subfamily and tribe names listed in the table of contents and catalogue of supraspecific names, 42 are either incorrect or are attributed to the wrong author and/or date of publication. This is not a criticism of this work in particular but rather a reflection of a broader problem caused by the lack of nomenclatural thoroughness in works on Tenebrionidae in the past. A more recent paper by Bouchard et al. (2005) will hopefully go a long way to promote stability in the nomenclature of higher groups in Tenebrionidae for the foreseeable future. Another drawback of this book is the inconsistency in dealing with the taxonomic literature. Some references at the end of the book are obviously incomplete, some publications cited in the text are absent from the bibliography and some publications used are certainly erroneous (e.g. Dejean, 1825 cited on p. 10). The text in the introductory pages also seems to be somewhat of an afterthought judging by the very superficial treatment of important and complex themes such as ecology, sampling and classification.

Overall, this book offers a good "species-level" treatment of the subfamilies Lagriinae and Pimeliinae occurring in the ibero-balearic region. The habitus photographs at the end of the book are especially useful to separate the taxa treated. Although inconsistencies were noted, this book will be of great value to amateurs and professionals alike, from ecologists to museum curators.

Reference

Bouchard, P., Lawrence, J. F., Davies, A. and Newton, A. F. Jr. 2005. Synoptic classification of the world Tenebrionidae (Insecta: Coleoptera) with a review of family-group names. Annales Zoologici. 55: 499-530.

Patrice Bouchard Agriculture & Agri-Food Canada Ottawa, Ontario

Special offer to Entomological Society members

Save 40% on *Tree and shrub insects of the prairie provinces* W.G.H. Ives and H.R. Wong 1988. 327 pages, 116 color plates. if ordered before 31 July 2006. Regular price: \$39.95, Special Offer: \$23.97. For details see: http://nofc.cfs.nrcan.gc.ca/publications/nofc.priced-e.php

In memory / En souvenir de

M. Ellen MacGillivray 1925 - 2006

Ellen MacGillivray died 15 April 2006 in the Dr. Everett Chalmers Hospital, Fredericton. By this event the entomological community has lost one of its greats.

Ellen took office as President of the national Society at the October 1976 Annual Meeting in Toronto, the first woman to do so since it was founded in 1863. One of her first actions was to alert the ESC and its affiliates to the manpower crisis in entomology as documented in the report of an ad hoc Manpower Committee received at that meeting (*Bulletin* 8(4):4). She was off to a running start.

Ellen presided over the 27th Annual Meeting in Winnipeg at which she spoke of the accomplishments of the Society on several fronts (*Bulletin* 9(3):86-94). In a detailed 9-page report she described the impressive accomplishments of a foreshortened 10-month term and after assessing the status of entomology in Canada, stated the responsibilities and challenges ahead and the importance of communicating with politicians, other sciences, and the public. The admonishments, for that is what they were, are just as important today as they were then.

Ellen undertook many other responsibilities as an executive member, on committees, in organizing meetings, etc. down through the years for both the ESC and the Acadian Entomological Society.

Ellen was born in Fredericton, New Brunswick, and earned a BA at the University of New Brunswick in 1947, a MSc at the University of Michigan in 1951, and a DSc at the University of Leiden, Netherlands in 1958 under Hille Ris Lambers. Her entire career was with Agriculture Canada at Fredericton where she had started as a student assistant in 1943.

She became a world authority on aphid taxonomy, and made important contributions in aphid biology, development, and their role in virus transmission to plants, the potato in particular. As the priorities of Agriculture Canada changed, she was diverted from this work and assigned the task of



developing a management program for aphids and viruses of potatoes in New Brunswick. Although she strongly felt that she could better serve entomological science with her basic research, she "took on the task with her characteristic true commitment" (Wood and Boiteau, *Bulletin* 13(3):84). In spite of her success in her new role, she was not happy with it and retired early, in December 1980, having authored 85 research papers as well as much extension material.

In retirement she remained busy in her involvement with the "Aphid Alert" program. In this regard, I would refer you to http://ipmworld.umn.edu/alert.htm which will lead you to "Aphid Alert No. 5" which features several of Ellen's excellent, downloadable photos of aphids and "Aphid Alert No.2" which offers a key based on Ellen's original.

