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Images

Sur le dos: La coccinelle *Anatis labiculata* (Coleoptera: Coccinellidae) se nourrissant d'un adulte d'*Uroleucon rudbeckiae* (Hemiptera: Aphididae). Photo: Pat MacKay

Sous le titre: L'urophore des chardons, *Urophora cardui* (Diptera: Tephritidae), originaire d'Europe et introduit en Amérique du Nord pour le contrôle du cirse des champs, *Cirsium arvense*. Photo: Steve Marshall

1. Mâle chalcis du sapin de Douglas, *Megastigmus spermotrophus* (Hymenoptera: Torymidae). Photo: Dion Manastyrski

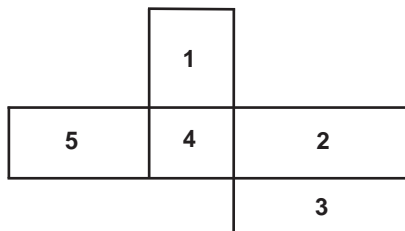
2. Une guêpe maçonne, probablement *Ancistrocerus* sp. (Hymenoptera: Vespidae: Eumeninae). Photo: Joanne Bovee

3. Une zygène, *Zygaena* sp. (Lepidoptera: Zygaenidae) sur une centaurée. Photo: Alicia Leroux

4. Vérification des pièges à charançons dans les fraisiers. Photo: Kenna MacKenzie

5. Accouplement de *Misumena vatia* (Araneae: Thomisidae) et souper d'empidide (Diptera: Empididae). Photo: Brian Klinkenberg

Couverture arrière: Une libellule tropicale, *Neurothemis* sp. (Odonata: Libellulidae), se rafraîchissant par thermorégulation, Thaïlande. Photo: Jeremy McNeil





How did this happen? This is my last missive in the *Bulletin* as President of the ESC. It seems like yesterday that I was beating my head last November trying to think of something useful, entertaining or pertinent to write for this column.

I have learned a number of things over this year as President.

1. As President, you get asked to identify insects from sometimes unfocused, sometimes stunningly beautiful photographs of insects from across Canada and elsewhere in the world. I have passed these along to our members who have done a great job of identifying insects and connecting to the public at large.

2. You get asked by the media to find someone to talk about entomology. Today, I had a radio announcer from Victoria ask for someone to speak about wasps, with two hours notice. Thanks to Rob Currie for stepping up the plate on such short notice. Or the request from the BBC for a contact to help them film a story on the behaviour of the black fire beetle.

3. The issues you think will take up your time and attention will surprise you. This spring, the ESC was informed that we may be sued as a third party in a class action proceeding against ProQuest Information and Learning

Comment est-ce arrivé? Ceci est mon dernier message dans le *Bulletin* en tant que président de la SEC. On dirait que c'était hier que je me creusais la tête, en novembre dernier, afin de trouver quelque chose d'utile, divertissant ou pertinent à écrire pour cette section.

J'ai appris un certain nombre de choses durant cette année en tant que président.

1. En tant que président, on vous demande d'identifier des insectes à partir de photos parfois floues, parfois incroyablement belles de partout au Canada et ailleurs dans le monde. J'ai refile ces photos à nos membres qui ont fait un bon travail d'identification et de connexion avec le grand public.

2. Les médias vous demandent de trouver quelqu'un pour parler d'entomologie. Aujourd'hui, j'ai eu un animateur de radio de Victoria me demandant quelqu'un pour parler des guêpes, avec un préavis de deux heures. Merci à Rob Currie d'avoir accepté cette tâche à la dernière minute. J'ai également eu une requête de la BBC pour un contact afin de les aider à filmer une histoire sur le comportement des buprestes pyromètres.

3. Les problèmes qui, selon vous, prendront votre temps et votre attention vous surprendront. Ce printemps, la SEC a été informée que nous pourrions être poursuivis par une tierce partie dans une action contre ProQuest Information and Learning Company et ses clients: Toronto Star Newspapers, Rogers Media Inc, Canwest Publications Inc, La Société d'entomologie du Canada, et plusieurs autres. La SEC a dû engager un avocat afin de la représenter, elle et ses intérêts dans cette cause, et nous espérons avoir une conclusion rapide et peu coûteuse à cette action légale.

4. La SEC rend un grand service à la communauté intellectuelle du Canada en fournissant aux gens qui sont passionnés par les insectes une façon de partager leur savoir et leur enthousiasme avec les gens partout au Canada et dans le monde, par le biais de la réunion

Company and its clients; Toronto Star Newspapers, Rogers Media Inc, Canwest Publications Inc., Entomological Society of Canada and scores of others. The ESC had to hire a lawyer to represent its interests in the case, and hopefully we will have a quick and not too costly conclusion to this legal action.

4. The ESC provides a great service to the intellectual community in Canada by providing people that are passionate about insects a way to share their knowledge and enthusiasm with like-minded people across Canada and around the world, through the Annual Meeting, the *Bulletin* and *The Canadian Entomologist*.

5. The ESC would not be able to do this without its members, and a host of volunteers and its Office Manager, Derna Lisi. For you not familiar with the ESC Board and Committees (<http://www.esc-sec.ca/board.html>), there are a few key people that deserve special thanks for their hard work during the year: The Trustees are the core of the society and I would like to thank them for the hundreds of hours they have spent over this year on Society business. Without them the Society would quickly grind to a halt.

Patrice Bouchard, as Treasurer, deals with the office on a weekly basis, keeps an eye on the money coming into the Society and what we are spending. The ESC has annual revenues of about \$200,000. This is a huge responsibility and Pat has done a stellar job. This year, Pat has the added responsibility of leading up the negotiations for the contract for the printing of *The Canadian Entomologist*.

Annabelle Firlej is our new Secretary. She is often the first person that receives correspondence for the ESC. She is also responsible for getting reports from committee chairs for the four meetings we will have this year. This takes a special kind of person to coax and cajole reports out of people in a timely fashion. Then she is responsible in reporting the essence of the meeting, sometimes chaotic meetings, so that we have a concise record of the meeting and that get action items are passed on to the right people.

annuelle, du *Bulletin* et de *The Canadian Entomologist*.

5. La SEC ne serait pas capable de faire tout cela sans ses membres, ses bénévoles et sa directrice de bureau, Derna Lisi. Pour ceux qui ne sont pas familiers avec le conseil d'administration et les comités (<http://www.esc-sec.ca/fr/f-board.html>), il y a plusieurs personnes clés qui méritent un merci particulier pour leur travail ardu durant l'année : les fiduciaires sont le cœur de la société et j'aimerais les remercier pour les centaines d'heures passées cette année sur les affaires de la société: sans eux la société s'arrêterait rapidement. Patrice Bouchard, en tant que trésorier, fait affaire avec le bureau sur une base hebdomadaire et garde un œil sur l'argent qui entre ou qui sort de la société. La SEC a des revenus annuels d'environ 200 000\$. Il s'agit donc d'une énorme responsabilité et Pat a fait un travail incroyable. Cette année, Pat a également pris les responsabilités de mener les négociations pour le contrat de l'impression de *The Canadian Entomologist*.

Annabelle Firlej est notre nouvelle secrétaire, elle est donc souvent la première personne à recevoir les correspondances pour la SEC. Elle est également responsable d'obtenir les rapports des présidents des comités pour les quatre réunions que nous aurons cette année. Ça prend un type de personne bien spécial pour pouvoir obtenir les rapports des gens dans un délai raisonnable. Elle est également responsable de rapporter l'essentiel des réunions, parfois chaotiques, afin que nous ayons un rapport concis de la réunion et des actions qui sont requises de différentes personnes.

Robb Bennett est notre rédacteur en chef de *The Canadian Entomologist*. Les gens auront oubliés depuis longtemps qu'est-ce que le président ou le conseil d'administration auront fait lors d'une année en particulier, mais la publication de *The Canadian Entomologist* est l'héritage le plus durable de la Société, et Robb et les 36 membres du comité éditorial sont responsables du maintien de la qualité de *The Canadian Entomologist* qui est publié depuis 1868.

Robb Bennett is our Editor-in-Chief of *The Canadian Entomologist*. People will have long forgotten what the President or Board did in a particular year, but the publication of *The Canadian Entomologist* is the Society's most enduring legacy, and Robb and the 36 members of the Editorial Board are responsible for maintaining the quality of *The Canadian Entomologist* which has been published since 1868.

Kevin Floate is the *Bulletin* Editor, he along with the Assistant Editor Fred Beaulieu produce this informative, entertaining and beautiful publication, four times a year, year after year. I see the *Bulletin* as the glue that helps keep the Society together between the meetings. Kevin and Fred are doing a bang up job, issue after issue. Also, I would like to welcome Cedric Gillott who will be replacing Kevin in January 2010 as the new *Bulletin* Editor.

Last but not least for the Trustees is Rick West, the Webmaster. The web has radically changed how people obtain information. The website is the face of the ESC to the general public, the media and to new members. Rick entirely revamped our website. This is the first place I go when I want to find out something about the Society. Rick has done a great job of designing the website and keeping it up-to-date.

The elected members of the Board, the Executive, the Regional Directors, Directors-at-Large and the Student Representative form the core of people that run the many committees that carry out the affairs of the Society. They are too numerous to mention by name and their work too diverse to detail here, but I would like to thank the over 60 people that make up the Board and the committee members for all the work they have done over the year.

I would like to welcome Michel Cusson as the incoming Second-Vice President and Felix Sperling as the incoming Director-at-Large to the Board. Thank-you Owen Olfert for putting his name as a candidate for Second-Vice President and Rebecca Hallett and Martin Erlandson for putting their names forward to serve as Director-at-Large. I have found the

Kevin Floate est le rédacteur du *Bulletin*, il produit donc, avec son rédacteur adjoint, Fred Beaulieu, cette publication informative, divertissante et magnifique, quatre fois par années, année après année. Je vois le *Bulletin* telle une colle qui nous aide à tenir la Société ensemble entre les réunions, et Kevin et Fred font un travail incroyable, numéro après numéro. J'aimerais également souhaiter la bienvenue à Cedric Gillot qui remplacera Kevin en janvier 2010 en tant que nouveau rédacteur du *Bulletin*.

Le dernier mais non le moindre pour les fiduciaires, Rick West, le webmestre. Internet a radicalement changé la façon dont les gens obtiennent de l'information. Le site Web est le visage de la SEC pour le grand public, pour les médias et pour les nouveaux membres. Rick a complètement revampé notre site Web. Il s'agit du premier endroit où je vais quand je cherche une information concernant la Société. Rick a fait un travail incroyable en concevant le nouveau site Web et en la gardant à jour.

Les membres élus du conseil d'administration, le conseil exécutif, les directeurs régionaux, les directeurs généraux et les représentants étudiants forment le cœur des gens qui font rouler les nombreux comités qui s'occupent des affaires de la Société. Il y a trop de gens à nommer et leur travail est trop diversifié pour tout détailler ici, mais j'aimerais remercier les plus de 60 personnes qui forment le conseil d'administration et les membres des comités pour le travail accompli dans la dernière année.

J'aimerais souhaiter la bienvenue à Michel Cusson qui deviendra second vice-président et Felix Sperling qui sera le conseiller sur le conseil d'administration. Merci à Owen Olfert d'avoir postulé en tant que second vice-président et à Rebecca Hallett et Martin Erlandson pour avoir postulé en tant que conseillers. Je trouve que le temps que j'ai investi en tant que bénévole pour la SEC m'a rapporté par tout ce que j'ai appris et tous les gens que j'ai rencontré.

Chaque année une équipe de bénévoles mettent sur pied la réunion annuelle. J'ai eu

time that I have spent as a volunteer working for the ESC very worthwhile in terms of what I have learnt doing these new and varied jobs and the people I have met.

Every year a team of volunteers put on the Annual Meeting. I have had a chance to be in on the preparations for the 2009 Meeting in Winnipeg. Thanks to Brent Elliott, General Chair, Neil Holliday, Scientific Chair, and the rest of the Local Organising Committee who have been preparing for over 2 years for the 5 days of meetings this October in Winnipeg.

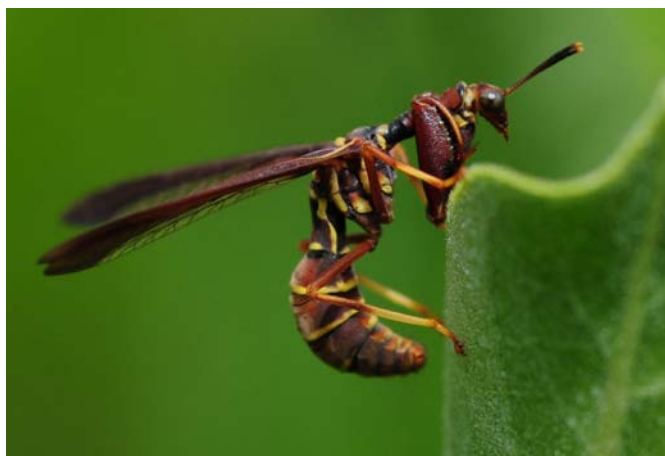
Finally, I would like to thank our Office Manager Derna Lisi. She provides invaluable service in the day-to-day running of the Society. Forgot your password? E-mail Derna. Need an update on the number of members that take the *Bulletin* in print and *The Canadian Entomologist* electronically? Phone Derna. Authors, subscribers and members and the public at large, all call on Derna during the year.

So when someone asks if you would like to volunteer on a committee, or put your name forward for an elected office, or help out to run a meeting – say yes. You will be surprised at the rewards of giving your time, expertise and enthusiasm.

la chance de participer aux préparations de la réunion de 2009 à Winnipeg. Merci à Brent Elliott, président général, Neil Holliday, président scientifique et le reste du comité organisateur local qui a préparé durant plus de deux années ces cinq journées de réunions en octobre prochain à Winnipeg.

Finalement, j'aimerais remercier notre directrice de bureau, Derna Lisi. Elle rend un service inestimable dans le fonctionnement de la Société au jour le jour. Un mot de passe oublié? Écrivez à Derna. Besoin d'une mise à jour sur le nombre de membres qui prennent le Bulletin en version papier et *The Canadian Entomologist* électroniquement? Téléphonez à Derna. Les auteurs, abonnés, membres et le grand public appellent Derna à chaque année.

Alors si quelqu'un vous demande si vous voulez participer sur un comité, mettre votre nom pour une élection, ou aider à organiser une réunion, dites oui. Vous serez surpris de tout ce que vous gagnerez à investir votre temps, votre expertise et votre enthousiasme.



Max Larrivée

A wasp-mimicking mantispid

(Not) Everyone's a critic

In many ways, the work of a critic is easy. We risk very little yet enjoy a position over those who offer up their work and their selves to our judgment. We thrive on negative criticism, which is fun to write and to read. But the bitter truth we critics must face, is that in the grand scheme of things, the average piece of junk is probably more meaningful than our criticism designating it so.

Anton Ego, *Ratatouille*.



In creative pursuits such as art, music or, as in the film quoted above, the preparation of fine cuisine, the critic may be dismissed as superfluous. Whether one prefers Monet or Renoir, *Château Lafite 1959* or *1962*, is mostly subjective. In science, however, criticism by

peers is an essential component of the publishing process. Peer review winnows out the chaff and attempts to uphold a standard level of quality in the published literature. Of course, the process is not perfect. Apart from potential lack of objectivity, one of peer review's growing problems is the inequitable distribution of papers being submitted by many, but reviewed by few. As more journals migrate to electronic publication and submission procedures, this discrepancy is growing. The resulting phenomenon has been called reviewer (and editor) "burn-out" in which journals find that their few, reliable reviewers are unable or unwilling to review all articles for them. In this scenario, journals must either delay publication until alternative, reliable reviewers are found, or use less well known and/or less critical reviewers, thereby risking a potential lowering of quality.

As a professional entomologist, my currency of productivity is the peer-reviewed paper. I am therefore obliged to participate in the peer review process. Among all aspects of my job, reviewing and editing papers generally ranks down with scrubbing Petri dishes in terms of level of enjoyment. Sometimes, I am surprised by a well-written, stimulating paper that broadens my knowledge or even adds insight to my own studies. But sadly, these cases are the exception rather than the rule. Increasingly, manuscripts are sent to me that suffer from any number of problems ranging from lack of a rudimentary knowledge of basic sentence structure to low scientific merit, the latter usually generated by an author's attempt to hack a perfectly valid study into three or four papers. Is it just me, or is this decline in quality a general phenomenon?

Certainly, the present global nature of science means that many articles are penned by authors who are not writing in their native language, but I have certainly received manuscripts from native English speakers that are the literary equivalents of airline disasters. And I'm not always convinced that this is because the authors do not know correct English. Some authors, whether deliberately or not, end up using journal reviewers and editors as proofreaders. I would go further to suggest that some individuals consider it foolish to waste time fussing with irrelevant details such as grammar and diction when this will be "caught during the review process". Perhaps this approach is not

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entirely their fault, but rather a symptom of the “publish or perish” mentality of universities and funding agencies. Regardless, it can make for dire reviewing. And this assumes that the science in these manuscripts is valid and relevant which of course, is not always the case.

How do I respond when I receive a low quality manuscript? Naturally, if the manuscripts are complete offal, they can be rejected outright. Unfortunately, however, this is seldom the case. Hidden behind the comma splices and dangling modifiers, somewhere between the excessively short methods section and the rambling, wasteland of logic posing as a discussion, all but the most poorly constructed papers possess at least a modicum of scientific merit. And being the compassionate person that I am (can't you tell?), I usually feel compelled to nurture this kernel through expansive suggestions and editorial comments. But sometimes, I wish I could write what I REALLY think, which leads to this issue's requisite list. Note that I am not deigning to hope that my comments in this column might actually improve the quality of articles submitted. No, this article is nothing more than a catharsis for me that was “fun to write and (hopefully will be) to read”. Also, just in case I have previously reviewed any of your papers – of course, yours was one of the rare, well-written, thought-provoking studies that made me chortle enthusiastically to myself while I was reviewing it.

