



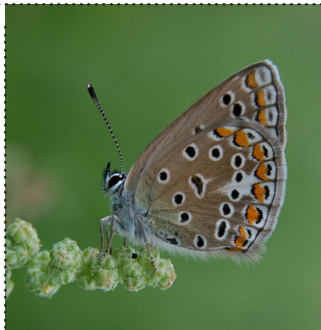
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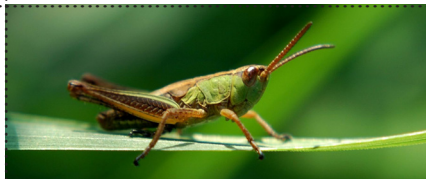


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Images

Sur le dos: Une mouche à toison, *Stenopogon inquinatus* Loew (Diptera : Asilidae), photographiée dans la vallée de l'Okanagan en Colombie-Britannique. Un des plus gros asilidés canadiens, sa distribution s'étend sur presque tout l'ouest de la Colombie-Britannique où il est commun dans les forêts sèches et les prairies. Photo : W. Strong

Sous le titre: Accouplement de téléphores fauves, *Rhagonycha fulva* (Scopoli) (Coleoptera : Cantharidae), dans un pré près de Delémont, en Suisse. Ce coléoptère prédateur européen a été introduit récemment en Amérique du Nord où il est maintenant répandu. Photo : A. Leroux

1 Une espèce européenne de *Plebejus Kluk* (Lepidoptera : Lycaenidae), très semblable à l'espèce néarctique *Plebejus melissa* (Edwards). Jerisberghof, Suisse. Photo : A. Leroux

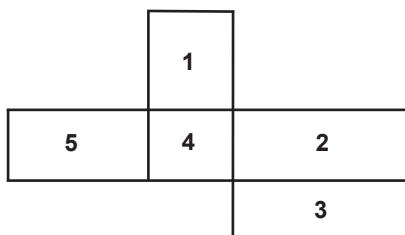
2 Œufs de *Leptoglossus occidentalis* Heidemann (Hemiptera : Coreidae), un important ravageur des graines de conifères en Amérique du Nord et des pignons de pins comestibles en Europe. Vernon, Colombie-Britannique. Photo : W. Strong

3 Une nymphe de criquet des pâtures, probablement une espèce de *Chorthippus* Fieber (Orthoptera : Acrididae), dans une pâture de montagne près de Soyhières, en Suisse. Photo: A. Leroux

4 Lars Andreassen préparant des leurres pour ses pièges à *Aleochara bipustulata* (L.) (Coleoptera : Staphylinidae), un agent potentiel de lutte biologique contre *Delia radicum* (L.) (Diptera : Anthomyiidae). Zurich, Suisse. Photo: A. Leroux

5 Une nymphe de punaise réduviidée (Heteroptera : Reduviidae), photographiée dans l'ouest du Massachusetts. Photo: B. Roitberg

Couverture arrière: Une guêpe platygastroïde, *Gryon pennsylvanicum* (Ashmead) (Hymenoptera : Scelionidae), pondant dans des œufs de la punaise américaine, *Leptoglossus occidentalis* Heidemann (Hemiptera : Coreidae) dans la vallée de l'Okanagan en Colombie-Britannique. Photo: W. Strong





Clés de vôûte

A lors que nous entrons dans la prochaine décennie du 21^e siècle, les molécules clé de vôûte est un des sujets chauds en biologie : « Imaginez un écosystème – une forêt tropicale par exemple. Visualisez la végétation luxuriante, les insectes pollinisateurs, les oiseaux qui s’en nourrissent et les serpents qui mangent les oiseaux – chacun affectant les autres dans un réseau complexe d’interactions. Mais comment ces interactions arrivent-elles? L’idée gagne du terrain qu’un petit nombre de molécules « clé de vôûte » font la majorité du travail. Retirez-les et l’écosystème entier s’effondre. » (Traduction de *New Scientist*, 22 janvier 2011, p. 14). Et bien, changez d’échelle et nous découvrons que nos fiduciaires et nos comités fournissent le même tissu à la Société d’entomologie du Canada.