On 26 November 1991, Ellen and her coworker and "mentor" (her word), Jean Adams, were honoured at a ceremony naming the "Drs. M.E. MacGillivray and J.B. Adams Insect and Reprint Collections" at the Agriculture Canada Research Station, Fredericton. The aphid collection consists of over 30,000 superbly preserved slides of specimens that are potential pests of agricultural and forestry crops, and are indexed by species and hosts, and within jurisdictions (the Mariti-

mes, Quebec, and Maine). The reprints number over 13,000 articles on aphids. To my knowledge, the existence of this collection was never publicized in the *Bulletin*, but Yvan Pelletier and Gilles Boiteau published the 129-page Agriculture Canada Research Branch Technical Publication 1986-11E, describing the collections. This collection is available to researchers and for identification purposes.

We in the entomological community certainly recognize her contributions to science and agriculture, but it is especially notable that she has earned wide recognition from client organizations and the public. She received the New Brunswick Seed Potato Grower's Award in 1981, and the New Brunswick Heritage Week Women in Agriculture Award in 1999. She was awarded an honorary DSc degree by the University of New Brunswick in 1981 for her excellence as an agricultural researcher, her contributions to entomology, and her constructive influence on extension.

Ellen probably met her husband George at UNB, where he earned the BScF degree, shortly after World War II. Lt. George MacGillivray was a true war hero and had suffered severe wounds, but in spite of that, after a brief period working with spruce budworm under the first ESC Gold Medallist, Frank Morris, on the Green River Project, he became a pioneer tree improvement specialist in the Maritimes. They shared pride in their Scottish heritage through the Fredericton Society of Saint Andrew, of which Ellen was President from 1979 to 1981. At a service of worship at St. Andrew's Presbyterian Church to celebrate her life, piper Eric Horncastle played a "Salute to Dr. Ellen MacGillivray" which he had composed. Ellen was a member of the NB Scottish Cultural Association and served as Honorary Chieftain of the Highland Games and Scottish Festival in 1999.

George loved to shoot and Ellen once told me that, although disliking guns, she took up shooting for his sake. She learned to enjoy it so much that she continued after George died in 1984. She was a member of the NB Rifle Association since 1970, serving as a member of the executive since 1975, and president from 1991 to 1993. The Association recognized her contributions with the

Andy Gunter Meritorious Award in 1991. She was a member of the Dominion of Canada Rifle Association since 1970 and named Life Governor in 1994.

For a busy scientist, Ellen undertook a variety of community responsibilities. She was a member of the Fredericton Tree Commission since 1961 through devastating attacks of Dutch Elm disease, fall cankerworm, elm leaf beetle, and elm aphids that produced so much honey dew cars parked downtown became coated with black mould. She served as chairman (she deplored such "politically correct" and evasive terms as "chairperson" and "chair") from 1996 to 2002. She was a charter member of the Fredericton Heritage Trust since 1972, the Nature Trust of NB since 1986, a member of the Canadian Forestry Association of NB since the mid 1960s, and a life member of the York-Sunbury Historical Society. She was honoured in 2005 by the city she loved as one of Fredericton's Distinguished Citizens. (See the Fredericton Chamber of Commerce web. site for details and further biographical information. The specific page address is very long and the easiest access can be had by Google-searching for a photo of "Ellen MacGillivray"on the web.)

Ellen and George had no children; Ellen supported and encouraged the education and wellbeing of her many grand nephews and -nieces and great grand nephews and -nieces. She was a strongly supportive alumna of UNB. Remembrances to the George and Ellen MacGillivray Endowment Fund at the University of New Brunswick would be appreciated. This can be done through the University website http://www.unb.ca/donations/donation or by mail to Office of Development and Donor Relations, University of New Brunswick, PO Box 4400, Fredericton, NB E3B 5A3.

Douglas Eidt

Fredericton, New Brunswick

(with the help of Ellen's former colleagues at the Potato Research Centre, Agriculture and Agrifood Canada, Fredrickton)

Gordon Richard Fuerst Davis 1925-2005

ichard, the name he preferred, was born in Prince Albert, Saskatchewan. He completed his high school education in Toronto, enrolled at the University of Toronto, and completed the first year of a pre-med course by 1943. Then followed a 16-month hitch in the Canadian Navy and a resumption of University studies - this last at McGill University. His summers were spent at the Biological Control Unit, Belleville, working in programs of biological control of forest insect pests. In 1952, Richard and wife Pauline moved west, when Richard was transferred to the then Dominion Entomological Laboratory (later the Entomology Section of the Agriculture Canada Research Station) in Saskatoon, Saskatchewan. There, for 33 years, Richard carried out research on many aspects of the nutrition of stored grain and field crop insect pests - a vast and complex area that included the nutrition requirements of insects, digestive enzyme systems, and the influence of food characteristics on insect reproduction. He took part also in studies of mycotoxin identification, nutritional assays, and insect behaviour. During that time Richard served terms of Director and Honorary Secretary-Treasurer of the Canadian Federation of Biological Sciences, Vice-President of the Entomological Society of Saskatchewan, and Director of the Entomological Society of Canada.