Completely warranted (but diplomatically excluded) comments from a few reviews that I may or may not have written (in phylogenetic order, of course):

- **Ephemeroptera:** From the Greek root *ephemeros* meaning “lasting for a markedly brief time” – not unlike the impression your paper will make on the scientific community.
- **Odonata:** This paper certainly provides excellent coverage in an area that badly needs it; namely, the bottom of my budgie cage.
- **Zoraptera:** I will begin my review by tactfully skipping the question, “Is the study relevant?”
- **Hemiptera:** It is fair to say that your studies on the comparative anatomy of hemipteran mouthparts re-define the meaning of the word “sucks”.
- **Psocoptera:** Even an extremely malnourished book louse would find your manuscript unappetizing.
- **Megaloptera:** Your manuscript would perhaps be more appropriately entitled: “Studies of the life history of Mega-CRAP-tera.”
- **Raphidioptera:** I was not aware that the journal accepts submission of manuscripts in Parseltongue, or whatever language it is in which you are attempting to write.
- **Coleoptera:** At a certain point during the fourth day of reviewing your article on dung beetle chaetotaxonomy, I began to wish that the manuscript was made of dung, so that I could watch your study organisms roll it away, lay an egg on it, and hastily consume it.
- **Strepsiptera:** With respect to your study, I am not sure which is more twisted: the hind wings of your *Stylops* spp. or the truth.
- **Diptera:** Even a sex-starved male fly would find your section on female genitalia stultifyingly dull.
- **Lepidoptera:** The author is apparently unaware that Moths, in fact, do not have Balls.
- **Hymenoptera:** I would rather attach hornet nests to my extremities and pogo stick my way across Canada than attempt to correct the numerous errors in your exceedingly tedious article.

I do not apologize for omission of taxa in the preceding list. Also, do not believe that studies on taxa omitted above are beyond criticism. More likely, your taxa are not significant enough to warrant discussion, either positive or negative.

Join *Moth Balls* next issue, or don't. Regardless, I will continue to offer cheerful commentary on all things entomological.



**Gold Medal Award –
Dr. Neil Holliday**

The 2009 recipient of the Entomological Society of Canada's Gold Medal Award for outstanding achievement in Entomology is Dr. Neil Holliday. This award recognizes his contribution as a scientist and Professor of Entomology in the areas of insect ecology, biological control and pest management. Neil has published 53 refereed journal articles that demonstrate his diverse research interests. His early work focused on basic questions in insect ecology such as the population dynamics of forest Lepidoptera and how carabid beetle communities respond to disturbance in northern forests. Neil's research program has also addressed fundamental problems faced by Manitoba producers and this research has been applied to integrated pest management in canola, potato, beans, and seed alfalfa. Included in his approach to integrated pest management is the study of biological control agents for potential introduction to Canada. Neil collaborates with researchers at Agriculture and Agri-Food Canada and the

Récipiendaire de la médaille d'or – Dr Neil Holliday

Le récipiendaire 2009 de la médaille d'or de la Société d'entomologie du Canada pour un accomplissement exceptionnel en entomologie est Dr Neil Holliday. Ce prix récompense sa contribution en tant que chercheur et professeur en entomologie dans les disciplines de l'écologie des insectes, de la lutte biologique et de la lutte aux ravageurs. Neil a publié 53 articles dans des revues scientifiques qui ont démontré ses intérêts de recherches diversifiés. Ses premiers travaux se sont concentrés sur les questions de base en écologie des insectes, telles que la dynamique des populations des lépidoptères forestiers et la façon dont les communautés de carabes répondent à la perturbation des forêts nordiques. Les recherches de Neil se sont également penchées sur des problèmes fondamentaux vécus par les agriculteurs manitobains et les travaux ont pu être appliqués ensuite à la lutte intégrée aux ravageurs dans le canola, les pommes de terre, les haricots et la luzerne de semence. L'étude des agents de lutte biologique en vue de leur introduction potentielle au Canada est incluse dans son approche de la lutte intégrée. Neil collabore avec des chercheurs d'Agriculture et agroalimentaire Canada et de la station de recherche du CABI en Suisse pour évaluer les ennemis naturels en vue d'une introduction potentielle au Canada, afin de lutter contre des ravageurs envahissants. Les travaux récents et en cours du laboratoire de Neil qui portent sur la maladie hollandaise de l'orme permettront de protéger les forêts urbaines et de réduire directement les coûts de contrôle pour les communautés, en plus de réduire l'exposition des insectes non ciblés aux insecticides.

Neil est très actif dans l'enseignement et le mentorat autant auprès des étudiants du baccalauréat que des étudiants gradués. Son implication dans l'enseignement au niveau du baccalauréat à l'Université du Manitoba

CABI research station in Switzerland to evaluate natural enemies for potential introduction to target invasive pests in Canada. Recent and ongoing research in Neil's laboratory on the biology and control of insect vectors of Dutch elm disease will protect urban forests and directly reduce the cost of control to communities as well as reduce the exposure of non-target insects to insecticides.

Neil is very active in the education and mentorship of undergraduate and graduate students alike. His dedication to undergraduate education at the University of Manitoba was recognized by his receipt of the University's Merit Award for Teaching in 1992 and a Students' Teacher Recognition Award in 2009. He has taught a variety of undergraduate courses at the University of Manitoba ranging from Principles of Ecology, to Introductory Agriculture and Insect Ecology and Insect Pest Management. Neil challenges his students to work hard which inspires them to have a life-long interest in insects and their importance and role in the natural world. Neil's efforts at undergraduate education are not limited to the lecture hall, as 20 undergraduate researchers have completed research projects in his laboratory. Neil has served as a mentor to 32 graduate students, including the five graduate students currently in his laboratory. His graduate students have been well-supported by over \$1.2 million in grant support in the last ten years. His former graduate students have populated research and technical positions in Canada and around the world. Neil also serves as the statistical resource person in the Department of Entomology at the University of Manitoba and has helped countless graduate students in the whole department to better understand and improve their research approach to Entomology.

Neil feels strongly and is very active in outreach education targeting various producer groups and the general public. He has published over 73 extension publications and makes regular presentations on pest management to gardening clubs. These demonstrate Neil's broad knowledge of insects of Manitoba

a été reconnue grâce au prix du mérite pour l'enseignement décerné par l'université, qui lui a été remis en 1992, ainsi que grâce au prix de reconnaissance de l'enseignement décerné par les étudiants, qui lui a été remis en 2009. Il a enseigné une diversité de cours de baccalauréat à l'Université du Manitoba, allant de Principes d'écologie à Introduction à l'agriculture et Écologie des insectes et Gestion des insectes ravageurs. Neil encourage ses étudiants à travailler fort, ce qui les stimule à entretenir un intérêt durable pour les insectes et leur importance et rôle dans la nature. L'implication de Neil dans les études du baccalauréat ne se limite pas aux salles de classe, puisque 20 étudiants du baccalauréat ont complété des projets de recherche dans son laboratoire. Neil a servi de mentor à 32 étudiants diplômés, incluant les 5 étudiants qui sont présentement dans son laboratoire. Ses étudiants diplômés ont été supportés financièrement par plus de 1,2 million \$ en bourses depuis les 10 dernières années. Ses anciens étudiants diplômés ont comblé des postes de chercheurs et de techniciens au Canada et à travers le monde. Neil est également une personne ressource en statistiques au département d'entomologie de l'Université du Manitoba et il a aidé un nombre incalculable d'étudiants diplômés de tout le département à mieux comprendre et améliorer leur approche scientifique en entomologie.

Neil considère que l'enseignement à l'externe est important et il y est très impliqué auprès de groupes de producteurs diversifiés et du public en général. Il a publié plus de 73 documents de vulgarisation et il fait régulièrement des présentations sur la gestion des ravageurs dans des groupes de jardinage. Ces documents et présentations illustrent les vastes connaissances de Neil sur la faune des insectes du Manitoba et les stratégies de lutte intégrée pouvant être utilisées contre ces ravageurs. Le département d'entomologie gère également une ligne téléphonique d'information sur les insectes, pour répondre aux requêtes du public à propos des insectes et Neil s'assure d'obtenir les fonds nécessaires pour pourvoir la ligne téléphonique en personnel à chaque été.

and the integrated pest management strategies used against pest species. The Department of Entomology also runs a “bug-line” to answer inquiries from the public about insects and Neil acquires funding to ensure the phone line is staffed each summer.

Neil has been active in academic and entomological service activities throughout his career. Most notably he has served as the Head of the Department of Entomology at the University of Manitoba for two terms and is currently serving a third term. In this role, he has fought tirelessly to maintain the Department of Entomology as the only such department in Canada. Through his efforts, a tentative agreement has been reached to increase the number of faculty in the department in the next few years. He has also served on many Faculty and University committees including Chair and Student Advisor to the Agroecology Undergraduate Program. Neil has served on the Governing Board and various committees of the Entomological Society of Canada and has been particularly active on the executive of the Entomological Society of Manitoba of which he has been President twice. He has had a major role in the organization of every joint ESC/ESM meeting since 1986.

Neil’s wide-ranging contributions to entomological research, the education of entomologists, pest management practitioners and the public, and his service to academia and entomological societies make him very qualified to receive the Gold Medal from the Entomological Society of Canada.

Neil a été actif dans les activités académiques et en tant que ressource entomologique tout au long de sa carrière. Il a entre autres été à la tête du département d’entomologie de l’Université du Manitoba durant deux trimestres et il en est présentement à son troisième trimestre. Dans ce poste, il s’est battu sans relâche afin de conserver le département d’entomologie tel qu’il est, il s’agit du seul département semblable au Canada. Grâce à ses efforts, une tentative d’entente a été obtenue afin d’augmenter le nombre de facultés du département au cours des prochaines années. Il a également été impliqué dans plusieurs comités de la faculté et de l’université, incluant en tant que président et conseiller aux étudiants pour le programme d’agroécologie. Neil a siégé sur le conseil d’administration et différents comités de la Société d’entomologie du Canada et il a été particulièrement actif au sein du comité exécutif de la Société d’entomologie du Manitoba, au sein de laquelle il a été deux fois élu président. Il a joué un rôle majeur dans l’organisation des congrès conjoints des deux sociétés depuis 1986.

Les contributions variées de Neil dans la recherche en entomologie, l’enseignement aux entomologistes, aux intervenants en gestion des ravageurs et au public, ainsi que sa présence au sein du système universitaire et des sociétés d’entomologie, en font un candidat très qualifié pour recevoir la médaille d’or de la Société d’entomologie du Canada.



Fred Beaulieu

A cerambycid (*Typocerus*) on a goldenrod flower



Gordon C. Hewitt Award –

Dr. Sherah VanLaerhoven

The 2009 recipient of the Gordon C. Hewitt Award is Dr. Sherah VanLaerhoven. Sherah is an accomplished researcher who runs two strong programs in entomology: forensic science and biological control of insect pests in greenhouses. Sherah shares her enthusiasm for entomology through supervision and teaching of highschool, undergraduate and graduate students. She is particularly active in outreach extension activities through her collaborations in forensic entomology cases. Sherah has a strong record of service to the academic community and entomological societies.

Sherah received both her Bachelor of Science (BSc) and Master of Pest Management (MPM) degrees from Simon Fraser University. Her MPM research examined the succession of insect species attacking buried carrion in two regions of British Columbia. This research introduced Sherah to the field of forensic entomology that makes up a strong part of her

**Récipiendaire du prix Gordon
C. Hewitt –**

Dr Sherah VanLaerhoven

La récipiendaire 2009 du prix Gordon C. Hewitt est Dr Sherah VanLaerhoven. Sherah est une chercheuse accomplie qui gère deux programmes majeurs en entomologie : science médico-légale et lutte biologique aux insectes ravageurs des serres. Sherah partage son enthousiasme pour l'entomologie grâce à la supervision et à l'enseignement à des étudiants du niveau secondaire, du baccalauréat et des niveaux gradués. Elle est particulièrement active dans les activités de vulgarisation à l'externe grâce à sa collaboration à des cas d'entomologie médico-légale. Sherah possède une longue liste de contributions à la communauté académique et aux sociétés d'entomologie.

Sherah a reçu ses diplômes de Baccalauréat en sciences (BSc) et de maîtrise en gestion des ravageurs (MPM) de l'Université Simon Fraser. Ses travaux de maîtrise se sont penchés sur la succession des espèces d'insectes attaquant des cadavres en décomposition enterrés dans deux régions de la Colombie-Britannique. Ce projet a initié Sherah à l'entomologie médico-légale, domaine qui constitue maintenant la majeure partie de son programme actuel. Suite à sa maîtrise, Sherah s'est déplacée vers l'Université de l'Arkansas, où ses études doctorales se sont penchées sur les comportements reproductifs et de recherche alimentaire du dendroctone méridional du pin, *Dendroctonus frontalis*. Grâce à une offre de post-doctorat, Sherah est revenue en Colombie-Britannique pour étudier les interactions entre les communautés végétales et le prédateur omnivore *Dicyphus hesperus*, dans le cadre d'un projet du Réseau Biocontrôle avec le Dr David Gillespie. La lutte biologique contre les ravageurs des serres demeure une part importante de son programme de recherche actuel. En 2003, Sherah s'est rendue à l'Université de Windsor en tant que professeure adjointe et pour développer un programme de sciences

current program. On completion of her MPM degree, Sherah moved to the University of Arkansas where her doctoral research examined the foraging and reproductive behaviour of the southern pine beetle, *Dendroctonus frontalis*. A postdoctoral position brought Sherah back to BC where she studied interactions between the plant community and an omnivorous predator, *Dicyphus hesperus*, as a project in the Biocontrol Network with Dr. David Gillespie. Biological control of greenhouse pests remains an important part of her current research program. In 2003, Sherah went to the University of Windsor as an Assistant Professor and to establish a Forensic Science program of which she is Chair. This research has resulted in 41 refereed publications, 6 book chapters and 22 Forensic Entomology Case Reports. She has given a total of 188 oral presentations at meetings or media interviews.

As a teacher and a mentor, Sherah has attracted many students to work in her laboratory. She currently supervises six MSc students, four PhD students, one postdoctoral fellow and seven undergraduates. These students are supported by abundant research grant monies that have totaled over \$3 million since 2005. These funds support a wide range of research projects including: (1) fall insect succession on carrion in SW Ontario; (2) plant resistance to soybean aphid; (3) ecosystem response to perturbation at multiple spatial scales; and (4) an integrated system for conversion of wastes using black soldier fly larvae. Sherah teaches several courses targeting undergraduate and graduate students as well as the professional community. She regularly teaches courses for the Ontario Police College on collection and recovery of human remains.

Sherah has been active in service to several professional societies. She has served on the Board of Directors for the Entomological Societies of British Columbia and Ontario and as a member of the Entomological Society of Canada's Student Affairs Committee. She has also been involved in the organization of meetings for the Canadian Society of Forensic Sciences and for the Biological Control Network.

médico-légales, pour lequel elle est la présidente. Ce projet a résulté en 41 publications, 6 chapitres de livres et 22 rapports de cas d'entomologie médico-légale. Elle a donné un total de 188 présentations orales durant des congrès ou entrevues avec les médias.

En tant que professeure et mentor, Sherah a attiré plusieurs étudiants à travailler dans son laboratoire. Elle supervise présentement six étudiants à la maîtrise, quatre au doctorat, un stagiaire post-doctoral et 7 étudiants au baccalauréat. Ces étudiants sont supportés par des bourses de recherche abondantes, qui représentent une somme de 3 millions \$ depuis 2005. Ces fonds supportent un large éventail de projets de recherche incluant : 1) la succession à l'automne des insectes dans les cadavres en décomposition dans le sud-ouest de l'Ontario; 2) la résistance des plantes au puceron du soja; 3) réponses d'un écosystème à des perturbations à des échelles spatiales multiples; et 4) système intégré pour la transformation des déchets à l'aide de larves de la mouche soldat noire (*Hermetia illucens*). Sherah enseigne plusieurs cours destinés aux étudiants du baccalauréat et aux étudiants gradués ainsi qu'aux professionnels. Elle enseigne régulièrement des cours au Collège de police de l'Ontario sur la collecte et la récupération des restes humains.

Sherah a été active au sein de plusieurs sociétés professionnelles. Elle a siégé sur le conseil d'administration des Sociétés d'entomologie de la Colombie-Britannique et de l'Ontario et elle a été membre du comité des affaires étudiantes de la Société d'entomologie du Canada. Elle a également été impliquée dans l'organisation de congrès pour la Société canadienne des sciences médico-légales et pour le Réseau Biocontrôle.

Sherah a reçu plusieurs prix de reconnaissance pour son excellence en recherche. Récemment, elle a été nommée pour le prix d'excellence en recherche pour un nouveau chercheur de l'Université de Windsor. D'autres prix de l'Université de l'Arkansas (2) ainsi que de l'Université Simon Fraser (3) ont reconnu son excellence en recherche

Sherah has received numerous awards in recognition of her research excellence. Most recently she was nominated for the Outstanding Faculty Research Award-Emerging Scholars/Researchers at the University of Windsor. Other awards from the University of Arkansas (2) and Simon Fraser University (3) have recognized her research excellence as a graduate student researcher. Sherah was also recognized as a leader in her field and for contributions to society in general by inclusion in Canada's Top 40 under 40 (Caldwell Partners, Globe & Mail, Air Canada) in 2006.

Dr. Sherah VanLaerhoven is clearly a young leader in entomology in Canada and is a richly deserving recipient of the Gordon C. Hewitt Award from the Entomological Society of Canada.

en tant qu'étudiante graduée impliquée en recherche. Sherah a également été reconnue comme une meneuse dans son domaine et pour ses contributions à la société en général en étant citée dans le palmarès canadien des 40 sous 40 (Caldwell Partners, Globe & Mail, Air Canada) en 2006.

Dr Sherah VanLaerhoven est clairement une jeune meneuse dans le domaine de l'entomologie au Canada et mérite grandement le titre de récipiendaire du prix Gordon C. Hewitt de la Société d'entomologie du Canada.



Steve Marshall

Nicrophorus tomentosus with phoretic mites catching a ride from a small carcass to another

Meeting announcements / Réunions futures

Joint Meeting of the Entomological Societies of Canada and Manitoba

Winnipeg, Manitoba, 18-21 October 2009

<http://home.cc.umanitoba.ca/~fieldspg/ESC2009.html>

Western Forum on Pest Management/Western Committee on Crop Pests/ Western Committee on Plant Diseases (associated with the ESC JAM)

Winnipeg, Manitoba, 15-17 October 2009

<http://www.westernforum.org/>

Canadian Forum on Biological Control (associated with the ESC JAM)

Winnipeg, Manitoba, 19 October 2009

<http://www.biocontrol.ca/cfbc/>

Biological Survey of Canada Symposium (at the ESC JAM)

Winnipeg, Manitoba, 21-22 October 2009

<http://www.esc-sec.ca/annmeet.html>

57th Annual Meeting of the Entomological Society of Alberta

Lakeland College, Vermilion, Alberta, 5-7 November 2009

<http://www.biology.ualberta.ca/courses.hp/esa/meet2009.htm>

57th Annual Meeting of the Entomological Society of America

Indianapolis, Indiana, 13-16 December 2009

<http://www.entsoc.org/am/fm/2009/index.htm>



Joint Annual Meeting / Réunion annuelle conjointe

Entomological Societies of Canada & Manitoba

ESM2009
Winnipeg, 18-21 October

JOINT ANNUAL MEETING OF THE ENTOMOLOGICAL SOCIETY OF CANADA AND THE ENTOMOLOGICAL SOCIETY OF MANITOBA

Hotel Fort Garry, Winnipeg, Manitoba

Noon Sunday 18 October – Noon Wednesday 21 October 2009

On behalf of the Entomological Societies of Manitoba and Canada we are pleased to invite you to attend the 2009 Joint Annual Meeting. The meeting will be held at the historic Hotel Fort Garry, a full service hotel that is a short walk from The Forks Markets and Entertainment Complex located in downtown Winnipeg. The hotel is approximately 20 minutes by cab from the airport and 5 minutes by foot from the train station.