Je suis heureux d’annoncer que Dr Chris Buddle a été nommé rédacteur en chef de *The Canadian Entomologist*. Il a accepté de prendre cette importante responsabilité pour 2 ans à partir d’octobre 2011. Chris travaillera avec notre rédacteur en chef actuel, Robb Bennett, durant cette année de transition vers la nouvelle maison d’édition. Les négociations avec les presses de l’université Cambridge sont en cours grâce au travail acharné du président du comité des publications, Kevin Floate, et du trésorier, Scott Brooks. Les presses NRC ont été compréhensives en accommodant la transition et nous apprécions leur coopération. Shashi Juneja a été engagé à temps partiel afin d’aider notre employée de bureau Derna Lisi. Cette équipe travaille fort afin d’assurer les fonctions de la SEC au jour le jour. La rédactrice adjointe du *Bulletin*, Julia Mlynarek est devenue partie intégrale de notre équipe et, avec le rédacteur en chef Cedric Gillott, produit les communications clés de la SEC pour les entomologistes au Canada. La secrétaire, Annabelle Firlej, nous a signalé qu’elle se retirera en septembre 2011. Annabelle a

Keystones

As we move into the next decade of the 21st Century *Keystone Molecules* is one of the hot topics in biology: “PICTURE an ecosystem - a tropical forest, for instance. Visualise the lush plant life, the pollinating insects, the birds that prey on them and the snakes that eat the birds - all affecting each other in a complex web of interactions. But how does that interaction occur? The idea is gaining ground that a small number of “keystone” molecules do much of the work. Take them away and the entire ecosystem collapses.” (*New Scientist*, 22 January 2011, p. 14). Well, scale it up and we discover that our Trustees and Committees provide that same fabric to the Entomological Society of Canada.

I am very pleased to announce that Dr Chris Buddle has been appointed as the incoming Editor-in-Chief of *The Canadian Entomologist*. He has agreed to take on this keystone responsibility for 2 years beginning in October 2011. Chris will work with our current Editor-

in-Chief Robb Bennett during this year of transition to the new publisher. Negotiations with Cambridge University Press are progressing thanks to the hard work of Publications Committee Chair, Kevin Floate, and Treasurer Scott Brooks. NRC Press has been gracious in accommodating the transition and we appreciate their cooperation.

Shashi Juneja has been hired part-time to help our office manager Derna Lisi. This team is working hard to ensure the ESC functions on a day-to-day basis. Assistant *Bulletin* Editor Julia Mlynarek has become an integral part of our team now and with Editor Cedric Gilloitt produces the key ESC communication to entomologists in Canada.

Secretary Annabelle Firlej has indicated that she will step down in September 2011. Annabelle has kept the Executive on track the last few years and we are reluctant to say goodbye. If you are interested to serve the ESC in a key role please see the notice under Society business regarding the Secretary position.

We are in the process of resurrecting the ESC Fund-raising Committee and are seeking volunteers who would be interested in making contact with potential donors to raise funds that would support JAM costs. I have written to each regional society asking for nominees to serve on this strategic committee. Please contact me if you would like to participate.

The 2011 JAM organizing committee has the planning for the November 6-9 meeting in Halifax well in hand. The website will soon be active and I recommend that you check the ESC website and plan your travel now.

maintenu le conseil exécutif sur les rails ces dernières années et nous lui disons au revoir avec regrets. Si vous êtes intéressés à servir la SEC dans un rôle clé, veuillez consulter la notice dans les affaires de la société concernant le poste de secrétaire.

Nous sommes en train de faire revivre le comité des levées de fonds de la SEC et nous recherchons des volontaires intéressés à prendre contact avec des donateurs potentiels afin d'amasser des fonds pour couvrir les frais des réunions conjointes annuelles. J'ai écrit à chaque société régionale afin de demander des nominés qui serviront sur ce comité stratégique. Merci de me contacter si vous voulez participer.

Le comité organisateur de la réunion conjointe annuelle 2011 ont bien en main l'organisation de la réunion du 6 au 9 novembre à Halifax. Le site Internet sera bientôt en ligne et je vous conseille de consulter le site de la SEC et de planifier votre voyage dès maintenant.



Frédéric Beaulieu

Hippodamia variegata (Coccinellidae)



The 2011 Entomological Worst Dressed List

Orthoptera

Mole crickets (Gryllotalpidae) (Fig. 1). First question. Are those fore legs or sausages? Maybe Olive Oyl would be impressed, but as far as I'm concerned, it's not a good look. Second question. Are you actually happy with your life strategy? You're a cricket for heaven's sake! You could be jumping around the fields, singing happily (or being serenaded) in the moonlight. But no. You had to go all Gollum on us, didn't you?



Fig. 2. *Pseudophasma* sp. (Phasmatidae).

Big Heads, Small Heads and Sausage Legs

Let's face it. Some arthropods are cool, like dragonflies and black widow spiders. Some are beautiful, like butterflies or buprestid beetles. But then there are some arthropods that for various reasons, would simply not be included in a top 100 sexi-entomologist's list for 2011. That's not to say that they aren't wonderful and fascinating. And perhaps I shouldn't pick on them. But I'm going to anyway.