Following his retirement in 1985 from his career in entomology, Richard continued to be very active in new endeavors. He moved to Regina, Saskatchewan, and worked as a translator -English-French/French-English - for a major firm, and then retired from that and set up his own Triple D Translations business. Richard was an active volunteer with the Alzheimer Society in Regina, again doing translations, and giving lectures on the disabling affliction. He also became keenly interested in genealogy for quite a number of years, and researched both his family and his wife's family, each back for several hundred years. For studies of his German ancestors he became fluent in German and went to Germany, search-



ing records, meeting previously unknown relatives, and uncovering many missing pieces in his family tree. During his later years he was working on Spanish - self-taught - as well, and was interested in returning to University with the intent of earning another PhD in another of the sciences.

Richard died 23 November 2005, in Peterborough, Ontario, while visiting family members.

Bob Burrage Saskatoon, Saskatchewan



C

Larger black flour beetle, *Cynaeus angustus* is a stored product pest found exclusively in North America.

Recently deceased Compiled by Ed Becker

Bobbie Peterson, husband of Jeannine, 3635 N. Little Rock Dr., Provo UT 84604, U.S.A., died on 29 March 2006 in his 77th year.

Ron Baird, husband of Ruth Baird,#606---18 Deerfield Dr.. Nepean ON, K2G 4L1, 613-224-1781, ruth ronbaird@sympatico.ca, died on 26 March 2006 in his 79th year. He was the son of the late Alf Baird.

"Doc" Davis, husband of Moira Davis, died on 20 January 2006. Doc was a chemist by training, but after retiring he became interest in biology. He attended many of the Entomology Club monthly talks, as well as the coleopterists' coffee hour.

Margery Milne, widow of Lorus, died on 28 February 2006 in Durham NH at age 94. She was an internationally known naturalist and the widow of Lorus (who died in 1987). They had no children. John Weaver (Durham NH) sent me the information including a copy of a very nice obituary from the UNH Campus Journal.

Reginald (Reg) Shuel, husband of Helene, R. R. #6, Guelph ON, N1H 6J3, 519-824-7714, died on 30 March 2006, having just turned 86. Reg was raised in Essex ON. He graduated from OAC in 1941 in Field Husbandy (now Crop Science), then joined the army and participated in the Italian campaign. After the war, Reg took graduate work in plant physiology at Ohio State University and then returned to Guelph where he joined the Apiculture Department about 1950 or 1951, and researched nectar secretion.



Oak Bark Scaler (Encyclops caerulea).

Marchall

Society business / Affaires de la société

Interim meeting of the Executive Council

Rick West, Secretary

Strategic Review

Michel Cusson will chair an ad-hoc committee on information technology. Chris Buddle, Terry Wheeler, David Shorthouse and Barry Lyons, as well as up to two other individuals, compose the rest of the committee. This committee will evaluate ways to improve the use of information technology in the society. Their role is not to produce a report but to produce improvements in our use of information technology. Paul Fields has also volunteered to help establish an editorial web site that would facilitate dealing with manuscripts submitted to *The Canadian Entomologist*.

Instructions for Authors

An ad-hoc committee composed of Paul Fields, Bob Lamb, Ward Strong, David Gray and Dan Quiring (Chair) rewrote the instructions to authors for *The Canadian Entomologist*. The new instructions, shorter and requiring authors to submit manuscripts electronically, were examined by divisional editors and the Editor-in-Chief and have already been incorporated into the journal and our website. The same committee, in consultation with Richard Ring and divisional editors, also prepared a short summary of editorial duties of the editor in chief, divisional editors and associate editors of *TCE*. The committee was assigned to produce a new electronic form for reviewers.