We encourage you to stay at the Hotel to be close to the meeting location and to help keep our meeting costs down. The local organizing committee has negotiated an excellent guestroom rate: \$129 per night plus taxes, double occupancy. Each additional adult is \$10 (maximum two additional adults). Please use the Group Code 1049YS when making your reservation.

Registration rates remain unchanged from 2008 with early registration being the wisest choice. Rates are \$265/365 (early/late) for regular members, \$100/160 for student and retired members. One day registration and guest tickets for the banquet are also available.

To get more information, or to view the complete program and abstracts, go to http://home.cc.umanitoba.ca/~fieldspg/ESC2009_files/index.htm

Program Highlights

Plenary symposium: Climate Change: from Geology to Ecology

- *History of glacial Lake Agassiz and climate since the last Ice Age, as reflected in lake sediments*
Dr James Teller, University of Manitoba
- *Insects and climate change: what are they telling us and where are we going?*
Dr Camille Parmesan, University of Texas
- *Future shock: invasive insects, climate change, and Canada's forest ecosystems*
Dr Shelley Hunt, University of Guelph

Symposia:

- *Apiculture: Bee–Virus Interactions*
- *Arthropod Host–symbiont Relationships: Diversity, Distribution and Ecology*
- *Biological Survey of Canada Symposium*
- *Canadian Forum on Biological Control Symposium: Putting the 'I' Back Into IPM – How To Integrate Biological Control Effectively In IPM Programs*
- *Entomological Issues in Potato Production*
- *Graduate Student Symposium*
- *Pollination Biology*
- *Protecting Urban Forests and Structures from Insects*
- *Diversity in Forest Ecosystems*

Heritage lecture: History of Beekeeping Research in Western Canada.

Donald Dixon

Student paper competition (presented paper and poster sessions)

Poster session

Presented papers sessions

Entomological Societies of Canada & Manitoba
ESM²⁰⁰⁹
 Winnipeg, 18-21 October

RÉUNION ANNUELLE CONJOINTE DE LA SOCIÉTÉ D'ENTOMOLOGIE DU CANADA ET DE LA SOCIÉTÉ D'ENTOMOLOGIE DU MANITOBA

Hotel Fort Garry, Winnipeg, Manitoba

Midi dimanche le 18 octobre – midi mercredi le 21 octobre 2009

Au nom des Sociétés d'Entomologie du Manitoba et du Canada, nous avons le plaisir de vous inviter à assister à la réunion annuelle conjointe 2009. La réunion se tiendra sur le site historique de l'Hôtel Fort Garry, situé à une courte distance de marche des Marchés Forks et du complexe de divertissement situés au centre-ville de Winnipeg. L'hôtel se situe à environ 20 minutes en taxi de l'aéroport et 5 minutes à pied de la gare de train.

Nous vous encourageons à loger à l'hôtel afin d'être à proximité du site de la réunion et afin de nous aider à maintenir des coûts minimaux. Le comité organisateur a su négocier d'excellent prix pour les chambres : 129\$ (+ tx) par nuit, occupation double. Des frais de 10\$ s'ajoutent pour chaque adulte additionnel (pour un maximum de deux adultes additionnels). Veuillez utiliser le code de groupe 1049YS lorsque vous réserverez.

Les frais d'inscription sont inchangés depuis 2008, les inscriptions hâtives étant le choix le plus éclairé. Les taux sont de 265\$/365\$ (hâtive/tardive) pour les membres réguliers, et de 100\$/160\$ pour les membres étudiants et les membres retraités. Des inscriptions d'une journée et des billets d'invités pour le banquet sont également disponibles.

Pour plus d'informations ou pour voir le programme complet et les résumés, visitez : http://home.cc.umanitoba.ca/~fieldspg/ESC2009_files/index.htm

Aperçu du programme

Session plénière: Changements climatiques: de la géologie à l'écologie

- *Histoire du lac Agassiz et du climat depuis la dernière ère glaciaire, démontrée par les sédiments*
 Dr James Teller, University of Manitoba
- *Évolution et changements climatiques: potentiel et pièges*
 Dr Camille Parmesan, University of Texas
- *Choc futur: insectes envahissants, changements climatiques et les écosystèmes forestiers du Canada*
 Dr Shelley Hunt, University of Guelph

Symposia:

- *Apiculture: interactions abeilles-virus*
- *Relations arthropode hôte-symbionte: diversité, distribution et écologie*
- *Symposium de la Commission Biologique du Canada*
- *Symposium du Forum canadien sur la lutte biologique: comment intégrer efficacement la lutte biologique dans les programmes de lutte intégrée*
- *Problèmes entomologiques dans la production de la pomme de terre*
- *Symposium des étudiants gradués*
- *Biologie de la pollinisation*
- *Protéger les forêts et structures urbaines contre les insectes*
- *Diversité dans les écosystèmes forestiers*

Allocution du patrimoine: Histoire de l'apiculture dans l'Ouest du Canada.

Donald Dixon

Compétition étudiante (présentations orales et affiches)

Session d'affiches

Session de présentations orales



Greetings Entomology Students! I hope you all had a great field season. The **Joint Annual Meeting** of the Entomological Societies of Manitoba and Canada is just around the corner and I am looking forward to see everyone in Winnipeg. Hopefully you've found some time between finishing up fieldwork and starting to number crunch to start putting together that great talk or poster for the meeting this year. The **Graduate Student Symposium** is one of many symposia that will be of interest to students. I would like to thank all those who submitted abstracts for the symposium and encourage you all to attend this session and show your support for your fellow students! The names of the presenters and the titles of their talks are:

- **Brian Ma** (Simon Fraser University): The role of *Anopheles gambiae* feeding decisions on vector-borne disease transmission.
- **Graeme Taylor** (University of Victoria): Host range of a male-killing bacterium infecting filth fly parasitoids.
- **Julia J. Mylnarek** (McGill University): Phylogeny of the tribe Elachipterini (Diptera: Chloropidae).

Bonjour aux étudiants en entomologie! J'espère que vous avez eu une bonne saison de terrain. La réunion annuelle conjointe des Sociétés d'entomologie du Manitoba et du Canada approche à grands pas et j'ai hâte de voir tout le monde à Winnipeg. J'espère que vous avez trouvé du temps entre la fin du travail de terrain et le début des analyses afin de commencer à préparer votre présentation ou votre affiche pour la réunion de cette année. Le **symposium des étudiants gradués** est l'un des nombreux symposiums qui seront intéressants pour les étudiants. Je voudrais remercier tous ceux qui ont soumis un résumé pour le symposium et je vous encourage tous à assister au symposium et montrer votre support à vos collègues étudiants! Le nom des conférenciers et le titre de leur présentation sont :

- **Brian Ma** (Simon Fraser University): The role of *Anopheles gambiae* feeding decisions on vector-borne disease transmission.
- **Graeme Taylor** (University of Victoria): Host range of a male-killing bacterium infecting filth fly parasitoids.
- **Julia J. Mylnarek** (McGill University): Phylogeny of the tribe Elachipterini (Diptera: Chloropidae).
- **Anais Renaud** (Bishop's University): Biodiversity of the Muscidae (Diptera) of Churchill, MB in context of environmental changes.
- **Laura Timms** (University of Toronto): What happens after establishment? Using gypsy moth to explore indirect impacts of invasive species on native communities.
- **Bianca Wolfart** (University of Calgary): Antagonistic selection on an antipredator defence: one predator type and the combined effects of prey phenotype and environment.

Cette année, le **cocktail étudiant** incluera un **quiz entomologique** et sera sans aucun doute un événement fort divertissant. Le cocktail et le quiz se tiendront le lundi 19 octobre de 19h30 à 22h30 dans l'une des salles

- **Anais Renaud** (Bishop's University): Biodiversity of the Muscidae (Diptera) of Churchill, MB, in context of environmental changes.
- **Laura Timms** (University of Toronto): What happens after establishment? Using gypsy moth to explore indirect impacts of invasive species on native communities.
- **Bianca Wolfart** (University of Calgary): Antagonistic selection on an antipredator defence: one predator type and the combined effects of prey phenotype and environment.

This year, the **Student Mixer** will include an **Insect Trivia Contest** and is sure to be an entertaining event. The Mixer and Contest will take place on Monday, October 19th from 7:30- 10:30 pm in one of the conference rooms at The Fort Garry Hotel. In addition to the Drink Tickets that students will find in their registration package, a cash bar will be available for the duration of the mixer. The contest will run from about 8:30-9:30 pm. The Student Mixer is always a great opportunity to come out and meet your fellow students and find out what it's like in Dr. So and So's lab, without the pressure of making a big impression on that next potential supervisor. For the contest, students will compete in teams of up to four people. A Sign-up sheet will be posted at the meeting and entry will be open until the start of the contest to allow students that might not be part of a big lab to join up with other students from across the country to compete for the prestigious title of Biggest Bug Nerds 2009 and some insect-related prizes!

As usual, the Student Affairs Committee is organizing the **Silent Auction** to raise money for ESC-SEC Student Scholarships and Awards. I would like to remind everyone to bring the entomological treasures you're willing to part with to the meeting and donate them to the Silent Auction. Although the auction usually consists of mostly books, any insect-related items will be gratefully accepted. Don't forget to ask your supervisors to bring something for the auction along with them to meeting! Donations can be dropped off at the

de conférence de l'hôtel Fort Garry. En plus de billets pour une boisson gratuite que les étudiants trouveront parmi les items remis à l'inscription, un bar payant sera disponible lors du cocktail. Le quiz aura lieu approximativement de 20h30 à 21h30. Le cocktail étudiant est toujours une bonne opportunité de rencontrer vos collègues étudiants et de découvrir comment ça se passe dans le labo du Dr Untel, sans la pression de faire bonne impression sur son futur superviseur potentiel. Pour le quiz, les étudiants s'affronteront en équipe de 4 ou moins. Une feuille d'inscription sera affichée à la réunion et les inscriptions pourront se faire jusqu'au début du quiz afin de permettre aux étudiants qui ne sont pas dans un grand labo de se joindre à des étudiants de tout le pays et de s'affronter pour le prestigieux prix du plus grand nerd des bibittes 2009 et autres prix reliés à l'entomologie.

Comme à l'habitude, le Comité des affaires étudiantes organise les *enchères silencieuses* afin d'amasser des fonds pour les prix et bourses étudiants de la SEC. Je voudrais rappeler à tous d'apporter leurs trésors entomologiques afin d'en faire don aux enchères silencieuses. Bien que l'enchère contienne principalement des livres, tout objet lié aux insectes sera accepté avec joie. N'oubliez pas de demander à vos superviseurs d'apporter quelque chose avec eux à la réunion! Les dons peuvent être déposés au comptoir d'inscription à l'arrivée à l'hôtel. Il y aura une table montrant les items aux enchères dans l'une des salles de conférence, alors n'oubliez pas de venir y jeter un œil afin de supporter vos collègues étudiants! Merci à tous ceux qui ont déjà envoyé leurs dons et aux gens de Winnipeg pour leur aide dans l'organisation.

Tirage de "Encyclopedia of Entomology"

En tant que présidente des publications, Kenna McKenzie reçoit souvent des copies de livres provenant des éditeurs afin d'être révisés. À l'occasion, les éditeurs envoient deux copies, certaines ayant été gracieusement offertes pour les enchères silencieuses dans le

Registration Desk upon arrival at the hotel. There will be a table set up in one of the conference rooms displaying the items to be bid upon, so be sure to stop by and support your fellow students. Thanks to everyone who has already sent in their donations and the folks in Winnipeg for helping to organize them.

Encyclopedia of Entomology Raffle

As Publication Chair, Kenna McKenzie often receives copies of books from publishers for reviews to be done. Occasionally, the publisher will send two copies, some of which she has graciously donated to the Silent Auction in the past to help raise money for student scholarships and awards. This year, she received an extra copy of the Encyclopedia of Entomology from Springer. This beautifully illustrated, four volume text retails for **\$709.00 USD** and instead of putting it up for grabs in the Silent Auction, we will be raffling it off at the Joint Annual Meeting in Winnipeg in October. Tickets will be sold for \$2 each or 3 for \$5. Bring some extra money to purchase raffle tickets and maybe you will be the lucky winner of this excellent entomological resource. I would like to thank Doris Drechsler from Springer on behalf of the Student Affairs Committee and ESC Student members for the generous donation of the encyclopedia set! If you are unable to attend the meeting in Winnipeg, but would like to purchase tickets for the raffle, please send me an e-mail and I will see what I can do (athielman@brocku.ca).

NEW! Changes to the Thesis roundup

In the past, the Thesis Roundup section of the ESC Bulletin has been compiled by the members of the Student Affairs Committee. To do this, SAC members have contacted the professors and/or department heads of each university in Canada that offers entomological education to solicit the names and thesis titles of students who have successfully defended their theses. Unfortunately, not everyone has

passé afin d'amasser des fonds pour les prix et bourses étudiants. Cette année, elle a reçu une copie supplémentaire de 'Encyclopedia of Entomologie' de Springer. Cette magnifique encyclopédie illustrée en quatre volumes se vend à **709.00\$US** et plutôt que de l'envoyer aux enchères silencieuses, il y aura un tirage lors de la réunion conjointe annuelle à Winnipeg en octobre. Les billets seront vendus au prix de 2\$ l'unité ou 3 pour 5\$. Apportez un peu d'argent afin d'acheter vos billets de tirage et vous serez peut-être l'heureux gagnant de cette excellente ressource entomologique. Je voudrais, au nom du Comité des affaires étudiantes et des membres étudiants de la SEC, remercier Doris Drechsler de Springer pour ce généreux don de l'encyclopédie! Si vous êtes incapables d'assister à la réunion, mais que vous êtes intéressés à acheter des billets de tirage, veuillez m'écrire un courriel et je verrai ce que je peux faire (athielman@brocku.ca).

NOUVEAU! Changement au foisonnement de thèses

Par le passé, la section du foisonnement de thèses du Bulletin de la SEC était compilée par les membres du Comité des affaires étudiantes. Pour ce faire, les membres du comité contactaient les professeurs et/ou les directeurs de département de chaque université au Canada afin de solliciter les noms, titres de thèses, etc. des étudiants ayant défendu leur thèse avec succès. Malheureusement, tout le monde n'a pas le temps ou les connaissances pour fournir cette information, le résultat étant que certains étudiants étaient inclus dans le foisonnement de thèses alors que d'autres en étaient exclus. De plus, il est récemment venu à notre attention que le fait d'inclure l'adresse courriel des étudiants sans leur consentement pouvait constituer une violation de la Loi sur l'accès à l'information et la protection de la vie privée. Obtenir le consentement est parfois difficile puisque les étudiants ayant récemment terminé leurs études déménagent souvent de leur labo et ne laissent pas toujours les informations de

the time or knowledge to provide this information, resulting in some students being left out of the Roundup. Also, it has recently come to our attention that including e-mail addresses for students, without their consent, may be a violation of the Freedom of Information and Privacy Protection Act. Getting consent is often difficult because the students, having recently completed their degrees, have often moved on from the lab they worked in and may not have left forwarding information. Therefore, in an attempt to solve both problems, the Student Affairs Committee is proposing to change the way the Thesis Roundup is compiled. We propose that **students wishing to see their information published in the Thesis Roundup section of the ESC Bulletin send us their information directly**. I will be adding Thesis Roundup submission forms to the Bulletin (can be filled in and mailed to me) and to the Student Affairs section of the ESC website (can be filled in and e-mailed to me). If you have any suggestions or comments regarding the Thesis Roundup section, don't hesitate to let me know.

Sincerely,
Aynsley

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contact. Ainsi, afin de tenter de résoudre les deux problèmes, le comité des affaires étudiantes propose de changer la façon de compiler le foisonnement de thèses. Nous proposons que **les étudiants qui souhaitent voir leurs informations publiées dans le foisonnement de thèses du Bulletin de la SEC nous envoient leurs informations directement**. J'ajouterai des formulaires de soumission au foisonnement de thèses au Bulletin (à remplir et m'envoyer par courrier) et à la section des affaires étudiantes du site Internet de la SEC (à remplir et m'envoyer par courriel). Si vous avez des suggestions ou des commentaires concernant la section du foisonnement de thèses, n'hésitez pas à me les faire parvenir.