Note that the opinions expressed in this article are those of the author (an unapologetically smug hymenopterist) and are not necessarily the views of the Entomological Society of Canada or any of its sponsors. No offence is intended to the arthropods portrayed in this article, their families or acquaintances.



Fig. 1. Northern mole cricket *Gryllotalpa hexadactyla* (Gryllotalpidae).

Phasmatodea

Walking sticks (Fig. 2). OK. When you can't see walking sticks, that's pretty cool. But the mystique is pretty much lost once they've been located. (Seriously dude, you're busted! You can stop pretending you're a stick now. Oh. No you can't. Unlucky.)

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

Notoptera

Heel-walkers (Mantophasmatidae) (Fig. 3). In terms of morphology, heel-walkers are mostly unremarkable which is likely why they remained undiscovered in collections for more than 100 years. Their placement on this list is more a function of their stubborn insistence on how they walk. The question I have to ask is: Have you ever tried walking using your entire “foot”? You might find it works a lot better. It’s even possible you’d be a lot more widespread today if you walked like almost every other arthropod on the planet.



Simon van Noort, Iziko South African Museum

Fig. 3. *Lobophasma redelinghuysensis* (Mantophasmatidae).



Steve Marshall

Fig. 4. *Diactor* sp. (Coreidae).

Mecoptera

Scorpion-flies and allies (Fig. 5). Practically the entire order deserves to be on this list for their excessively long “snouts”. I have no idea what it is like having your mandibles in a different area code than your eyes, but suffice it to say, in my opinion, it’s not attractive. Oh, and boys – if you’re trying to create the effect of “don’t mess with me, I’m a scorpion”, it’s just not working for me.



Steve Marshall

Fig. 5. *Panorpa lugubris* (Panorpidae).



Steve Marshall

Fig. 6 *Pterodontia* sp. (Acroceridae).

Diptera

Small-headed flies (Acroceridae) (Fig. 6). The most obvious question is, why? What possible adaptive advantage can there be to having a head that is five sizes too small for your body? I suppose it might allow you to sit in the front row of a theatre without fear of complaints from the people behind you. And you might not have to pay provincial sales tax when you buy hats. But other than that, it’s just silly! But then again (see next page)...



Steve Marshall

Fig. 7. *Eudorylas* sp. (Pipunculidae).

Coleoptera

Clown beetles (Histeridae) (Fig. 8). From the common name, it's nice to see I'm not the only one who thinks that there is at least something comical about histerids. One of the diagnostic characters of the group is that the terminal two tergites are not covered by the elytra. This feature, coupled with the fact that most species are extremely spherical, makes them look like scarab beetles that have let themselves go over the holidays. Hey buddy! Your tergites are showing!



Steve Marshall

Fig. 8. *Hypocaccus patruelis* (Histeridae).

Lyle Buss, Department of Entomology and Nematology, University of Florida

Fig. 9. Giant swallowtail caterpillar *Papilio cresphontes* (Papilionidae).

like bird droppings..." What doesn't kill you makes you stronger (I guess), but it really can't be much fun at any social functions the young larvae have to attend.

Hymenoptera

Sadly, my inclusion of two kinds of Diptera in this issue's column has used up all the space I was going to allot for Hymenoptera. What a shame.

For those of you mortally offended by this article, join *Moth Balls* next issue, by which time it's almost inevitable that the "sausage-legged, microcephalic, bird-dropping look" will be the pinnacle of arthropod style.

Dear Buggy / Cher Bibitte

Chris MacQuarrie



Dear Buggy,

I read your reply to Artless in Attawapiskat, and I'm in the same boat. I just got my reviews back on my first ever paper. Lucky for me my manuscript was accepted, but the editor's response letter states that before a final decision is made, I must provide a revised manuscript with an accompanying letter that addresses each referee's comments. My problem is that I have pages and pages of referee comments and only 6 weeks to get material back to the editor - do they really expect me to write a response to every comment? Can't I just do the revisions and let the editor figure it out?

Signed 'Out of time in Oromocto'

The short answer Ootio is that while you can technically 'let the editor figure it out', Buggy always advises against annoying editors at all costs. Like, perhaps, not turning in your column for the last issue of the *Bulletin*.