Evolution Debate

D. Quiring gave an interview to the Globe and Mail and was asked to write a letter to the federal Social Sciences and Humanities Research Council regarding a particular grant proposal that is now an international news story. Dan Johnson and George Ball have agreed to serve on an adhoc committee to deal with future inquiries on this issue.

International Congress of Entomology (2012)

The Entomological Society of Quebec has officially requested the support of the Society to host, with the ESC, the International Congress of Entomology in 2012. The Annual Meeting Committee will contact all regional representatives regarding the 2012 Congress and find out what the deadlines are to obtain invitations from the Congress organizers.

Treasurer

The Society is in good shape financially and a balanced budget is expected for 2007. A replacement for A. Devine, who is retiring after many years of sterling service, is expected to be hired by the end of April. The Society's part-time employee will continue to work in the office for at least 8 months to aid in the transition period.

Auditors Report

As a cost-saving measure to reduce the number of printed pages in the *Bulletin*, the Executive recommended that financial statements be posted in the members' area of the website. This recommendation will be reviewed by the Bylaws, Standing Rules and Committee Guidelines Committee and the ESC auditors.

ESC Headquarters Committee

Minor electrical repairs completed during the last year make the storage and work area safer. Painting of the entrance and repair of the cement entrance step are still on the work-list for this year. Additional shelving and a reorganization of the office layout would improve space utilization and new office equipment may need to be ordered.

Policy for sales of Memoirs for which only a few copies exist

Actions including the creation of PDF copies of the Memoirs for sale on CD or by FTP access, selling cost, copyright and payment forms were assigned to the Treasurer and Publications and Marketing Committees.

9.3.3.5 Institutional subscriptions

A ballot will be sent to the membership to amend Standing Rule XII.3 to increase the annual subscription rate for foreign institutional subscribers from 200.00 (USD) to 250.00 (USD) for either print copy or online access and three hundred and fifty dollars (\$350.00 USD) for both print copy and online access to cover increased mailing costs and depreciation of the USD.

Funding levels for Student Awards

The issue of funding levels for student awards was deferred. The Annual Meeting Committee will discuss the number and funding level of President Prize awards with the regional societies.

Scientific Editor

Initial responses to the new journal design have been very positive. Manuscript submissions for 2005 (115) were similar to those in 2004 (114), but less than in 2003 (123). During January-March 2006, 37 manuscripts were submitted, a rate higher than for the past three years. Systematics and ecology are the divisions receiving the most manuscripts. The acceptance rate is about 55-60%. New divisional/associate editors include David Gray (D.E.), Michael Smirle (A.E.) and Michielle Marcotte (A.E.), replacing outgoing editors Jens Roland (D.E.), David Pree (A.E.) and Johanne Delisle (A.E.).

The President will appoint an ad hoc committee to find a replacement for R. Ring who is retiring at the end of 2006.

Editor - Bulletin

P. Fields estimates that the 2006 operating costs for the *Bulletin* will be about 3200.00 per issue. Marj Smith has agreed to serve as Assistant Editor until the end of 2007.

Web Site

Report received. Information on the main page and modules was summarized. The web site is being reviewed by the Ad hoc Committee on Information Technology.

Publications Committee

The Conditions of Use document, outlining conditions of use for downloading documents and photos from the web site, is in preparation.

Nominations Committee

Paul Fields and Gary Gibson were nominated as Second-Vice President. Chris Buddle and Yvan Pelletier were nominated as Directors-at-Large. The Committee recommended that nominees prepare their biography in the first or third person, and indicated that the first-person voice may be more accessible to younger ESC members who are likely less familiar with the nominees than members of long standing. This recommendation is offered on the basis that current biographies go out with the ballot rather than being published in the *Bulletin* or other permanent ESC documents where the more professional third-person format is preferable. Photos of the candidates were also recommended to be included with distributed biographies.

Achievement Awards Committee

The Achievement Awards Committee will provide recommendations for the Gold Medal and Hewitt awards shortly and will contact the SEQ regarding the eligibility of that Society's recommendation for the Criddle Award.

Index to Biographies

The Heritage Committee intends to have a updated index prepared by the fall of 2006.

Insect Common Names and Cultures Committee

There has been good progress in updating the common names list with the help of Henri Goulet and cooperation with the CNC of the Entomological Society of America.

Membership Committee

Membership numbers as of April 2006 are similar to those of April 2005. Lapsed members will be reminded to renew with the 2006 JAM mail out. A large poster has been drafted by the Mar-

keting Committee and will be presented to the Governing Board for comment. T. Shore will check with organizers of the 2006 JAM on the differential registration rate for members.