Sincèrement,
Aynsley

Thesis roundup

- Adlam, Chris.** MSc, 2009. *Seasonal and environmental variability of ground beetle (Coleoptera: Carabidae) assemblages at Mont St-Hilaire, QC.* Supervisors: Dr. Emma Despland, Concordia University, and Dr. Fred Beaulieu, Agriculture & Agri-Food Canada.
- Armstrong, Gary.** PhD, 2008. *Octopamine and thermotolerance of motor pattern generation in locusts and Drosophila.* Supervisor: Dr. Mel Robertson, Queen's University.
- Atallah, Joel.** PhD, June 2008. *The development and evolution of complex patterns: The Drosophila sex comb as a model system.* Supervisor: Dr. Ellen Larsen, University of Toronto.
- Cudmore, Timothy J.** MSc (NRES-Forestry), May 2009. *Geographic variation in the effect of Lodgepole Pine characteristics on Mountain Pine Beetle attacks and productivity in British Columbia.* Supervisor: B. Staffan Lindgren, University of Northern British Columbia.
- Dehghani, Mehrnoush.** MSc, March 2009. *Proteomic Analysis of the heat shock response in the nervous system of Locusta migratoria.* Supervisor: Dr. Mel Robertson & Dr. Kelly Shoemaker, Queen's University.
- Feder, Elah.** MSc, 2007. *Exploring the operation of negative frequency-dependent selection on the rover-sitter polymorphism of Drosophila melanogaster.* Supervisor: Dr. Locke Rowe, University of Toronto.
- Fleury, Dominique.** PhD, avril 2009. *Écologie comportementale de la punaise terne (Lygus lineolaris) sur la vigne.* Directeurs de these: Dr Charles Vincent et Dr Yves Mauffette, Université du Québec à Montréal.
- Graf, Marnie L.** MSc (NRES-Biology), April 2009. *Effects of host quality parameters on fitness of the Mountain Pine Beetle, Dendroctonus ponderosae Hopkins (Coleoptera: Curculionidae: Scolytinae).* Supervisor: B. Staffan Lindgren.
- Guay, Jean Frédéric.** MSc, mai 2009, Université Laval. *Capacité des pucerons à résister aux parasitoïdes et aux stress abiotiques. Rôle du symbiote bactérien Hamiltonella defensa en association avec un nouveau symbiote facultatif du puceron du pois.* Directeur de thèse : Conrad Cloutier.
- Harris, Leanne.** MSc, December 2009. *The invasion and spread of the bacterial endosymbiont Cardinium in Encarsia pergandiella (Hymenoptera: Aphelinidae).* Supervisor: Dr. Steve Perlman, University of Victoria.
- Kavanagh, Rhys.** BSc Hons (Biology), May 2009. *Bugs and drugs: the effect of octopamine on the sensitivity of female olfactory receptor neurons to female conspecific sex pheromone in Heliethis virescens.* Supervisor: Kirk Hillier, Acadia University.
- Kolaczan, Christopher.** MSc Biology, May 2008. *Investigation of cascading host-race formation in the parasitoid wasp Copidosoma gelechiae.* Supervisor: Dr. Steve Heard, University of New Brunswick.
- Kundapur, Jessica.** MSc, April 2008. *The evolution of fitness after prolonged sperm storage.* Supervisor: Dr. Adam Chippindale, Queen's University.
- Landry, Kathryn.** BSc Hons (Biology), May 2009. *Blend processing in the Tobacco Budworm, Heliethis virescens.* Supervisor: Kirk Hillier, Acadia University.
- Lenkic, Lisa E.** MSc 2008. *The effects of juvenile hormone analogue treatment on juvenile hormone biosynthesis and reproduction in adult female Diptera punctata.* Supervisor: Dr. Stephen S. Tobe, University of Toronto.
- Leonard, Erin.** MSc, 2008. *Investigations into Cd tolerance in Chironomus riparius: spatial patterns of Cd transport and sequestration.* Supervisor: Dr. M.J. O'Donnell, McMaster University.
- Lungchukiet, Panida.** PhD, April 2008. *Molecular cloning and characterization of the allatostatin receptor in the cockroach Diptera punctata.* Supervisors: Dr. William Bendena & Dr. Stephen Tobe, Queen's University.

- Pacheco, Henry Murillo.** MSc, September 2008. *Evaluation of the larval endoparasitoid Campoletis sonorensis Cameron (Hymenoptera: Ichneumonidae) as a biocontrol agent of the Cabbage looper, Trichoplusia ni Hübner (Lepidoptera: Noctuidae).* Supervisors: Sherah Vanlaerhoven and David Hunt, University of Windsor.
- Punzalan, David.** PhD, 2007. *Evolution of sexual colour pattern dimorphism in the ambush bug Phymata americana.* Supervisor: Dr. Locke Rowe, University of Toronto.
- Rasoolizadeh, Asieh.** MSc, juillet 2009. *Transcriptional analysis of Tranosema rostrale ichnovirus (TrIV) genes, with emphasis on the rep gene family.* Directeurs de thèse: Conrad Cloutier et Michel Cusson, Université Laval.
- Rogers, Mark.** MSc, 2008. *Experimenting with sex and speciation: Does intersexual co-evolution drive population divergence?* Supervisor: Dr. A. Chippindale, Queen's University.
- Ruiz-Sanchez, Esau.** PhD, 2007. *Characterization and regulation of salicylate transport by insect renal epithelia.* Supervisor: Dr. M.J. O'Donnell, McMaster University.
- Slaney, Greg.** MScF, October 2008. *Expanding the Spruce Budworm decision support system to include costs, product value, and carbon sequestration potential.* Supervisor: Dr. Dave McLean, University of New Brunswick.
- Smith, Greg.** MSc, July 2008. *Maintenance of endemic Dendroctonus ponderosae populations through interactions with a secondary bark beetle, Pseudips mexicanus.* Supervisors: Staffan Lindgren, University of Northern British Columbia and Allan Carroll, Canadian Forest Service.
- Strachan, Lauren.** MSc (Biology), May 2009. *The evolution of cold tolerance in Drosophila species larvae.* Supervisor: Dr. Brent Sinclair, University of Western Ontario.
- Vandermoten, Sophie.** PhD, février 2009. *Étude moléculaire des «short-chain» isoprényle diphosphate synthases chez les pucerons: évaluation de leur potentiel d'utilisation comme cible de nouveaux bio-insecticides.* Directeurs de thèse: Éric Haubruge et Michel Cusson, Faculté universitaire des sciences agronomiques de Gembloux, Unité d'entomologie fonctionnelle et évolutive, Gembloux, Belgique.

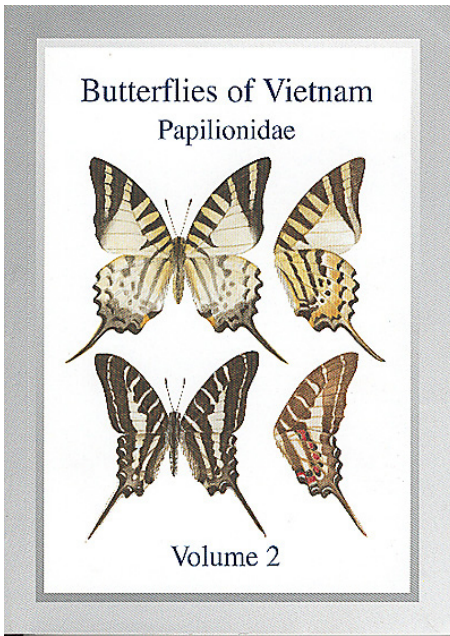
Books available for review:

- Control of Pests and Weeds by Natural Enemies: An Introduction to Biological Control.* Van Drieshe R., Hoddle, M. and Center, T. 2008. Wiley-Blackwell Publishing. 484 pp.
- Ecology of Insects: Concepts and Applications.* 2nd Ed., 2008. Speight, M.R., Hunter, M.D. and Watt, A.D. 2008. Wiley-Blackwell Publishing.
- Frog Biting Midges of the World (Corethrellidae: Diptera).* Borkent, A. 2008. Zootaxa (Auckland, New Zealand: Magnolia Press), **1804**: 456 pp.

Please send correspondence regarding book reviews to the Chair of the Publications Committee.

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Butterflies of Vietnam, Papilionidae – Volume 2. Monastyrskii, A.L. 2007. Apollo Books, Stenstrup, Denmark. 189 pp incl. 31 colour plates and line drawings. ISBN 0-9551211-1-6. (softcover) \$64.00 USD. (available from International Specialized Book Services, Inc., Portland, Oregon). <http://www.isbs.com>

The author has spent twenty years studying the butterflies of Vietnam as part of his position at the Vietnam-Russia Research Tropical Centre, Hanoi, where he is currently Head of the Ecology Department. This excellent guide book to the Papilionidae of Vietnam is the second volume in the series resulting from these studies. The first volume, published in 2005 covered the Satyrinae (Nymphalidae), and the third volume on Danaeinae and Amathusiinae (Nymphalidae) is in preparation.

The layout of the book is easy to use, starting with a well organised and informative introduction to the family covering Systematics, Diversity and Distribution, Adult Morphological Characteristics, Genitalia, Habitats, and

Life Cycle. This is followed by a Checklist of the taxa known from Vietnam before the main body of the text entitled “Keys and Descriptions”. This treats all taxa in the order as per the checklist from tribe level down to subspecies. There is a concise summary of the characters distinguishing the tribe and the genera within each tribe followed by a key to the members of that taxon, culminating in consideration of each of the 65 species recorded from Vietnam. Each species account gives a reference to the original description and type locality, and contains a synonymic list of records in Vietnam followed by information on Synonyms, Range, Distribution and Variation in Vietnam, Taxonomic Notes, Habitat and Biology, Similar Species, and Conservation Status. The last category is only included for species listed by CITES or the IUCN.

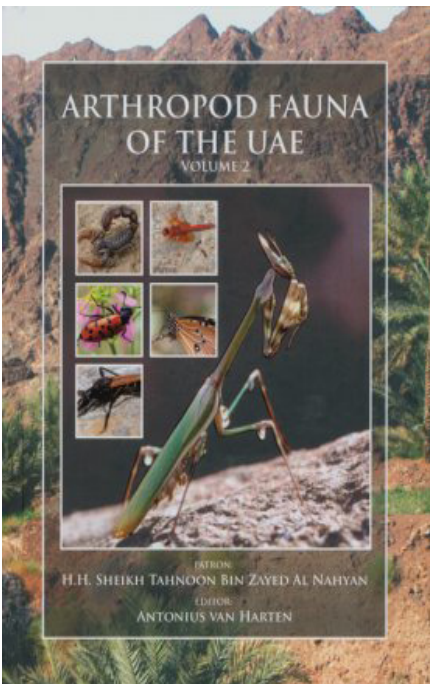
The main text covering the species of Papilionidae in Vietnam is followed by a comprehensive list of References and Index to the Scientific Names. The next section of the book contains a map of Vietnam marking the 58 collecting localities, with a brief note on each locality including latitude and longitude, with abbreviations for the collectors recording Papilionidae from each locality. Almost all of the listed localities include information on habitat type and altitude, and the localities are grouped by the three regions of Vietnam from North to South. The list of localities is complemented by a series of eight photos of different papilionid habitats across the country, with a short summary of the typical species found in each habitat.

The final section of the book is a series of 30 plates of high quality photographs of each species covered in the book. These photos are necessarily somewhat smaller than life size, and many are only one half of the butterfly with body, but the picture quality is so good that all important identification characters can be clearly seen. The various forms of polymorphic species are illustrated, and undersides are often included, especially where useful for identification purposes. The provenance of each specimen is also listed. The inside of

the back cover contains a useful sketch-map of Southeast Asia and the region, showing the position of non-Vietnamese localities mentioned in the text.

The only criticism of the book I can raise is that two species of Papilionidae known from Vietnam (*Byasa hedistus* and *Papilio elwesi*) are not included in this work. Possibly these were first found in Vietnam after the book went to press, but also this omission could be due to the fact that neither the author nor his listed collectors seem to have visited the northernmost province of Vietnam, where these two Chinese species have been found. Having pointed this out I should conclude by stating that this book is a must buy for all enthusiasts of Southeast Asian Papilionidae, and is both a useful reference work on Papilionidae and a handy field guide at the same time.

Adam Cotton
Chiang Mai, Thailand



Arthropod Fauna of the United Arab Emirates – Volume 2. Antonius van Harten [Editor] (UAE Insect Project). 2009. Multiply Marketing Consultancy Services. Abu Dhabi (United Arab Emirates). 786 pp. ISBN 978-9948-15-090-9. Approximate prices 100 EA Dirhams, 63 US\$, 45 €, 38 UK£. (available from Dar Al Ummah Printing, Publishing, Distribution & Advertising; P.P. Box 39975. Abu Dabi, United Arab Emirates). info@daralummah.ae

In Volume 40 (2) of the *Bulletin* of the Entomological Society of Canada, a commentary was made of the *Arthropod Fauna of the United Arab Emirates – Volume 1*, published in 2007. It was said that this book contained the first results of the great project being carried out to make an inventory of the Arthropod fauna of the UAE, under the patronage of H.H. Sheik Tahnoon Bin Zayed Al Nahyan and the coordination of Dr. Antonius van Harten. The second volume of this work was published some months ago.

This volume is similar in all aspects to the previous one, and the same comments can be made about it: the field work was carried out intensively, the material was very carefully prepared; the taxonomical work of the authors (42 of 18 nationalities) was meticulous and rigorous, and coordination efficient; the editorial and printing work are of high quality. In short, this is a worthy second edition of a very important work.

The composition of fauna in the following families in the UEA is described:

- Order Prostigmata (Arachnida): Cunaxidae;
- Order Pseudoscorpions (Arachnida): Olpiidae, Cheiridiidae, Chernetidae, Withiidae, Cheliferidae;
- Order Collembola: Entomobryiidae;
- Order Psocoptera: Psyllipsocidae, Amphientomidae, Pachytrochidae, Asiopsocidae, Lachesillidae, Ectopocidae, Meopsocidae;
- Order Dermaptera: Anisolabididae, Spongiophoridae;
- Order Coleoptera: Carabidae, Helephoridae, Georissidae, Dryopidae, Elmidae, Het-

eroceridae, Drilidae, Dermestidae, Ptinidae, Meloidae, Mordellidae, Anthribidae, Brentidae, Apionidae, Nanophytidae, Curculionidae, Dryophthoridae;

- Order Hymenoptera: Gasteruptionidae, Myrmecidae, Thynnidae, Colletidae, Andreidae, Halictidae, Melittidae, Megachilidae, Apidae;

- Order Lepidoptera: Tineidae, Psychidae, Depressariidae, Autostichidae, Aulicidae, Geometridae, Notodontidae, Noctuidae;

- Order Diptera: Corethrellidae, Chironomidae, Bibionidae, Psychodidae, Nemeritidae, Mythicomyiidae, Scenopinidae, Empidae, Trixocelididae, Hippoboscidae, Scatophagidae, Oestridae.

Ninety new taxa are described. Five of these are new genera: *Pseudobarirrhinus* Magnano, *Pseudoparasaphus* Magnano, *Parakaskhstania* Magnano, *Parageotragus* Magnano (Coleoptera: Curculionidae), and *Limomormia* Ježek & van Harten (Diptera: Psychodidae). The remainder are new species: Pseudoscorpiones (2 species), Collembola (2), Psocoptera (4), Coleoptera (34), Hymenoptera (7), Lepidoptera (11), Diptera (25).

A new tribe is described. However, because conditions have not been met as stipulated in article 13.1.1 of the International Code of Zoological Nomenclature – Fourth Edition, the name is unavailable. Six new combinations (2 for Coleoptera, 1 for Lepidoptera, 3 for Diptera) and 10 new synonymies also are established.

I await with interest the appearance of future volumes containing the results of many other families. Some of these belong to 12 orders for which information has yet to be supplied.

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Australian water bugs (Hemiptera-Heteroptera, Gerromorpha and Nepomorpha): Their biology and identification. Andersen, N.M. and Weir, T.A. 2004. Entomograph Series Volume 14. CSIRO Publishing, Australia/Apollo Books, Stenstrup, Denmark. 344 pp. 8 colour plates and numerous black and white photos, line drawings and scanning electron micrographs. ISBN 87-88757-78-1 (hardcover) \$84.00 USD (available from International Specialized Book Services, Inc., Portland, Oregon). <http://www.isbs.com>

In 1994, heteropterists Nils Andersen of Copenhagen University and CSIRO's Tom Weir collaborated on their first of 11 co-authored publications. Just over four years ago they produced their most ambitious joint project: *Australian Water Bugs*. Sadly, this was to be their final publication together, as Nils passed away on 12 May 2004 at the age of 63. This masterful work represents the culmination to a collaboration spanning ten years.

When I first moved to Australia from Canada I was immediately struck by the aridity of the continent. While Australia is indeed the driest continent, I was surprised to learn that water bugs have nonetheless managed to spread

throughout the country, occupying a myriad aquatic habitats. In permanent rivers, seasonal water bodies, mangroves, and even the open ocean, aquatic bugs are a highly successful component of Australia's biota.

Australian Water Bugs is a comprehensive guide to this fauna, which includes over 260 species, representing 15 families and 54 genera of Gerromorpha and Nepomorpha (semiaquatic and aquatic bugs). As with so many other taxonomic groups, the Australian water bugs show a high degree of endemism, with 14 genera found nowhere else, and several others shared only with Australia's closest neighbours. It is of interest to note that around 24% of Australia's water bugs are in fact, marine, versus ~10% world-wide. Overall, however, the water bugs are relatively depauperate in Australia, aside from the Veliidae, and to a lesser extent the Corixidae and Notonectidae.

The first six chapters serve as a detailed introduction to water bugs and provide an excellent primer for newcomers to the field. After a brief overview, the reader is presented with distribution data of the Australian fauna as they relate to habitat types, weather patterns and biogeographic regions. This is followed by a summary of water bug biology and ecology, including an interesting key to bugs based on habitat and habits, as well as sections covering respiration, locomotion, feeding, reproduction, wing polymorphism, parasites, economic importance and environmental monitoring.

Classification and phylogeny are treated in Chapter 3, with a detailed commentary on the emergence of the current classification, including discussion of supporting characters and their hypothesized evolution. The authors even include a detailed appraisal of the water bug fossil record, which is more complete than for any other group of Heteroptera. Chapter 4 describes and illustrates in detail the components of adult, nymph and egg structure. This chapter is essential reading for those not versed in water bug biology, as it covers the salient terminology used in the keys in later chapters. The introductory portion of the book concludes

with brief chapters on collecting, preserving and rearing water bugs, a comprehensive summary of major museum holdings, and a key to all Australian families. Although the key is to adults only, according to the authors, in most cases it will work for immatures as well, particularly late instars.

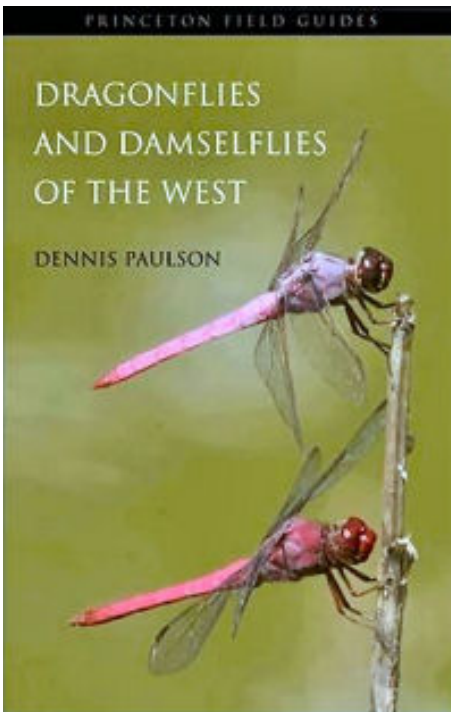
The remainder of the book is divided into two sections covering the infraorders Gerromorpha and Nepomorpha. This portion of the book is perhaps the most useful to serious water bug biologists. With comprehensive chapters for each family, this section is richly illustrated with photographs, drawings and scanning electron micrographs which complement the very thorough text and keys, not only to the Australian genera but to their species as well. Distribution maps are also included. However, these are of genera rather than species and may thus be of limited use to some readers. Biological synopses of higher and lower taxonomic levels provide the reader with a basic understanding of the habits and habitats of the various families, subfamilies and genera. Such information is compiled from a wide range of sources, and though the focus is on the Australian fauna, these summaries are informative on a more general level as well.