Student Awards Committee

The winners of the Research-Travel Scholarship for 2006 will be announced shortly. No applications were received for the John Borden Award. This award needs to be promoted in a manner similar to that for the BSC award - i.e., by contacting student supervisors. Final edits to Award requirements will be completed following committee reviews this spring. Universities are expected to soon issue electronic transcripts, which will speed up review times. New bilingual award certificates will need to be created for printing on calligraphy paper and including colour versions of the logos as well as fewer words to provide space for citations in both official languages. R. De Clerck-Floate gave notice of her intention to resign after the Montreal meetings.

Science Policy Committee

Requests for funding from the AES, ESS and SEQ were approved.

Canadian Academies of Sciences (BSC and Funding)

The organization, Canadian Academies of Sciences, is still forming itself, and therefore it is premature to approach the Academy for support of the BSC.

Student Affairs

The Committee maintains a running list of new graduates with postgraduate degrees in Entomology in Canada for publication regularly in the *Bulletin*. The President will ask the Student Affairs Committee to help in the appointment of a student to the ad hoc committee on Information Technology. A joint ESC-SEQ student night out, silent book auction and grad symposium are being planned for the Montreal meetings. The Directory of Canadian Entomological Education is currently being updated for the Québec region,

by the SEQ student affairs committee, as well as the section on UNBC in Prince George. A major revision of the directory is not expected until next year.

The Annual Meeting Committee will review the usefulness and future of the Student's "Meet the Board Reception" with the Student's Affairs Committee.

Marketing Committee

Report received. The CD for Maladies et Ravageurs des Cultures Légumières au Canada (MR-CLC) has sold over 35 copies since its creation. A new order form indicating that the french text is sold out and the version is available in CD format only is being developed and will be posted on the website. The Canadian Phytopathological Society has decided to produce a series of books, based on DPVCC, and are soliciting entomologists as editors, chapter editors, and contributors of material and/or photographs on insect pests of various commodities or cropping systems (i.e. greenhouse crops). A draft Membership poster to the Membership Committee for their comments and suggestions. The Committee is asked to contact meeting organizers to ensure space at the 2006 JAM for an ESC booth to sell memberships and copies of the DPVCC book and promote the Society.

Role of Society in Annual Meetings

The affliliated societies were sent a questionnaire to obtain feedback on their views regarding arrangement of JAMS and profit sharing. Some commonalities so far:

- No regional societies favour an ESC JAM committee to organize all meetings
- Most favour more involvement in the organization of the meeting by the ESC: primarily in the form of the annual meeting committee working with the regional committee. Some favour the idea of past, current and future chairs being involved on the Annual Meetings Committee (although a few mentioned that past chairs may have had enough by the end of the meeting so may not want to participate).
 - Most feel that there should be some flexibil-

ity in profit/loss sharing based on regional circumstances

- Some feel that the ESC should increase its seed money contribution.

A more complete analysis of this survey and recommendations will be presented when the remaining two societies return their information. The committee recommends that past, current and future chairs of JAMs meet with the annual meeting committee during the annual meeting to discuss future meetings.

Biological Survey of Canada

Support for the BSC is still provided by the Canadian Museum of Nature, but again this year there are critical shortages of funds in the Museum. Once again, therefore, even though the Survey budget was forecast to increase to normal levels again, the BSC has a much reduced budget, and funds are currently available for only one rather than two annual meetings of the Committee. The electronic journal of the BSC will be launched soon.

President Quiring and J. Shorthouse, the current BSC Chair, will meet with senior Museum of Nature officials to discuss H. Danks's replacement and the role of the BSC.

Affiliated Entomological Societies

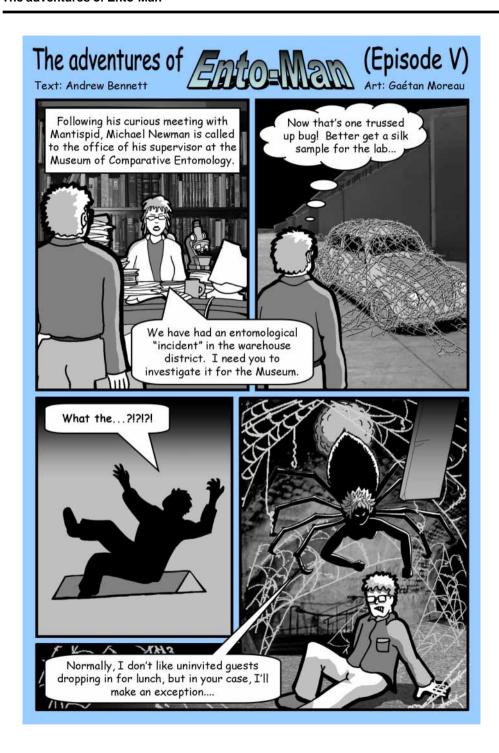
Updates were received from several regional societies. There were no requests for action by the Executive Council.

Errattum:

Bulletin 38(1): 7. The caption on on the figure should read "Nomada on Caltha (Marsh Marigold)."



Larva of the monarch butterfly, Danaus plexippus.



People in the news / Gens qui font les manchettes

Nominations for ESC Governing Board

The following have been nominated and agreed to stand for election in 2006:

Second Vice-President: Gary Gibson and Paul Fields

Director-at-Large: Chris Buddle and Yvan Pelletier.

Members will receive more detailed information in the mail. The ballots must be mailed

to the Elections Committee by July 15th, so vote!





Candidates for Second Vice-President: Gary Gibson (left) and Paul Fields (right).





Candidates for Director-at-Large: Chris Buddle (left), Yvan Pelletier (right).

Officers of Affiliated Societies, 2005-2006 Dirigeants des sociétés associées, 2005-2006

Entomological Society of British Columbia

President Karen Needham President-Elect Richard Ring Past President Dave Raworth Editor (Journal) Ward Strong Editor (Boreus) Jenny Heron & Suzie Lavallee 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

http://esbc.harbour.com/

Entomological Society of Alberta

President Mava Evenden Vice President Jeff Battigalli Past President John Acorn Editor (Proceedings) Stephanie Erb Editor (Website) Troy Danyk Treasurer Kimberly Rondeau Secretary Mike Undershultz

Alberta Environment 9th Floor, 9920 108 St. Edmonton, AB T8C 1C6 E-mail: undershultz@gov.ab.ca

Tel: (780) 422-1508

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

Entomological Society of Saskatchewan

Art Davis President President-Elect Julie Soroka Past President Philip Curry Treasurer Dwayne Hegedus Newsletter Editor Brian Galka Larry Grenkow Secretary Agriculture and Agri-Food Canada

107 Science Place, Saskatoon, SK S7N 0X7

Tel: (306) 956-7293 E-mail: grenkowl@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.

Entomological Society of Manitoba

Rheal Lafreniere President President-Elect Blaine Timlick Past-President Brent Elliott Treasurer Ian Wise

Newsletter Editors Manhood Iranpour Patricia MacKay Editor (Proceedings) Terry Galloway Member-at-Large Kim Riley 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

http://home.cc.umanitoba.ca/esm/

Entomological Society of Ontario

President John Huber President-Elect Blair Helson Past-President Fiona Hunter Treasurer Kevin Barber Editor (Journal) Yves Prévost Secretary David Hunt Agriculture and Agri-Food Canada

2585 Country Rd. 20, Harrow, ON NOR 1G0

Tel: (519) 738-2251 ext 427 E-mail: Huntd@agr.gc.ca http://www.entsocont.com

Société d'entomologie du Québec

Président Eric Lucas Président-sortant Jacques Brodeur Vice-président Daniel Cormier Trésorier Nancy Larocque Rédacteur (Antennae) Christine Jean Mireille Marcotte Secrétaire

1055, rue du PEPS, C.P. 3800 Sainte-Foy, OC G1V 4C7

Tél.: (418) 648-4928, Fax: (418) 648-5849

E-mail: secretariat@seq.qc.ca

http://www.seq.qc.ca/

Acadian Entomological Society

President Kenna MacKenzie Vice-President Michelle Larsen Past President John Sweeney Treasurer Suzanne Blatt Secretary Suzanne Blatt

Chemistry Department Acadia University Wolfville, NS B4P 2R6

E-mail: suzanne.blatt@acadiau.ca http://www.acadianes.org/index.html

Bulletin

of the Entomological Society of Canada

Editor: Paul Fields

Assistant Editor: Marj Smith

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.