Despite the fact that both infraorders are of roughly the same size (129 versus 132 described species in Australia), the section on Gerromorpha, with 143 pages, is considerably longer than the 90 pages devoted to the Nepomorpha. This reflects both the greater number of gerromorphan genera as well as the research bias of the authors. A closer examination confirms this; virtually all of the figures in the gerromorphan section are attributed to the authors (either as originals or reproductions from earlier works), whereas those in the Nepomorpha section are all gleaned from other sources. This is not a criticism of this work – but it does highlight the opportunity for more nepomorphan workers in Australia.

The book concludes with a lengthy reference list (25 pages) and a checklist to the Australian fauna, with information on type specimens, their locality and repository, synonyms and known worldwide distribution.

In 2004, *Australian Water Bugs* won a Whitley Award, and it is now considered a standard for water bug specialists the world over. It is beautifully illustrated, and for the price of AU \$99.95 from CSIRO Publishing, it is great value. The documentation of the Gerromorpha is near complete, while there is still much to do on the Nepomorpha of Australia. This book provides the ideal framework for more in-depth evolutionary and ecological studies on the Gerromorpha, and for addressing the taxonomic impediment of the Nepomorpha. I recommend this book to entomologists the world over, even if you only regard it as a template for how to write a book of this type.

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Dragonflies and Damselflies of the West. Paulson, D. 2009. Princeton Field Guides. Princeton University Press, Princeton, NJ. 535 pp. US\$29.95, cloth | US\$65.00, hardcover.

As insects, odonates (dragonflies and damselflies) come second only to butterflies in their popularity and in the public affection they inspire. Networks of amateur and professional entomologists dedicate a great deal of time to the study of odonate distributions and phenology. Further, the conspicuous behaviours and colour variation of odonates have made them important model species for the study of sexual selection, demography and dispersal¹.

A key tool serving to support and accelerate this scientific endeavour is the field guide – such books are particularly useful when they provide links to other aspects of the organism’s ecology and life-history, so that one can get a clearer idea of why the species is there and what it is doing. Dennis Paulson has produced just such a field guide, that will appeal to amateur and professional odonatologists alike. The *Dragonflies and Damselflies of the West* details the appearance, natural history, flight season (by state and province) and global distribution of some 348 species of dragonfly (Anisoptera) and damselfly (Zygoptera) in the western USA and Canada. Restricting the guide to these western regions was necessary to keep the size (and weight) of the volume manageable – a complementary volume for eastern USA and Canada with 334 species (about ¾ of which overlap) is in the works. The book meets a clear need. Although there are a number of guides to dragonflies and damselflies found in specific states and provinces, and other monographs on dragonflies cover much or all of North America^{2,3}, this is the first to cover both the damselflies and dragonflies in this immense geographical region.

Paulson is a highly accomplished naturalist (e.g., he has also written a field guide to the *Shorebirds of North America*) and here he not only displays intimate knowledge of the odonate species he describes, but he also provides

the vast majority of their colour photographs (both male and female, as well as different morphs and age-specific forms where appropriate), almost all in a natural setting. Rosser Garrison and Natalia von Ellenrieder have helped enormously in providing line drawings of male and female anatomical structures (such as male claspers and female sub genital plates) to aid identification where discriminating between species is difficult. Tables are also presented to facilitate rapid cross-species comparisons in a range of morphological attributes that include eye colour and the shape of lateral stripes. Likewise, distribution maps within the west are also provided, based on the dot maps compiled by Nick Donnelly and included in the Odonata Central database curated by John Abbott (www.odonatacentral.org). Hopefully this field guide will facilitate more entries into this important database, arming us all with a better understanding of the spatial (and temporal) distribution of odonates.

Paulson has chosen to arrange his guide along approximate phylogenetic lines rather than alphabetical or a strict look-alike basis (although sister species can of course look alike). This is eminently sensible and a welcome change, although it appears that he does not strictly adhere to a contemporary phylogeny from its roots up. Primitive Petaluridae kick off the Anisoptera. However, the somewhat-more derived Calopterygidae are the first family considered in the Zygoptera, whereas a number of odonate phylogenies would suggest Lestidae to be a more basal damselfly group.

How does one evaluate a field guide like this? This is not a book to be read from cover to cover in a comfortable chair with brandy (unless you just want to admire the photographs), but is best tested in the field with specimen in hand. We look forward to having an opportunity to do just that. In the meantime, the guide passes all of our non-random dart tests (based on those species which we know best through our own research) with flying colours. Paulson correctly notes that the proportion of *Nehalennia irene* females that are andromorphic (similar in colour to the male) changes from East to West,

and accurately describes the extremely wide distribution of *Ischnura hastata* (the fact that it is parthenogenic in the Azores might have been mentioned, but this is forgivable given the region of interest here).

Quibbles? We have a few, but they are all trivial and largely based on personal preference. Paulson uses both common names and scientific names when referring to species, but defers to common names when showing photographs and line drawings. Although this move seems intended to broaden the book's appeal to amateur odonatologists, the scientific name is a far more reliable tag than the common name, and the use of common names may underestimate the abilities of the lay enthusiast. Also, in his introductory guide to odonate collecting and collections, Paulson recommends acetone-treatment of specimens for preservation, but it is worth noting that a growing amount of odonate research is genetical in nature and in these cases concentrated alcohol may preserve DNA better than acetone.

These are minor issues that should not distract from the fact that Paulson has produced an extremely well organised and well presented field guide that will be a source of information and inspiration for a number of generations to come. Like a well known credit card, odonatologists in North America should not leave home without it.

Tom Sherratt, Carleton University, Ottawa, Canada

Chris Beatty, University of Santa Clara, California, USA

References

1. Córdoba-Aguilar, A. (ed.). 2008. *Dragonflies and Damselflies: Model Organisms for Ecological and Evolutionary Research*. Oxford University Press.
2. Dunkle, S. 2008. *Dragonflies through Binoculars*. Oxford University Press.
3. Garrison, R., von Ellenrieder, N. & Louton, J. 2006. *Dragonfly Genera of the New World*. Johns Hopkins University Press.

Letter from the Editor of the NRC Monograph Publishing Program to the ESC President

June 23, 2009

Dr. Paul Fields, President
Entomological Society of Canada
Agriculture and Agri-Food Canada
Cereal research Centre
195 Dafoe Road
Winnipeg, MB R3T 2M9

Dear Dr. Fields

In the early 1990s, the Royal Society collaborated with several Canadian scientific societies, including the Entomological Society of Canada, to recommend that a Monograph Publishing Program be established in Canada. This Program, created in 1993 as part of the NRC Research Press, has published more than 100 monographs in a variety of scientific subject areas. Another 12 are currently in the process of publication. In addition, more than 200 of this nation's engineering and scientific specialists are engaged in the preparation of monographs that have been given preliminary approval by the Editorial Board of the Monograph Publishing Program.

Many of our published monographs have a strong emphasis on entomology. The "Insects and Arachnids of Canada" series, in particular, is world-renowned. Two of the manuscripts we are attempting to publish during the next 9 months also are in the area of entomology, as are many of the monographs in preparation. Many others have large contributions from entomologists.

Unfortunately, none of the works in preparation will be published by the NRC Monograph Program because the National Research Council has decided to terminate the Program. At the same time, it will split off the Canadian Journals of Research as a private enterprise and reduce other activities of the Canadian Institute for Scientific and Technological Information. It is left to me to inform you of this decision and to solicit your help in efforts to maintain a monograph publishing capability in Canada.

I am enclosing a more detailed account of the events that have led to this situation. In addition, descriptions of the monographs published by the Program can be found on the Internet at pubs.nrc.gc.ca.

Please bring this situation to the attention of your Board and to the individual members of the Entomological Society of Canada. If you agree, I will be pleased to forward copies of this letter and the enclosure to your Newsletter Editor. Does Dr. Kevin Floate still serve in that capacity?

Any assistance that you can provide to help reverse this unfortunate decision will be greatly appreciated. I will also welcome suggestions that would assist in maintaining a monograph publishing organization in Canada. I can assure you that all members of the Editorial Board strongly support any efforts that can be made to this end.

Letters urging a reversal of the NRC decision to terminate the Monograph Program can be sent to the Prime Minister; the Minister of State for Science and Technology, the Hon. Gary Goodyear; the leaders of other federal parties; your local Member of Parliament; and the President of the National Research Council, Dr. Pierre Coulombe. I will appreciate receiving copies of all such letters.

Thank you for any assistance that you and your members can provide.

Yours sincerely

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Termination of NRC Monograph Publishing Program

What is the Program?

Established in 1994, the National Research Council (NRC) Monograph Program has published high-quality specialized monographs (books) on topics in science and engineering, important to Canada. To date, nearly 80 monographs have been published and twelve more are in the process of publication. Moreover, more than 200 of the nation's engineering and scientific specialists have been engaged in preparing additional monographs, which they have been working on for months to years. These planned volumes, which will now be terminated, cover topics as diverse as aeronautical engineering, fisheries and important insect pests (e.g. the mountain pine beetle), former incidents of environmental change, mass extinction, and faunal and floral recovery and sustainability, to biographies of distinguished Canadian pure and applied scientists.

In the early 1990s, scientists in Canada recognized that specialized books on scientific and engineering topics were being published by some government departments, university presses, professional societies and even privately by some authors. Many were published outside of Canada and not marketed effectively in this country. An unknown number of book-length manuscripts were simply not being written because there was not seen to be an appropriate Canadian outlet for them; others were being written but never saw the light of publication because they were viewed as too regional in scope or to lack immediate economic significance. Their latent value and that which they offered to nurturing and strengthening the basic scientific foundation of the country as a mature civilized nation were ignored.

The Royal Society of Canada and a number of scientific societies established an *ad hoc* committee to recommend a procedure to overcome this problem. These people recommended that the NRC Research Press, well-known for its long-lived and successful Journals Program, should take on the responsibility for monograph publishing and that an Editorial Committee, composed of distinguished and experienced scientists in a wide range of fields should be established to oversee the new program to ensure that resulting works would be internationally competitive in the quality of their content and production.

When was termination announced and why is it happening?

The employees of the NRC Press were informed of the decision in mid-February. The members of the Editorial Board of the Monograph Publishing Program were informed that our program is being terminated through a conference call near the end of that month. The organizations involved in founding the NRC Monograph Program (e.g. the scientific societies, government departments at the federal and provincial levels, the Royal Society) still have not been told officially, and we were informed that NRC does not plan to tell them. In addition, members

of the Monograph Publishing Program have been left the unenviable and embarrassing task of informing hundreds of engineers and scientists, who already have devoted months or years to preparation of their monographs and whose proposals the Editorial Board already had approved, that the Editorial Board would have to renege on its earlier acceptance in principle. Authors of monographs already published will also suffer, since the marketing of their work by NRC will no longer take place. Co-publishing agreements will lapse, affecting hundreds of scientists.

In addition, the NRC Research Journals are being “spun off” into a not-for-profit Canadian company, which will not be part of the Federal Government. Assistance to enable the Journals to be transferred to this new company has been requested, but there will be financial challenges ahead. For example, electronic versions of all NRC Journals have been provided free to all Canadians by means of generous support from the Federal Depository Services Program. This support will not be available to the new company. Some of these journals have a history exceeding 80 years and several rank internationally among the best in their fields.

NRC Press has been a component of the Canada Institute for Scientific and Technical Information (CISTI). The NRC, in response to directives from the Federal Government to cut 5% of overall costs, has made an overall cut to CISTI of 70%. Thus, in addition to the draconian measures applied to the Research Press, there will be large cuts to the operation of the National Science Library and the Information Intelligence Services, which are maintained for scientists across Canada. More than 300 employees of CISTI will lose their jobs. All of these changes will have negative effects on the work of Canadian scientists.

These decisions have been a result of a strategic review of NRC programs conducted by the Federal Government of Canada. We were told that the philosophy behind these decisions is that the Canadian Government believes that it should divest itself of publishing activities by privatizing or terminating its current programs as part of the policy to reduce the size of government.

Why does Canada need a Monograph Program?

First, we need information on living organisms and their environment in Canada. Unless we know where our fauna, flora, and other organisms can be found and what environmental conditions they require for survival, we cannot make intelligent decisions to combat the effects of climate change, habitat degradation, effects of invasive species and environmental pollution. To provide this information, we have published monographs in a wide variety of areas, several of which are listed below.

1. We have published floras [e.g. Flora of the Yukon Territory, Flora of the Hudson Bay Lowland and its Postglacial Origins, Flora of the Canadian Arctic Archipelago] that provide information on the plants that grow in various parts of the country.

2. Entomologists and the staff of the Monograph Program have established an agreement to work co-operatively to publish monographs on various groups of insects that are of importance to Canada. Most of these publications are in the “Insects and Arachnids of Canada Series”. “Coleoptera, Curculionidae, Entiminae. Weevils of Canada and Alaska”, Volume 2, published in 2008, is the 25th book in this important series.

3. We have published monographs on individual species of importance. Monographs on “Blue Grouse”, “Sea Buckthorn” and “Les fourmis” have all received much favourable attention in Canada and abroad.

4. Publications on agricultural and related topics have been of prime importance. Titles include “Canadian Medicinal Crops”, “Vegetables of Canada”, “Culinary Herbs”, “The Canadian System of Soil Classification”, “Mycorrhizas: Anatomy and Cell Biology”, and “Science, Agriculture and Food Security”.

5. At its inception, The Monograph Program became responsible for the series entitled “Ca-

nadian Special Publications of Fisheries and Aquatic Sciences”. We have published 16 books in this series. Among the most recent titles are: “The Quest for Sustainable International Fisheries”, “Salmonine Introductions to the Laurentian Great Lakes”, and “Marine Protected Areas and Fisheries Closures in British Columbia”.

6. Our monographs in Forest Sciences are few but they are large and comprehensive in scope. They include “Towards Sustainable Management of the Boreal Forest”, “Poplar Culture in North America”, “Ecophysiology of Northern Spruce Species” and “Biology of *Populus* and its Implications for Management and Conservation”.

7. Many titles in the Earth Science Series describe ancient animals (from giant dinosaurs to microscopic conodonts), many of which are used to date and correlate strata for purposes as diverse as establishing the ancient history of the Canadian landmass or investigating settings for petroleum and mineral concentration. Several examine major episodes of former climatic change, sea-level fluctuation and mass extinction. In another field of Earth Science, “Atlas of Migmatites” contains a description of some of the most highly deformed rocks from the roots of ancient mountain systems and found widely throughout the Canadian Shield. A key volume, now in an advanced state of preparation, summarizes final results of Project Lithoprobe – the multi-year, multi-million dollar investigation of the Canadian landmass by teams of academic, governmental and industrial scientists, which has rewritten the story of North American continental evolution through some four billion years. Unfortunately, this is one of the many volumes that we shall be unable to publish.

A feature of NRC Press publications, supported by the Monograph Program, has been the biographies of world leaders from Canada in science and engineering. These have been in great demand by teachers anxious to satisfy students’ requests for some national examples of outstanding accomplishments by such specialists. The first “biography”, on Gerhard Herzberg, dealt with one of the greatest scientists of the last century, the 1971 Nobel Prize winner in chemistry and a founding member of the Editorial Board of the NRC Monograph Program. The second volume dealt with George Klein, the most productive inventor in Canada in the twentieth century. The third volume, “Her Daughter the Engineer”, describes the life and accomplishments of Elsie MacGill, the world’s first female aeronautical engineer.

NRC Monographs have earned a first-class reputation in Canada and around the world for their scientific merit and their attractive presentation. Several have won prestigious national and international awards.

Scientific monographs are an essential part of the scientific process and serve the public good. They constitute the documented record of much of a country’s scientific foundation; one that can be drawn upon both as a reliable reference source and as a basic platform from which to launch advances designed to elevate the platform to new heights. With such a huge and physiographically diversified landmass with offshore extensions on three sides, Canada, more than many countries, needs a well-documented record of the remarkable natural variations that accompany its geographical extent and extremes. Knowledge of these is obviously in the public interest, and in building the secure national foundation needed to meet that interest, this country currently lags well behind many of the world’s advanced nations.

What can be done to reverse these decisions?

1. Respectful letters to the Prime Minister, the Minister of State for Science & Technology (the Honorable Gary Goodyear), and your local MP, to explain the critical role that science publishing in Canada plays for Canadian scientists. Please mention that you believe that a Monograph Publishing Program is a public good that is essential for Canadian science and international competitiveness.

2. Letters to Presidents of the scientific societies of Canada and to individual scientists in Canada and abroad to inform them about this situation, urging that they write to the government, in their personal and organizational capacities, to explain the benefits of scientific publishing by the federal government, explaining that this is a core function of government. Please ask them to tell their members about this situation and to explain the importance of letters from individual scientists stressing the importance to Canadian science of a monograph publishing program.

3. Contact the media, particularly editorialists and science journalists, to bring this to the attention of the public.



Bernie Ronberg

A syrphid fly on...human skin

Members in the news / Membres qui font les manchettes

Honour to Charles Vincent

On 5 June 2009, during the Congress of the “Ordre des Agronomes du Québec”, Charles Vincent, horticultural entomologist at the Research and Development Center, Agriculture and Agri-Food Canada, Saint-Jean-sur-Richelieu, Qc, Canada, has been awarded the title “Commandeur de l’Ordre du Mérite Agricole”. This award is presented by the OAQ (3300 members) in recognition of exceptional services to agriculture.

The day earlier, he received a copy of: Aluja, M., Leskey, T.C. & Vincent, C. 2009 (Eds.) Biorational Tree-Fruit Pest Management. CABI Publishing, Wallingford, U.K., 295 p. This book has been done to honour the career and legacy of Ronald J. Prokopy.

A few months earlier, he worked on the following publication: Mason, P.G., Gillespie, D.R. & Vincent, C. (Eds.). 2008. Proceedings of the Third International Symposium on Biological Control of Arthropods. Christchurch, New Zealand, 8-13 February 2009, United States Department of Agriculture, Forest Service, Morgantown, WV, FHTET-2008-06, December 2008, 636 pp. It is downloadable as a pdf at: <http://eduportfolio.org/6644>.