Published by the Entomological Society of Canada 393 Winston Ave. Ottawa, Ontario, Canada K2A 1Y8 http://esc-sec.org 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

ISSN: 0071-0741

Customer Account No. 3975533

Publications Mail Agreement No. 40033986

Printed in Canada

Contents copyrighted 2006 by the Entomological

Society of Canada

Submission deadline for the next issue: 31 July 2006



Bulletin de la Société d'entomologie du Canada

Rédacteur : Paul Fields

Rédactrice adjointe : Marj Smith

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.

Publié par Société d'entomologie du Canada 393 Winston Ave. Ottawa, Ontario, Canada K2A 1Y8 http://esc-sec.org entsoc.can@bellnet.ca

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 sousmissions 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

ISSN: 0071-0741

Numéro de client : 3975533 Numéro de convention : 40033986

Imprimé au Canada Droits d'auteur 2006 par la Société d'entomologie du Canada

Date de tombée pour le prochain numéro : 31 juillet 2006

The Buzz / Bourdonnements Paul Fields, Editor / Rédacteur



ne of the pleasures I have had as a scientist is discovering new things in the lab or the field, learning new things from reading or discussions and sharing ideas with other people. Instead of writing about the my thoughts on the subject, I thought I would share the thoughts of greater minds than I on the topic.

Don't worry about people stealing your ideas. If your ideas are any good, you'll have to ram them down people's throats. Howard Aiken

New ideas pass through three periods: 1) It can't be done. 2) It probably can be done, but it's not worth doing. 3) I knew it was a good idea all along! Arthur C. Clarke

The way to get good ideas is to get lots of ideas, and throw the bad ones away. Linus Pauling (American theoretical chemist 1901-1994)

Everyone is in love with his own ideas. Carl Gustav Jung

Nothing is more dangerous than an idea when it is the only one you have. Emile Chartier

If you have an apple and I have an apple and we exchange these apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas. George Benard Shaw

Ideas are far more powerful than guns. We don't let our people have guns. Why should we let them have ideas? Joseph Stalin

Originality is the fine art of remembering what you hear but forgetting where you heard it. Laurence Peter

Parmi les grands plaisirs que j'ai eus en tant que scientifique, il y a celui de découvrir du nouveau dans le laboratoire ou sur le terrain, d'apprendre par la lecture ou la discussion et puis celui d'échanger des idées. Au lieu de vous transmettre mes idées cette fois-ci, j'aimerais vous offrir les paroles de certains grands penseurs.

N'ayez pas peur qu'on vous vole les idées. Si vos idées sont bonnes, il vous faudra en rebattre les oreilles aux gens. (Howard Aiken)

Les nouvelles idées passent par trois phases:
1) C'est impossible. 2) C'est peut-être faisable,
mais ça ne vaut pas la peine. 3) J'ai toujours su
que c'était une bonne idée. (Arthur C. Clarke)

Pour avoir de bonnes idées, il faut avoir beaucoup d'idées, puis rejeter celles qui sont mauvaises. (Linus Pauling)

Chacun est amoureux de ses propres idées. (Carl Jung)

Rien n'est plus dangereux qu'une idée lorsque c'est la seule idée qu'on a. (Émile Chartier)

Si vous avez une pomme et moi, j'ai une pomme et nous échangeons ces pommes, alors nous avons toujours une pomme chacun. Mais si vous avez une idée et moi, j'ai une idée et nous échangeons ces idées, alors chacun de nous en aura deux. (George Bernard Shaw)

Les idées sont plus puissantes que les fusils. Nous ne permettons pas au peuple d'avoir des fusils; pourquoi devrions-nous lui permettre d'avoir des idées? (Joseph Staline)

L'originalité, c'est l'art de retenir ce qu'on a entendu, mais d'oublier où on l'a entendu. (Laurence Peter)

Entomological Society of Canada, 2005-2006 Société d'entomologie du Canada, 2005-2006