Graham Griffiths was best known as a brilliant but controversial dipterist who expressed his strong opinions about morphology, phylogeny and people in books, reviews and papers as well as a legacy of letters to administrators, editors, committees and bureaucrats. His opinions, and how they were expressed, sometimes alienated colleagues. However, his contributions to biology were indeed impressive, including a 1972 book that remains an extremely important synthesis of information about morphology and phylogeny of the higher Diptera as well as a clear and concise summary of Hennigian cladistic methodology. He was also an extraordinary taxonomist and an encyclopedic storehouse of information about various groups of flies, especially the large and difficult families Agromyzidae and Anthomyiidae. His knowledge of the latter family was particularly important and his passing leaves a huge gap in our collective



Graham C. D. Griffiths

22 June 1937 – 3 May 2009

ability to deal with the diversity of this very important group of mainly phytophagous flies. His incredible knowledge about Diptera and his productive publication record are all the more remarkable given that he started out in the arts but became a scientist and turned a hobby of collecting flies into a biological career that later involved almost as much botany as entomology.

Early years and education

Graham Charles Douglas Griffiths was born to Peggy and Arthur Griffiths in Cardiff, Wales. Graham went to school there and in London, England (1941-1955). While at school he studied piano but also started a life-long interest in flies. After finishing school, Graham served two years in the British Army. With the aid of various scholarships, he attended Christ's College, Cambridge (1958-1961) and obtained a BA (Honours) majoring in classics and philosophy. After graduation, he worked in the United Kingdom Ministry of Agriculture, Fisheries and Food (1961-1967).

Based on letters of recommendation rather than an education in biology, Graham was granted admission to graduate studies at the University of Alberta under the supervision of George E. Ball (1967-1971). From 1972 to 1974, he held a Killam Special Postdoctoral Fellowship awarded by the Canada Council. In 1970, Graham married Deirdre Webb, who was a park naturalist at Elk Island National Park. (Graham's first marriage ended after he came to Canada.) After post-graduate work, Graham became self-employed as an entomological and botanical consultant based in Edmonton. Deirdre helped part-time with illustrations and co-wrote several of the consulting reports.

Publications

Graham was a prolific writer with over 130 publications. These included a book, 83 scientific notes, papers and book chapters; 21 reviews of scientific papers and books; 5 translations; 21 major reports; 8 botany and agricultural articles; and many single-copy reports for various governmental departments and industries. His scientific publications primarily dealt with the taxonomy of Agromyzidae (leaf-miner flies) and Anthomyiidae (root-maggot flies).

Graham's first research, on Syrphidae (flower flies), was published in 1954 when he was at Mill Hill School (= high school). About 1953, Kenneth Spencer got Graham interested in agromyzids and the two developed a lasting friendship based on their interest in these flies (Spencer 1992). While still at school, Graham also published descriptions of two new species of these flies. During his time with the army and the civil service, he continued to publish on agromyzids and their parasites. By rearing leaf-mining larvae to adults, he was able to connect the flies with their hosts as well as their parasites.

Graham's PhD thesis was expanded into a book about the evolution of higher flies (Griffiths 1972), a subject area to which he had earlier contributed by translating Hennig's revolutionary approach to systematics into English (Griffiths, 1965). His post-doctoral work dealt with the foundations of biosystematics (Griffiths 1973, 1974).

In 1977, Graham initiated and edited *Flies of the Nearctic Region*, designed as a companion to the Palaearctic Series, *Die Fliegen der Paläarktischen Region* (flies of the Palaearctic), which started publication in 1924. The *Flies of the Nearctic Region* is a series of monographs published in taxonomically arranged Parts. Each Part covers an inclusive taxonomic unit such as a family or genus of New World Diptera. This series has now reached 9 volumes with numerous parts, all published without public funds. Since 1982, Graham produced 15 Parts on anthomyiids, which total 2635 printed pages (e.g. Griffiths 2004). In these publications, he described nearly 170 new species.

Graham's studies of phytophagous flies led him to learn a great deal of botany. In 1988, he published his first plant, rather than insect, paper. His proficiency at identifying plants by their leaves, stems and roots rather than by their flowers led to consulting contracts from pipe-line companies, which to fulfill their environmental impact assessments, needed to avoid rare plant habitats.

Languages

Graham was multi-lingual. During his army service in Cyprus, he learned modern Greek in order to interrogate suspected rebels. In 1965 and 1975, he translated and re-published two German papers in English. In 1987, as a visiting scientist at the Russian Zoological Institute, he delivered lectures in Russian in Leningrad and Moscow. In the early 1990s he started to translate the "Flora of the Russian Arctic" into English. The first three volumes (330, 233 and 472 pages) were published between 1995 and 2000. He was still working on translating the remaining volumes when he died.

Service

Graham served in various capacities for several professional and environmental societies. These included:

- National and Provincial Parks Association of Canada (Chair of Edmonton Chapter, 1972-1974; editor for book on the Swan Hills, 1975);
- Environmental Protection Subcommittee of the Public Advisory Committee on the Environment for the Government of Alberta (member 1972-1976, 1978-1984 and Chair 1980-1982);
- Environment Policy Committee for the Alberta New Democratic Party (Chair 1982);
- Publications Committee of the Entomological Society of Canada (member 1984-1988);
- Council for International Congresses of Dipterology (Chair 1986-1994 and Past Chair 1994-1998); and
- Editorial Board of the European Journal of Entomology (1992-2009).

Honours

Between 1962 and 1987, five entomologists (M. Fischer, K.A. Spencer, J.T. Nowakowski, V.K. Sehgal and C. Hansson) named four anthomyzid flies and two of their hymenopteran parasites *griffithsi*. In 1998, Graham was elected an honorary member of the International Congresses of Dipterology during the 4th International Congress of Dipterology. This is one of a maximum of seven living dipterists who can be so honoured. In 2003, he was elected a Special Life Member of the British Entomological and Natural History Society. Graham was a member of this society for an extraordinary 57 years.

Final years

After moving permanently to Athabasca, Alberta in 2001, Graham continued his research and consulting work but also volunteered to give talks to children and the general public on his biological studies of Muskeg Creek and Crooked Lake. He also worked through Athabasca University's herbarium checking and doing identifications as well as documenting plants of interest for the Alberta Native Plant Council. In late 2006, Graham, after months of what he thought was a minor irritation, was diagnosed with throat cancer. In early 2007, after various cancer treatments, he had difficulty speaking and had to use writing to communicate with most people. However he continued with field work, a revision of the genus *Fucellaria*, and identifying plants for the Alberta Biodiversity Monitoring Institute. Unfortunately the cancer spread and Graham died in Athabasca, just short of his 72nd birthday.

Graham is survived by his mother, two sisters (Eileene and Angela) and his wife Deirdre.

Most of Graham's collections will go to the Strickland Museum at the University of Alberta.

Acknowledgements

Thanks to Deirdre E. Griffiths for a copy of Graham's curriculum vitae, photograph (International Congress of Dipterology, Bratislava, August 1990), and other information. Thanks also to Stephen A. Marshall of the University of Guelph and personnel of the old Department of Entomology at the University of Alberta who supplied background information and comments on various drafts.

References

- Griffiths, G.C.D. 1965. Translated from German of: Hennig, W. Phylogenetic Systematics. Annual Review of Entomology, **10**: 97-116.
- Griffiths, G.C.D. 1972. The phylogenetic classification of Diptera Cyclorrhapha, with special reference to the structure of the male postabdomen. Series Entomologica Number 8. The Hague: W. Junk. 340 pages.
- Griffiths, G.C.D. 1973. Some fundamental problems in biological classification. Systematic Zoology, **22**:338-343.
- Griffiths, G.C.D. 1974. On the foundations of biological systematics. Acta Biotheoretica, **23**:85-131.
- Griffiths, G.C.D. 2004. Anthomyiidae. Flies of the Nearctic Region, **8**(2). Number 15 (pages 2485-2635).
- Spencer, K.A. 1992. Flycatcher: memoirs of an amateur entomologist. The Hague: SPB Academic Publishing, 414 pages.

Robert G. Holmberg
Athabasca University
Athabasca, Alberta

ESC responds to NSERC cuts to Post Graduate Scholarships

In March 2009 a National Sciences and Engineering Research Council (NSERC) news release communicated the decisions in the federal Budget 2009 that affected their programs. Although NSERC continues to receive substantial funding, a number of changes were made following a strategic review. Among these was the decision to reduce the master's level Post Graduate Scholarship (PGS) award to one year only.

On behalf of the Entomological Society of Canada, President Paul Fields sent a letter (see following page) to the Honourable Tony Clement, Minister for Industry Canada, and all Members of Parliament, praising the Government of Canada for its continued substantial funding to NSERC in support of academic research in Canada. The letter also pointed out the impact of reducing the MSc PGS to one year, briefly, that students will have to seek alternative funding to complete their research rather than focusing their energy on producing the highest quality work possible, that students may be deterred from entering master's programs by uncertainty about adequate funding, and that personal financial status will become a much more significant determinant of entry in master's programs, programs for which merit and ability should be the only basis for student selection. The letter recommended that the Government of Canada make supporting a second year of the NSERC master's level PGS a priority and, as part of the economic stimulus package, invest an additional \$15,000,000 to achieve this.

Mr. Clement kindly replied with a letter dated 11 July 2009. He outlined that the decision to reduce the master's PGS funding was "... determined on the basis of a thorough and objective strategic review, and was reallocated to support priority S&T funding." He explained further that the funding was reduced, beginning in 2009 "... to align the program with the structure of the Canada Graduate Scholarship program." Mr. Clement outlined the need for program spending review and the process through which a comprehensive analysis is made. He also pointed out the Government's continued support for higher education research and development, the increases made to NSERC's budget each year since 2006 and that "Budget 2009 represents one of the single largest federal investments in science and technology to date, providing \$5.1 billion overall in new funding for infrastructure, research, people, and commercialization."

Mr. Jack Layton, leader of the New Democratic Party also replied, sending an e-mail, dated 17 July 2009. His message indicated that the New Democrats support federal investment in research and development to Canadian institutions and industries so they may achieve strategic objectives in both the medium and long term. Mr. Layton noted that 2008 New Democratic Party platform called for an additional \$400 million in research grants to be provided to colleges and universities. He also reiterated his party's position that the Investment Canada Act must be strengthened to ensure that foreign takeovers of Canadian companies will be subject to more stringent tests respecting the promotion of research and development in Canada.

The ESC action achieved its goal to inform politicians that continued funding for science and to train future scientists is important to Canada's economic well-being. The replies noted above attest to this. Unfortunately, but not unexpectedly, the Society was not able to secure an immediate reversal of a decision we regard as detrimental to the interests of master's students in entomology and other scientific disciplines.

Peter Mason, Chair
Science Policy and Education Committee

Letter from The President to the Minister of Industry about NSERC cuts to MSc Scholarships



Entomological Society of Canada
Société d'entomologie du Canada

March 23, 2009

Tony Clement
Industry Canada
C.D. Howe Building, East Tower, 11th Floor
235 Queen St.
Ottawa, ON K1A 0H5
Phone: 613-995-9001
FAX: 613-992-0302
E-mail: ministre.industrie@ic.gc.ca

Dear Mr. Minister of Industry;

On behalf of the Entomological Society of Canada I am writing concerning the recent announcement by the National Sciences and Engineering Research Council (NSERC). The Society applauds the Government of Canada for its continued substantial funding to NSERC in support of academic research in Canada. As well, the additional investment provided for postgraduate scholarships is encouraging.

The Society understands the constraints of the Strategic Review of 2008, particularly the requirement to identify a minimum of 5 percent of the NSERC budget for potential reallocation to other federal government priorities. However, we believe that the decision to reduce the master's level Post Graduate Scholarship (PGS) award to one year only is in error. In science, research conducted at the master's level normally requires two years to complete and this is particularly true of projects involving field studies. Field studies must be replicated over two years to be publishable in the scientific literature, and it is a great disservice to a master's student to oblige them to graduate without the opportunity of publishing their research.

Master's students supported by a PGS for a single year will be forced to seek other funding sources for the second year and thus will have to seek alternative funding to complete their research rather than focusing their energy on producing the highest quality work possible. Many potential master's students will be deterred from entering graduate programs by uncertainty about availability of funding to complete their program. Personal financial status will become a much more significant determinant of entry in master's programs, programs for which merit and ability should be the only basis for student selection.

The consequences we see are: 1) there will be a shift from merit-based to means-based selection of students to undertake graduate studies at the master's level; 2) the quality of the research conducted will be diminished and not publishable in peer-review journals, thus leaving students at a competitive disadvantage for doctoral positions and scholarships; 3) there will be a reduction in the number of graduates of master's programmes in science, thus reducing the number of students in Canadian Society with postgraduate training and the supply of entrants for the increased number of Ph.D. scholarships that NSERC plans to fund; and 4) a Canadian workforce that is less qualified, less varied and less productive.

The Entomological Society of Canada recommends that NSERC allow support for 2 years in a Master's program, as they had done in the past. Also, we strongly urge the Government of Canada direct a substantial proportion of the economic stimulus package to the knowledge industry; universities, research grants and its own government research programs.

We hope that you will consider our concerns and support our recommendation to strengthen the academic training of Canada's future workforce.

Yours sincerely,



Paul Fields, Ph.D.
President
Entomological Society of Canada

Cc:
Prime Minister
Members of Parliament
President of NSERC

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Summary of items arising from the 1 June 2009 meeting of the Executive Council

By Annabelle Firlej, Secretary

Executive Council

P. Fields summarized his President's report, which identified the following priorities:

- dealing with the ProQuest lawsuit.
- getting electronic membership forms.
- renewing the contract for publication of *The Canadian Entomologist*.
- finalizing the digitization of back issues.
- finding a replacement for the *Bulletin* Editor.
- preparations for the 2009 meeting.

Dissolution of the Strategic Review – Committee Structure

The Board approved by e-mail ballot the dissolution of the Strategic Review Committee.

Treasurer

The overall financial assessment shows that in 2008 our Society had a net revenue of \$33 339. The total revenue for 2008 was \$198 626 and total expenditure amounted to \$181 442. The total revenue and expenditure figures are very low (lowest in more than 10 years) and are the direct result of publishing smaller issues of *TCE*. Publishing and mailing *TCE* cost the Society approximately \$50 000 less in 2008 than in 2007. New auditors should be recruited for the next year. Negotiations with NRC Research Press regarding the upcoming renewal of *TCE* production are ongoing. Mike Boroczki and Carol McKinley will provide input for the Board before the upcoming meeting. The Finance Committee is asked to provide its recommendations about increasing subscription rate and cost of reprints for *TCE* for the year 2010. The number of subscribers to *TCE* and members is similar to those of 2008 at the same time.

Translation of the mail for membership

Revised guidelines of the Bilingualism Committee now require emails from the head office or committee Chairs to be sent to members in both French and English, The revised guidelines are now available on the ESC website.

ESC Headquarters Committee

The new Chair of the Headquarters Committee is Chris Schmidt from Ottawa. The Committee is currently searching for a new tenant for occupancy commencing 1 May 2009. D. Lisi obtained quotes for repair and maintenance of the building required for 2009.

Finance Committee

The Committee reports that there was an audited net operating profit of \$34 838 for 2008 and operating expenses remain stable. Profit was a combined result of fewer pages published in *TCE* and the reduced cost of the *Bulletin* (30% less).

TCE page charges

The Financial Committee, in consultation with the Editor of *TCE*, anticipates that eliminating page charges for ESC members would increase the number of manuscripts submitted, but not their quality and, therefore, provide extra work to Subject Editors. The Committee instead recommends that global access to *TCE* publications be enhanced to encourage more submissions of quality manuscripts. The new contract with NRC Press should include open access to the full text of the *TCE* website for authors who purchase the pdf rights of their papers. The

TCE Editor, R. Bennett, is also convinced that open access for authors will be a better solution than no page charges.

Editorial Board stipend

Stipends provided to members of the Editorial Board are a remuneration “in lieu of expenses”, and not an honorarium. Thus, the Finance Committee cannot recommend increasing these stipends based on job quality. The President suggested that Division Editors be invited to attend the JAM in Winnipeg with the Society providing financial support to pay their registration fees. R. Bennett will send a formal invitation to the Division Editors. The President suggested that financial support for Division Editors attending JAMs be added to the Standing Rules. This item will be discussed at the annual Board meeting and the AGM.

Ad Hoc Business Plan Committee

The Committee is working on two major issues: declining membership and the financial sustainability of *The Canadian Entomologist*. A process to renew memberships on-line should help retain and recruit members. The President will discuss with the Membership Committee and the Web Content Committee how this can be done.

Editor – *Bulletin*

Production and distribution of the *Bulletin* is going well. To aid incoming Editors, guidelines for the preparation of each issue were prepared by M. Smith in 2007. The more recent issue (March) included a call for photographs for use on the covers of the TCE and *Bulletin*.

Web Site

A photograph was provided by P. MacKay for a new header for the website. Recent lab profiles and obituaries (2007-08) have been added to the website. There is now a link to the webpage advertising the Arctic and Boreal Entomology Course and the jobs page has been updated.

Electronic Balloting

The Webmaster drafted a possible format for electronic balloting. The wording to add electronic balloting to the Standing Rules will be discussed at the annual Board meeting and the AGM.

Web Content Committee

The Board approved by e-mail ballot that the Web Content Committee become a Continuing Committee. R. West, M. Cusson and W. Riel have drafted the committee guidelines. Appropriate changes to Standing Rules and Guidelines will be discussed at the annual Board meeting and the AGM.

Publications Committee

Change to Publication Committee guidelines

As suggested by the Webmaster and the Board, the photo contest should be added to the duty of the Publication Committee guidelines. The Committee will be dealing with this issue over the next few months.

Authorization to Publish/Copyright Assignment

The present ‘Authorization to Publish/Copyright Assignment’ form is confusing and will be revised in consultation with R. Bennett. The Committee will be dealing with this issue over the next few months.

Conditions of use document

A policy outlining the conditions of use for downloading material from the website needs to be developed. The Committee will be dealing with this issue over the next few months.

Nominations Committee

A list of nominees for the ESC Governing Board appeared in the June issue of the *Bulletin*. A ballot was e-mailed to all members in the last week of May.

Achievement Awards Committee

The nominations of N. Holliday for the Gold Medal Award and of S. Vanlerhoven for the Gordon Hewitt Award were officially approved by the Board. Revised guidelines for the Achievement Awards Committee were also approved and will be posted soon on the website. A potential new award could be obtained from Doug Carr in honor of John and Bert Carr. This award could support research/field work for amateur entomologist for an approximate value of \$500 per year. M. Evenden will send a formal proposition to Doug Carr to create a new Award under the responsibility of the Achievement Award Committee.

Bylaws, Rules and Regulations Committee

The Committee has seen some activity, including revisions to the guidelines of the Achievement Awards Committee and of the Bilingualism Committee. The Committee is updating the Standing Rules for Electronic Balloting, addition of the photo contest (Publications Committee) and the creation of a permanent Web Content Committee to replace the current Ad-Hoc Committee.

Heritage Committee

Two deaths were reported to the Committee. An obituary will be published in the *Bulletin* for Reg Salt (Lethbridge) and an announcement for Nora Urquhart (Toronto), widow of the late F.A. Urquhart and deeply involved in his work on Monarch butterflies.

Student Awards Committee

Committee members evaluated applications for scholarships and awards. Applications were submitted electronically and placed on a secure location on the Society web site from which they could be accessed by committee members. This system seemed to work well and reduced the costs of printing and circulating the applications.

Student Travel Award conditions

A revised version of the Travel Award conditions has been approved by the Board and placed on the ESC website.

Science Policy and Education Committee

A letter responding to the changes announced by NSERC to the postgraduate scholarship support for MSc students was sent to the head of NSERC and Members of the Parliament. No response has been received to date. Concerning the Convention on Biological Diversity (CBD) and Access and Benefit Sharing (ABS) issue, the Committee agreed that the ESC has an interest in supporting ABS. But several points need to be considered. The Committee will prepare a policy statement and the draft will be sent to the Board. During the 2009 JAM, one or two papers will be presented on ABS.

Student Affairs Committee

The student mixer at the 2009 JAM was initially cancelled, but has now been reinstated and combined with an Insect Trivia contest. The Board agreed to cover the cost of the event if the Annual Meeting Committee is unable to cover cost with profits from the JAM. The President will contact the Annual Meeting Organizing Committee to make arrangements.

Marking Sheets for President's Prize Competition

The student representatives sent the marking sheets to Board members for review. A new version is now available on the website.

Marketing Committee

P. Mason contacted some ESC members in the Ottawa area to join the Marketing Committee. He is waiting for their response.

Biological Survey of Canada

Funding to keep the Biological Survey of Canada (BSC) will end in this September. The Board discussed opportunities for additional funding to sustain BSC activities and publications, of which some currently are in progress. P. Bouchard will put an announcement in the next issue of the *Bulletin* to summarize the situation and to request suggestions from members.

Affiliated Entomological Societies

Updates were received from three regional Societies. W. Riel reported that the Treasurer (L. Maclaughlan) of the ESBC didn't receive the Public Education Grant from the ESC. The President will contact D. Lisi on this matter.

Other Business

Support to Secretary

The Secretary will give birth in August. She plans to attend the JAM in Winnipeg, but will require help to meet her obligations as Secretary. She will inform the Executive in September as to the extent of the help required.

Next ESC Board Meeting and Annual General Meeting

The next meeting of the ESC Board will be held on Saturday, October 17 from 8:00 am to 5:00 pm. The Annual General Meeting will be held Tuesday, October 20 from 5:00 – 5:45 pm. Both meetings will be at the Fort Garry Hotel, Winnipeg.



Max Larrivière

A bombyliid fly feeding on an *Erytronium* flower

Notice of proposed by-law amendments

Dear ESC member,

In an attempt to give the Society more flexibility to meet current ESC needs and changing technology, the By-Laws Committee is recommending a change of wording in bylaws to allow electronic (or on-line) ballots, and to modernize the procedure for the updating of the bylaws.

This is the first notification of proposed amendments: a second notification will take place at the fall AGM. Voting on these proposals shall take place by mail ballot along with general elections. If you have concerns or questions regarding the proposed amendments or any feedback, they can be sent to the Secretary of the ESC (Annabelle Firlej: afirlej@yahoo.com) or brought to the floor at the fall AGM.

Specifically, we propose that the following sections of the By-Laws which affect voting be changed as suggested:

- **Article VIII:4** of the by-laws currently reads:

The 2nd Vice-President shall be elected by annual mail ballot and shall fill the office of the 1st Vice-President when it becomes vacant.

Proposed change:

The 2nd Vice-President shall be elected by annual ballot and shall fill the office of the 1st Vice-President when it becomes vacant.

- **Article IX:2** currently reads:

One Director-at-Large shall be elected by annual mail ballot for a three-year term and shall take office at the end of the annual meeting following their election.

Proposed change:

One Director-at-Large shall be elected by annual ballot for a three-year term and shall take office at the end of the annual meeting following their election.

- **Article XIII:1** currently reads:

Elections shall be by secret mail ballot.

Proposed change:

Elections shall be by secret ballot.

Notification des modifications proposées au règlement intérieur

Cher membre de la SEC,

Dans le but de tenter de donner plus de flexibilité à la société afin de rencontrer les besoins présents de la SEC et la technologie changeante, le Comité du règlement intérieur recommande un changement à la formulation des règlements permettant le vote électronique (ou en ligne) et la modernisation de la procédure pour mettre à jour le règlement intérieur.

Ceci est la première notification des modifications proposées : une deuxième notification sera faite à l'assemblée générale annuelle en automne. Le vote sur ces propositions aura lieu par vote postal en même temps que les élections générales. Si vous avez des questions ou commentaires concernant les modifications proposées, vous pouvez les faire parvenir à la secrétaire de la SEC (Annabelle Firlej: afirlej@yahoo.com) ou les partager lors de l'assemblée générale annuelle en automne.

Plus précisément, nous proposons que les sections suivantes du règlement intérieur qui concernent les votes soient modifiées tel que suggéré:

- **Article VIII:4** du règlement intérieur se lit présentement comme suit:

Le deuxième vice-président est élu par scrutin postal annuel; il remplit les fonctions de premier vice-président lorsque ce poste devient vacant.

Changement proposé:

Le deuxième vice-président est élu par scrutin annuel; il remplit les fonctions du premier vice-président lorsque ce poste devient vacant.

- **Article IX:2** se lit présentement:

Les directeurs généraux sont élus par scrutin postal annuel pour un mandat de trois ans; ils entrent en fonction à la fin de l'assemblée annuelle suivant leur élection.

Changement proposé:

Les directeurs généraux sont élus par scrutin annuel pour un mandat de trois ans; ils entrent

• **Article XIV:3** currently reads:

In elections or other business conducted by mail ballot, twenty-five votes on any question shall constitute a Quorum

Proposed change:

In elections or other business conducted by ballot, twenty-five votes on any question shall constitute a Quorum

• **Article XX:1** currently reads:

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

Proposed change:

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

Amending By-Laws

• **Article XX:3** currently reads:

Proposals to amend shall be shown to the Members for consideration at least twice, and at least two months shall elapse before they may be voted on. The vote shall take place no later than twelve months after the proposals have been received by the Secretary.

Proposed change:

Proposals to amend shall be shown to the Members for consideration at least twice, with at least a one month interval between first and second notification. During this time, member feedback on the proposed amendments shall be solicited. The vote shall take place no later than twelve months after the proposals have been received by the Secretary.

en fonction à la fin de l'assemblée annuelle suivant leur élection.

• **Article XIII:1** se lit présentement:

Les élections sont tenues par scrutin postal secret.

Changement proposé:

Les élections sont tenues par scrutin secret.

• **Article XIV:3** se lit présentement:

Au cours des élections ou pour la prise de décisions par scrutin postal sur d'autres affaires, le quorum équivaut à vingt-cinq votes pour n'importe quelle question.

Changement proposé:

Au cours des élections ou pour la prise de décisions par scrutin sur d'autres affaires, le quorum équivaut à vingt-cinq votes pour n'importe quelle question

• **Article XX:1** se lit présentement:

Le règlement intérieur peut être abrogé ou modifié par la majorité des deux tiers des membres actifs formant quorum; l'abrogation ou la modification n'entre pas en vigueur et n'est pas mise à exécution avant d'être approuvée par le ministre de l'Industrie du Canada. Le scrutin doit être tenu par la poste.

Changement proposé:

Le règlement intérieur peut être abrogé ou modifié par la majorité des deux tiers des membres actifs formant quorum; l'abrogation ou la modification n'entre pas en vigueur et n'est pas mise à exécution avant d'être approuvée par le ministre de l'Industrie du Canada.

Modifications du règlement intérieur

• **Article XX:3** se lit présentement:

Les propositions de modification du règlement intérieur doivent être soumises à l'examen des membres au moins deux fois, et il doit s'écouler au moins deux mois avant que ces propositions fassent l'objet d'un scrutin. Ce scrutin ne doit pas avoir lieu plus de douze mois après la réception des propositions par le secrétaire.

Changement proposé:

Les propositions de modification du règlement intérieur doivent être soumises à l'examen des membres au moins deux fois, et il doit

s'écouler au moins un mois entre la première et la seconde notification. Durant cette période, les commentaires des membres sur la modification sont sollicités. Ce scrutin ne doit pas avoir lieu plus de douze mois après la réception des propositions par le secrétaire.

The status and conservation of butterflies in Canada

The recently released report, Sentinels on the Wing: The Status and Conservation of Butterflies in Canada by Peter Hall is now available as a PDF on the internet (http://www.natureserve-canada.ca/en/pdf/NatureServe%20Canada%20-%20Hall%20Sentinels_on_the_Wing%202009.pdf). For any enquiries please contact Peter Hall (halljp@rogers.com) or the publisher, NatureServe Canada (1-888-277-5265).



Jay Cossey

A Mourning Cloak, *Nymphalis antiopa*

Know butterflies? I want your help!

The Ecoinformatics lab of Dr. Jeremy Kerr at the University of Ottawa is conducting an analysis of mobility for butterflies in Canada. In the absence of experimental mobility data for the vast majority of species, I will rely on the cumulative knowledge of Canada's lepidopterists to construct a mobility index. I am distributing a survey to people with field experience with butterflies and skippers of Canada. Surveys of lepidopterists in the UK and Finland have produced mobility estimates remarkably similar to those obtained from field experiments.

If you have field experience with Canadian butterflies then I hope you will take the time to complete my survey. Visit www.science.uottawa.ca/~jfitz049/survey.html for more information on this project and to download the survey. Do not hesitate to e-mail me (rburk091@uottawa.ca) with any questions or comments you may have.

Thanks for your time and I look forward to hearing from you!

Ryan Burke
Canadian Facility for Ecoinformatics Research
Dept. of Biology, University of Ottawa
www.science.uottawa.ca/~jkerr/
Tel.: 1-613-562-5800 x2594

Seeking graduate students for projects in forest entomology

Department of Renewable Resources, University of Alberta

I am seeking two outstanding students to pursue **one PhD and one MSc** degrees in forest entomology at the University of Alberta, Edmonton. Current research in my lab explores questions of broad relevance to **invasion biology and ecology**, emphasizing chemical ecology of forest insects. By doing so, my group integrates forestry, entomology, pathology, and plant chemistry approach to characterize chemical interactions among interacting organisms (trees, insects, pathogens), determine effects of the environment and climate on altering the tripartite interactions, and understand the effects of the tripartite interactions on fitness of interacting organisms. I currently supervise two PhD and one MSc students and co-supervise one MSc and one PhD students and one postdoctoral researcher. Currently I am involved in several research projects in Canada, US and Europe.

The MSc student will focus on a USDA-NRI funded project characterizing the species of **symbiotic bacteria associated with mountain pine beetle** and different pine species and to evaluate the roles of symbiotic bacteria in mediating host utilization of the beetle in portions of its historical and emerging geographic and host ranges. Our hypothesis is that bark beetles employ specific bacteria to inhibit antagonistic fungi and facilitate symbiotic fungi, and that adapted trees employ endophytic bacteria to inhibit the beetles' symbiotic fungi. The project specific to the MSc student will determine effects of the predominant bacteria, fungi, and their combinations on mountain pine beetle reproduction, and how tree species affect these interactions in the lab. This is a joint project among Cameron R. Curry (<http://www.bact.wisc.edu/faculty/currie>) and Kenneth F. Raffa (<http://entomology.wisc.edu/~raffa>) (University of Wisconsin, Madison) in US, and Brian H. Aukema (<http://web.unbc.ca/~aukema>) (Canadian Forest Service) and my lab (<http://www.ales.ualberta.ca/rr/>) in Canada.

The PhD student will focus on an Alberta Ingenuity-funded project emphasizing the **roles of native biotic agents**, such as insects and diseases, **in range and host expansion of mountain pine beetle** in western Canada. The goal of this project is to **lay out a blueprint** of how interactions among trees, insects and microorganisms can be used as a proactive (or pre-emptive) method to understand the risk potential of species invasion. Depending on the interest and quality of the applicant, the project offers considerable flexibility in designing a research program that investigates areas of personal interest within the overall framework of the project.

Background in ecology, entomology, chemical ecology, or a related field is required, as is an interest in the linkages between trees and insects. Experience with any of the following will be an asset, but is not required: plant-insect interactions, chemical ecology, and forest ecology. Proficiency in spoken and written English is a necessity. Selection of a student will be based on academic achievements, reference letters and previous research experience. Strong verbal, written, and computational skills are essential. Tuition and fees and a standard Graduate Assistantship can be offered. Students are also eligible for Tri-Council graduate scholarships (e.g. NSERC) in their first year.

Both positions are available starting the Winter Semester (January 2010), but not later than May 2010. The applicant must meet the entrance requirement for The University of Alberta, Department of Renewable Resources, which can be viewed at: <http://www.ales.ualberta.ca/rr/phdprograms.cfm>.

Interested candidates should e-mail (1) their transcript, (2) curriculum vitae, (3) a letter describing their research experience and interests (2 page limit), (4) recent TOEFL scores (if

appropriate), and (5) the names and contact information of three references to Dr. Nadir Erbilgin, Department of Renewable Resources, 230-A Earth Science Building, University of Alberta, Edmonton, Alberta T6G 2E3, CANADA. Tel.: (780) 492-8693; Fax: (780) 492-1767. Additional information can be obtained via e-mail or phone call. E-mail: erbilgin@ualberta.ca.

Postdoctoral positions in entomology and population genetics

Ecosystem Science and Management, University of Northern British Columbia

Genome Canada, with Genome BC, will fund new research on mountain pine beetle biochemistry and population genomics starting in October 2009. The positions are part of a large-scale research program on the mountain pine beetle (MPB) epidemic (www.thetriaproject.ca).

Entomology (Dr. Dezene Huber) – 2 positions:

1) Functional characterization of MPB gene products related to detoxification of host secondary metabolites: example genes include cytochromes P450, carboxylesterases, and glutathione S-transferases. Successful candidates should be familiar with insect, yeast and bacterial expression systems and able to perform functional characterization enzyme assays.

2) Molecular genetic mechanisms of cold tolerance in MPB: successful candidates should have field and lab research skills, including preparation of samples for RT-qPCR, microarray and proteomic analyses. The ability to design, plan, and carry out replicated, ecologically-based experiments is a necessary qualification.

Population Genomics (Dr. Brent Murray) – 1 position:

3) Investigating the integrated landscape genomics of the MPB system, this position focuses on the study of neutral (microsatellite) variation among collections of MPB populations. Previous experience with field collection and population genetic/genomic analysis is an asset.

All qualified persons should apply; however, Canadians/permanent residents of Canada are given priority. Only qualified applicants will receive a reply. Noting position for application, apply with CV and names of three references to: Project Director Kyeema Burns (kyeema@interchange.ubc.ca)



The mountain pine beetle,
Dendroctonus ponderosae

Participants wanted for survey on insect conservation

Dr. Harvey Lemelin, Association Professor in the School of Outdoor Recreation, Parks and Tourism at Lakehead University has organized two insect symposiums in the city of Thunder Bay (i.e., a dragonfly symposium in the summer of 2007; a bee symposium in the summer of 2008). Both events attracted over 200 participants. For the past five years, Dr. Lemelin has been examining the human-dimensions of 'dragonfly-hunting' in Northern Ontario. Several publications and presentations have been produced from this research. In the summer of 2009, the Social Sciences and Humanities Research Council of Canada (SSHRC) provided some funding to expand this study to other insects and arachnids.

The title of the project is *Looking Beyond the Exoskeleton: Insights into Endoskeletons and Insect Conservation*. This research will involve an overview of the state of insect and/or spider management through the critical examination of achievements, failures, and impacts resulting from current management strategies. Interviews with major stakeholders and associations (entomologists, researchers, enthusiasts) will provide a greater understanding of human-insect/spider interactions from an interdisciplinary perspective. By discussing with participants their experiences relating to insect/spider conservation we may be able to translate these findings into practical management tools that will enhance the recognition that experiential learning and awareness are essential cornerstones of an effective and meaningful conservation strategy for all beings.

We are encouraging individuals who have an interest in insects/spiders to provide their stories on our on-line survey. This is a semi-structured web-based interview consisting of five general questions. The survey takes about 10-20 minutes to complete, and can be found at:

<http://humandimensionsofinsectconservation.wordpress.com/>

http://www.surveymonkey.com/s.aspx?sm=m9c7EXCaTowU6eoJF6NwA_3d_3d

Electronic publication of taxonomy

The International Commission on Zoological Nomenclature is considering amending the International Code of Zoological Nomenclature to allow publication of descriptions of new taxa in electronic media, such as the World Wide Web. Electronic media are currently not accepted as a valid means of publishing descriptions of new taxa.

Details of the proposal can be found in an article published recently in *Zootaxa*:

International Commission on Zoological Nomenclature (2008). Proposed amendment of the International Code of Zoological Nomenclature to expand and refine methods of publication. *Zootaxa*, **1908**: 57-67. The paper may be downloaded from here:

<http://www.mapress.com/zootaxa/2008/f/zt01908p067.pdf>.

The Commission invites responses and discussion of this proposal from individuals and organisations for a period of one year, beginning on 17 October 2008. Correspondence should be addressed to the Executive Secretary, ICZN, iczn@nhm.ac.uk.

Further information about the Commission and the Code can be found here:

<http://www.iczn.org/>.

Bruce Halliday

Member, International Commission on Zoological Nomenclature

General update

For many years this space in the *Bulletin* has been occupied by a summary of the twice-yearly meeting of the advisory Scientific Committee to the Biological Survey of Canada (Terrestrial Arthropods). The summary of the October 2008 meeting printed in the March 2009 issue of the *Bulletin* indicated that the Biological Survey would be undergoing some significant changes. The following report summarizes what has happened since October and presents a look to the future.