Executive Council / Conseil exécutif

President / Président

Dan Quiring University of New Brunswick Fredericton, NB E3B 6C2

Tel: (506) 453-4922, Fax: (506) 453-3538

E-mail: quiring@unb.ca

First Vice-President / Premier vice-président

Peggy Dixon

Atlantic Cool Climate Crop Research Centre Agriculture and Agri-Food Canada

308 Brookfield Rd. St. John's, NL A1E 5Y7

Tel: (709) 772-4763, Fax: (709) 772-6064

E-mail: dixonpl@agr.gc.ca

Second Vice-President / Second vice-président

Terry Shore

506 West Burnside Rd Pacific Forestry Centre

Victoria, BC, Canada V8Z 1M5

Tel: (250) 363-0600, Fax: (250) 363-0775

E-mail: tshore@pfc.cfs.nrcan.gc.ca

Past President / Président sortant

Robert Lamb

Cereal Research Centre

Agriculture and Agri-Food Canada 195 Dafoe Rd., Winnipeg, MB R3T 2M9

Tel: (204) 983-1458, Fax: (204) 983-4604

E-mail: rlamb@agr.gc.ca

Directors-at-Large / Conseillers

Rosemarie De Clerck-Floate (2006), Robert Roughley (2007), Sheila Fitzpatrick (2008)

Regional Directors / Directeurs régionaux

Allan Carroll (ESBC), Hector Carcamo (ESA), Lorraine Braun (ESS), Patricia MacKay (ESM), David Hunt (ESO), Michèle Roy (SEQ), Kenna MacKenzie (AES).

Student Representatives / Représentantes des étudiants

Chris Borkent
McGill University

E-mail: cborkent@primus.ca

Greg Smith

University of Northen British Columbia

E-mail: gregsmith@telus.net

Trustees / Fiduciaires

Treasurer / Trésorier

Patrice Bouchard Entomological Society of Canada 393 Winston Ave., Ottawa, ON K2A 1Y8

Tel: (613) 759-7510, Fax: (613) 759-1924

E-mail: bouchardpb@agr.gc.ca

Secretary / Secrétaire

Rick West

31 Drover's Heights

Portugal Cove-St. Philips, NL A1M 3G6 Tel: (709) 895-2734, Fax: (709) 895-2734

E-mail: reely.west@nl.rogers.com

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

Ass. Bulletin Editor / Rédactrice adj. du Bulletin Mariorie Smith

Agriculture and Agri-Food Canada

195 Dafoe Rd., Winnipeg, MB R3T 2M9 Tel: (204) 983-4889, Fax: (204) 983-4604

E-mail: msmith@agr.gc.ca

Webmaster / Webmestre

Barry Lyons

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

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

Divison Editors / Rédacteurs de division

Michel Cusson, E-mail: cusson@cfl.forestry.ca
Don Lafontaine, E-mail: lafontained@agr.gc.ca
David Gray, E-mail: David.Gray@nrcan-rncan.gc.ca

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, http://esc-sec.org/

| | 1 | |
|---|---|---|
| 5 | 4 | 2 |
| | | 3 |



http://esc-sec.org/

Return Undeliverable Canadian Address to: Entomological Society of Canada Société d'entomologie du Canada 393 Winston Avenue Ottawa, Ontario, Canada K2A 1Y8

Publications Mail Agreement No. 40033986

Date of issue: June 2006

E-mail: entsoc.can@bellnet.ca

ISSN: 0071-0741

Images

On the spine: The spurge hawk-moth, *Hyles euphorbiae* (L.)(Sphingidae), a biological control agent introduced to North America during the 1960s, photo: P. MacKay. **Beneath the title:** The boxelder bug, *Boisea trivittatus* (Say) (Rhopalidae), feeds on seeds of female boxelder trees, photo: B. Landry.

Photos on front cover:

- 1. The two-striped grasshopper, *Melanoplus bivittatus* (Say)(Acrididae), a major North American crop pest, completing its molt, photo: T. Wist.
- 2. Sampling for the soybean aphid, *Aphis glycines* Matsumura (Aphididae), photo: J. Brodeur.
- 3. Stratiolaelaps scimitus (Womersley) (Laelapidae), a predatorymite used as a biological control agent for thrips and fungus gnats in greenhouses, photo: D. Walter.
- 4. *Perillus bioculatus* (F.) (Pentatomidae), the twospotted stinkbug, a natural predator of the Colorado potato beetle, photo: S. Marshall.
- 5. The ponderosa pine seedworm, *Cydia piperana* (Kft.) (Tortricidae), an obligate seed feeder common on ponderosa pine, photo: L. van Akker.

Back cover: The assassin bug, *Zelus luridus* Stal (Reduviidae), feeding on a flower fly, *Ocyptamus fascipennis* (Wiedemann) (Syrphidae), photo: S. Marshall. Français à l'intérieur de la couverture avant