BACKGROUND

The Biological Survey of Canada (Terrestrial Arthropods) was started in 1977 as a Pilot Study by the Entomological Society of Canada. After a series of contracts, the BSC was established in 1980 at the Canadian Museum of Nature (at that time called the National Museum of Natural Sciences) under a continuing partnership with the ESC. From its origins until his retirement in 2007, Dr. Hugh Danks served as the Head of the BSC. Dr. Andrew Smith was subsequently hired by the Canadian Museum of Nature in 2007 in a temporary position to fulfill that role. In 2008 the Canadian Museum of Nature advised the Scientific Committee of the Biological Survey of Canada and the Entomological Society of Canada that they would not make any funding commitments to the BSC beyond March 2010. It was evident that a new way of doing business would be needed if the BSC was to survive.

ORGANIZATION

As of 10 February 2009 the BSC became a federally incorporated not-for-profit organization managed by a board of directors. The individuals who made the application for incorporation became the provisional Board of Directors. They are:

- Robert Anderson, Canadian Museum of Nature
- Patrice Bouchard, Canadian National Collection of Insects, Arachnids and Nematodes
- Douglas Currie, Royal Ontario Museum
- Donna Giberson, University of Prince Edward Island
- David Langor, Natural Resources Canada
- Joseph Shorthouse, Laurentian University

The provisional Board will be replaced by an elected Board at the first annual general meeting of the membership.

The BSC bylaws provide for officers who **need not be directors, nor members**. At the first meeting of the Board of Directors in April the following appointments were made:

President – Joe Shorthouse

Vice-President – Donna Giberson

Secretary – Susan Goods

Treasurer – Pat Bouchard

Membership

Membership in the BSC will be open to those who can actively participate in a BSC project or who can contribute to the BSC objectives in a meaningful way and whose application for admission as a member has received the approval of the Board of the corporation. Members will be admitted for a two (2) year term, which can be renewed.

Meetings

Annual general membership meetings will be held in conjunction with the annual Entomological Society of Canada meetings. The first AGM will be held at the Fort Garry Hotel in Winnipeg, Manitoba on 21 October 2009.

The Board of Directors met in Ottawa on 24 April 2009 and they have continued to hold monthly teleconferences during this transition period.

Secretariat

The BSC Secretariat remains housed at the Canadian Museum of Nature (CMN). The position of Head of the BSC is now vacant. The CMN continues to provide the services of Susan Goods, office space, accounting and other services.

Scientific Committee

The 1980 Memorandum of Agreement between the Entomological Society of Canada and the National Museum of Natural Sciences specified that a Scientific Committee would be appointed by the Entomological Society of Canada to provide national direction for work on Canada's insect fauna and to facilitate the coordination of scientific projects. This committee will be decommissioned because the membership of the BSC not-for-profit corporation will now fulfill that role.

GOALS AND OBJECTIVES

The purpose of the Biological Survey of Canada will continue to be to facilitate research and dissemination of knowledge of Canada's biodiversity. This mandate will be fulfilled through two main priorities:

- facilitating and coordinating project-based research
- coordinating publications that characterize the Canadian biota

The objectives of the BSC may be found in the Overview section of the BSC web site (<http://www.biology.ualberta.ca/bsc/english/overview.htm>).

While these goals are not much different than what they have been for the last 30 years, activities will now need to be somewhat more focussed than in the past.

FUNDING

In the past, scientific research done for Survey projects was funded chiefly through specific funding obtained by co-operating individuals for their own work, from various sources. The BSC is now adopting a collaborative fundraising model. It is hoped that funds can be secured for major projects under the auspices of the BSC with a percentage of these funds allocated to support the operations of a BSC Secretariat. A fundraising campaign for the Northern Insect Survey project is now in progress.

PROJECTS AND ACTIVITIES

Northern Insect Survey

The Northern Insect Survey (NIS) is the current major research project of the BSC. The BSC will document changes in Canada's arthropod fauna by repeating the half century old Northern Insect Survey – an unprecedented initiative that sampled diversity at 58 arctic and subarctic localities at a time when climate change was not yet a global concern. An outline of the NIS was published in the Fall 2008 issue of the Newsletter of the Biological Survey of Canada (see http://www.biology.ualberta.ca/bsc/news27_2/nis.htm). An application for an NSERC strategic grant to fund this project was submitted in April and other fundraising initiatives are being pursued.

Publishing

Arthropods of Canadian Grasslands

The first volume in the Arthropods of Canadian Grasslands series (Arthropods of Canadian grasslands: ecology and interactions in grassland habitats) was submitted to NRC Research

Press in the fall of 2008. While the volume was undergoing the review process, the BSC was notified that NRC was terminating their Monograph Publishing Program and therefore would not be able to publish the grasslands volumes. Consequently, the BSC decided to self-publish the first and second volumes (Arthropods and Altered Grassland Ecosystems) of the grasslands series. Volume one is now in the editing and production stage. Volume two is in progress; many chapters have been submitted. Both volumes will appear in electronic format.

The Insects and Arachnids of Canada

The Insects and Arachnids of Canada handbook series and other entomological monographs were also to be published by NRC Research Press. The BSC therefore proposed to the Handbook Committee that they take over the responsibility of coordinating the publication of this series. Production will be integrated with the BSC's *Canadian Journal of Arthropod Identification* because the CJAI has the infrastructure (editorial committee, chief editor, and a technical editor) in place to deal with manuscript submissions. Authors of all planned handbooks and monographs have been contacted and most have already agreed to this plan.

***The Canadian Journal of Arthropod Identification* (CJAI)**

The latest issue to be published in CJAI is: Thomas, A.W. and Marshall, S. A. 2009. Tabanidae of Canada, east of the Rocky Mountains 1: a photographic key to the species of Chrysopsinae and Pangoniinae (Diptera: Tabanidae). *Canadian Journal of Arthropod Identification* No. 8, 25 June 2009, available online at http://www.biology.ualberta.ca/bsc/ejournal/tm_08.html, doi: 10.3752/cjai.2009.08.) There are many other papers currently in progress including one that will use an interactive LUCID key. A guide to landscape insects will be a departure from the normal taxonomic focus.

BSC Symposium

A BSC Symposium on "Terrestrial Arthropod Surveys in Canada: Purpose, Progress, and Plans" will be held the morning of Wednesday, October 21 at the Joint Annual Meeting of the Entomological Society of Canada and the Entomological Society of Manitoba. See http://home.cc.umanitoba.ca/~fieldspg/ESC2009_files/index.htm for more information.

Curation Blitz

The BSC has organized a Curation Blitz to be held at the J.B. Wallis Museum on Monday evening, October 19 during the Joint Annual Meeting of the Entomological Society of Canada and the Entomological Society of Manitoba. Please contact David McCorquodale (David_McCorquodale@cbu.ca) for more information.

Other projects

Work on other active projects (such as Forest Arthropods, Arthropods of Newfoundland and Labrador, etc.) continues. Whether these projects will continue under the auspices of the BSC has yet to be determined. Active subcommittees of the Scientific Committee could be established as subcommittees at the discretion of the BSC Board.

Biological Survey Foundation

The Biological Survey Foundation (BSF), a charitable organization recognized by the Canada Revenue Agency, exists to help develop and fund selected publications of the Biological Survey and to ensure that they become widely available. This organization remains unchanged although some slight changes to the by-laws may be needed to recognize the new membership structure of the BSC.

Name change

The official name of the BSC is now the Biological Survey of Canada / Commission biologique du Canada. The 'Terrestrial Arthropods / Arthropodes terrestres' suffix no longer appears in the name and references to terrestrial arthropods were not specifically made in the application to become a not-for-profit organization. This change was not made to infer a change in the focus of the BSC, as the BSC's history and ties with the ESC are very important. Indeed, the BSC's current and future work will continue to have a strong entomological component. However, the BSC is open to the future possibility of collaborating with other scientists in other disciplines that complement the BSC goals and projects. As well, a broader outlook may be more attractive to potential funding organizations.

SUMMARY

The Biological Survey of Canada will continue, through strong collaboration with biodiversity researchers across Canada, to pursue its objectives, specifically to facilitate projects and publications about Canada's biodiversity. The new funding reality has forced us to rethink how we deliver on these objectives, but we will continue collaborating with the ESC and Canadian entomologists.

Prepared by Susan Goods, Biological Survey of Canada. BSC e-mail: bsc@mus-nature.ca

(continued from p. 156)

Doug Eidt was the *Bulletin's* first editor (1969-75), undertaking his duties starting with the second issue. He listed suitable submission topics that remain unchanged today. He also noted that the *Bulletin's* "success depends on the contributions of its members." In addition to reports from the Society, the second issue contained two lengthy responses to the earlier article on insect taxonomy, a report of a retirement and an appointment, and word of two upcoming meetings. It also contained the *Bulletin's* first 'Feature Photograph' – an SEM of the antenna of the female spruce budworm moth, *Choristoneura fumiferana*.

Similar content has appeared in all subsequent issues – sometimes eerily so! The September issue for 1970 includes a letter sent by the Society to then Prime Minister Pierre Trudeau concerning the Federal Government's austerity program and its implications for the future of entomology. The current issue contains two similar items, both with serious implications to entomology in Canada (see pages 128-132 and 136-138).

(suite de la page 156)

une embauche, ainsi que des annonces pour deux réunions à venir. Ce numéro contenait également la première apparition de la section « Feature Photograph » du *Bulletin* – un MEB de l'antenne d'une femelle de la tordeuse de l'épinette, *Choristoneura fumiferana*.

Un contenu similaire se retrouve dans les numéros subséquents – parfois étrangement même! Le numéro de septembre de 1970 contient une lettre envoyée par la Société au Premier Ministre Pierre Trudeau concernant le programme austère du gouvernement fédéral et ses implications pour le futur de l'entomologie. Le numéro courant contient deux items similaires, les deux ayant de sérieuses implications pour l'entomologie au Canada (voir pages 128-132 et 136-138).

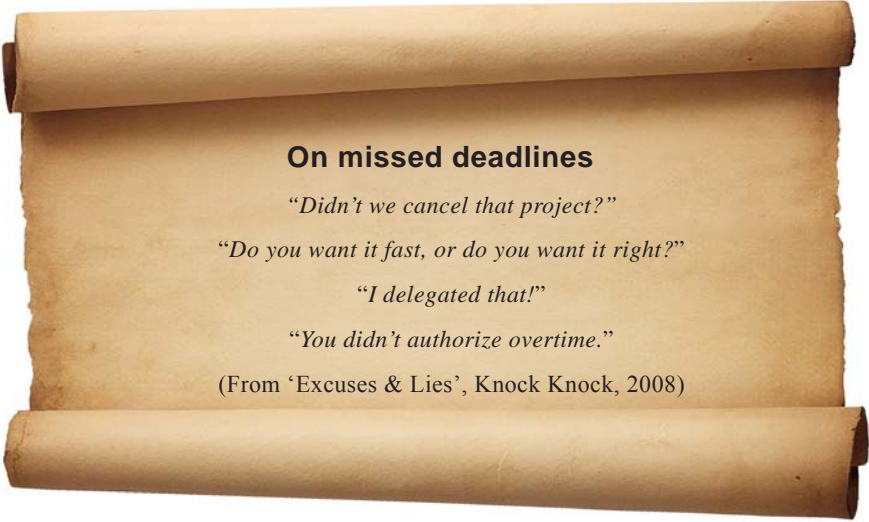
Bien qu'étant fidèle à son mandat, le *Bulletin* a tout de même changé dans les 40 dernières années. Le numéro de décembre 2001 était le premier numéro publié autant en format électronique que papier. La publication électronique permet une utilisation accrue de photographies couleur qui maintenant ornent

Although remaining true to its mandate, the *Bulletin* has changed somewhat during the past 40 years. The December 2001 issue was the first to be published in both electronic and hardcopy format. Electronic publication allowed for much greater use of the colour photographs that now regularly grace the pages of the *Bulletin*. The March 2005 issue was the first to incorporate colour photographs on the cover, corresponding to a similar change made to *The Canadian Entomologist*. The previous Editor, Paul Fields (2003-06) incorporated major changes in formatting and implemented a series of regular columns. These include the ever popular 'Moth Balls', 'The Student Wing', 'Lab Profiles', and 'Tricks of the Trade'. Sadly, 'The Adventures of Ento-man' no longer appears, but it has been replaced with 'Dear Buggy'. I have tried to follow the example set by Paul and include submissions such that all readers of the *Bulletin* will find something to enjoy.

I see no reason why the *Bulletin* won't survive the next 40 years. All it will require is "*the contributions of its members*". Thanks to everyone, past, present and future, for their submissions to the *Bulletin*. Each submission becomes part of the Society's collective memory to be recalled by future generations of *Bulletin* readers.

régulièrement les pages du *Bulletin*. Le numéro de mars 2005 était le premier à intégrer des photographies couleur sur la page couverture, correspondant à un changement similaire dans *The Canadian Entomologist*. Le précédent rédacteur, Paul Fields (2003-2006) a incorporé des changements majeurs dans le format et a implanté une série de rubriques régulières. Celles-ci incluent « Boules à mites », « L'aile étudiante », « Profil de labo » et « Trucs et astuces ». Malheureusement, « Les aventures d'Ento-Homme » n'apparaissent plus, mais elles ont été remplacées par « Cher Bibitte ». J'ai tenté de suivre l'exemple de Paul et d'inclure des soumissions de telle façon que tous les lecteurs du *Bulletin* puissent y trouver leur compte.

Je ne vois aucune raison pour que le *Bulletin* ne survive pas encore 40 ans. Tout ce qui est nécessaire sont « *les contributions de ses membres* ». Merci à tout le monde, dans le passé, le présent et le futur, pour leurs soumissions au *Bulletin*. Chaque soumission devient une partie de la mémoire collective de la Société dont se souviendront les futures générations de lecteurs du *Bulletin*.



On missed deadlines

"Didn't we cancel that project?"

"Do you want it fast, or do you want it right?"

"I delegated that!"

"You didn't authorize overtime."

(From 'Excuses & Lies', Knock Knock, 2008)

Officers of Affiliated Societies, 2008-2009 Dirigeants des sociétés associées, 2008-2009

Entomological Society of British Columbia

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President-Elect Tom Lowery
Past President John McLean
Editor (Journal) Hugh Barclay
Editor (Boreus) Jenny Heron
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Editor's note: Society Directors and Officers are reminded to check these lists, and submit corrections, including the names and positions of new officers.

Bulletin of the Entomological Society of Canada

Editor: Kevin Floate
Assistant Editor: Fred Beaulieu

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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.

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

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The Buzz / Bourdonnements

By Kevin Floate, Editor / Rédacteur



40 years later and still going strong!

The first issue of the *Bulletin* appeared in March 1969. It was followed by a second issue in December of the same year and has been published quarterly ever since.

In the inaugural editorial, Patrick Pielou wrote that “*The Bulletin will be concerned not so much with the problems of entomology as with the problems of entomologists. It will be a forum for the discussion of controversial matters that affect entomologists personally – for instance, the sort of things that are often argued about, sometimes heatedly, at coffee breaks, but are rarely put in print. At the same time, the bulletin will provide a permanent record of many of the decisions, reports and minutes concerning the organization and activities of our Society. At the moment, most of this is on record only in the files of the secretary.*”

Much of the first issue comprised reports for the annual ESC meetings of 1967 and 1968, an article titled ‘Insect Taxonomy – Is It Dying in Canada?’, and a humorous report of samples sent astray when wolves ate the shipping labels.

(continued on p. 152)

40 plus tard et toujours aussi fort!

Le premier numéro du *Bulletin* a été publié en mars 1969. Il a été suivi par un second numéro en décembre de la même année et a été publié quatre fois par année depuis.

Dans l’éditorial d’inauguration, Patrick Pielou écrivait (originellement en anglais) que « *Le Bulletin sera concerné pas tant par les problèmes de l’entomologie que par les problèmes des entomologistes. Il sera un forum de discussion pour les sujets controversés qui affectent les entomologistes personnellement – par exemple, le genre de choses qui sont souvent discutées, parfois de façon enflammée, à la pause café, mais rarement publiées. Du même coup, le bulletin fournira des archives permanentes de nombreuses décisions, rapports et ordres du jour concernant l’organisation et les activités de notre Société. En ce moment, la plupart de ces archives se trouvent uniquement dans les dossiers du secrétariat.* »

Le premier numéro contenait principalement les rapports des réunions annuelles de la SEC pour 1967 et 1968, un article intitulé (originellement en anglais) « La taxonomie des insectes – Est-ce en chute au Canada? », ainsi qu’un rapport humoristique à propos des échantillons perdus lorsque les loups avaient mangé les étiquettes d’envoi.

Doug Eidt a été le premier rédacteur du *Bulletin* (1969-1975), assumant ces responsabilités au second numéro. Il a énuméré des sujets de soumission appropriés qui sont toujours inchangés aujourd’hui. Il a aussi noté (originellement en anglais) que « *le succès [du Bulletin] dépend des contributions de ses membres.* » En plus des rapports de la société, le second numéro contenait également deux longues réponses à l’article sur la taxonomie des insectes, un rapport sur une retraite et

(suite à la page 152)

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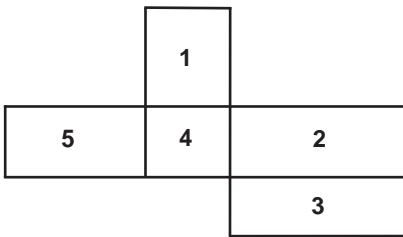
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Images

On the spine: The lady beetle *Anatis labiculata* (Coleoptera: Coccinellidae) feeding on an adult *Uroleucon rudbeckiae* (Hemiptera: Aphididae). Photo: Pat MacKay

Beneath the title: The thistle gall fly, *Urophora cardui* (Diptera: Tephritidae), was introduced from Europe to North America for the control of Canada thistle, *Cirsium arvense*. Photo: Steve Marshall

1. Male Douglas-fir seed chalcid, *Megastigmus spermotrophus* (Hymenoptera: Torymidae). Photo: Dion Manastyrski

2. A mason wasp, probably *Ancistrocerus* sp. (Hymenoptera: Vespidae: Eumeninae). Photo: Joanne Bovee

3. A burnet moth, *Zygaena* sp. (Lepidoptera: Zygaenidae) on knapweed. Photo: Alicia Leroux

4. Checking weevil traps in strawberries. Photo: Kenna MacKenzie

5. *Misumena vatia* (Araneae: Thomisidae) mating and dining on a dance fly (Diptera: Empididae). Photo: Brian Klinkenberg

Back cover: A tropical dragonfly, *Neurothemis* sp. (Odonata: Libellulidae), cooling by thermoregulation, Thailand. Photo: Jeremy McNeil

Français à l'intérieur de la couverture avant

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