Ahem, to your situation though. The ability to ignore the wishes of an editor and get away with it is probably inversely proportional to one's reputation. So, unless your name is E.O. Wilson, I suggest you do what the editor is asking. Buggy is no expert when it comes to publishing papers, but I have had the fortune - or perhaps misfortune - to receive some rather pointed and lengthy referee comments in my brief career. Plus, I've had some good mentors who have showed me how to craft an artful response.

First, you should give yourself a quick pat on the back that your paper has been accepted. This means that after reading the referees' comments the editor thinks your paper meets the criteria for publication in their journal. For most journals this puts you at least 50% of the way to having the paper published. It is important to keep in mind that while the opportunity to make revisions is a good sign, the editor still has the right to turn your paper down. A poor or insufficient response to an editor's or referee's request can lead to rejection, putting you right back to the start of the submission process.

When I get a set of comments back, I like to read them through with a copy of the submitted manuscript alongside, then split the comments into three types: 'Easy fixes', 'Hard fixes', and 'Can't fixes'.

Easy fixes are self explanatory. These are simple requests being made by a referee. For instance, you may have cited one of your supervisor's papers in your methods section because you used the same technique. A referee might ask you to give some additional details instead

Chris MacQuarrie is a research scientist with the Canadian Forest Service in Sault Ste. Marie where he studies the management of native and invasive insects. Currently, he struggles with being the only Saskatchewan Roughriders fan in Northern Ontario. Dear Buggy is always looking for suggestions or guest contributors. Have an idea? Send it to: cjkmacquarrie@gmail.com or post in the Facebook student group.

of just citing the paper. There's probably nothing wrong with your original choice, but there's no harm (beyond increasing your word count) in fulfilling this request. Easy fixes are also where you get the chance to address inadvertent mistakes that creep into every submission. In my master's thesis I used the word 'insulation' to describe the process by which an insect is warmed by the sun. That process is actually 'insolation'; insulation is the pink stuff in the walls of your house. That's the kind of easy fix I'm talking about.

Hard fixes are (obviously) more difficult. These are often the things that the referee or, more likely, the editor has specifically asked you to do. These may be a follow-up experiment, a new analysis or a supplementary figure. For your sake, I hope there aren't too many of these. A lot of hard fixes can be a sign that your paper holds promise, but isn't at the level of the journal. To deal with these kinds of 'Hard fixes' often requires a game plan and consultation with your co-authors.

Can't fixes - These are the things that you either can't fix or won't fix. These are referee comments that may stem from a perceived flaw in your logic or methodology, or where the referee has misunderstood your findings. These are comments where you must provide a good reason why you disagree with the referee and have not made the change as requested.

Once you've identified the types of comments, you need a strategy to deal with them. My first step is to compare the comments of the different referees. If I'm lucky, I'll find that they've hit on the same things. If so, this will mean I have fewer individual comments to respond to. Duplication is also a good sign that something really needs attention, especially if all the referees have highlighted the same aspect of the study. Pay special attention if one of your 'Hard fix' or 'Can't fix' things is brought up multiple times, as the editor will certainly be looking for you to deal with it in your revisions.

The next thing I like to do is prepare a document to track the comments and my responses. First, I assemble all the referee comments into a single file. You may have to cut and paste from an email, or an online system, a word document or a pdf. While this may take some time, I find it helpful to have all the comments in one central location. I then parse the comments into specific requests. This can be particularly useful when the referee has provided multiple comments within a passage of prose as it will break the work up into simpler tasks (my favorite referees make their comments in point form, but that doesn't always happen). Finally, I number all the comments to allow me to cross reference among them. Now you might be asking, why go to all this trouble? If you look closely at the documentation you received from your editor, it probably states that you need to demonstrate how you dealt with *each* referee comment. Best to start this process now and build the document as you do your revisions, rather than assemble the responses after the fact.

Now the revisions. There's no proper order here, and I find my strategy for dealing with them depends on the type of comments I've received. If most are easy fixes, I'll tackle them one by one, starting with the first referee. If I have one referee that was quite thorough I will go through their comments first as these are likely to be duplicated by the other referees. I would, however, advise dealing with your hard fixes first, as they are going to require the most work, and might even result in changes to the manuscript that render some of the other comments irrelevant. For instance, Referee A might ask for an additional analysis that invalidates a part of the results where Referee B wanted some small change. There's no point in revising a section that's going to be cut.

As you complete each revision make a note of it in the tracking document. I like to state what I did in simple declaratory sentences (I did X which resulted in Y). You should also include a reference to the line and page number in the revisions so that the editor can easily check your response against the referee's comment (I'm not sure editors check every comment in every

response, but its best to demonstrate that you've been thorough). When I'm doing this I like to use a different font and colour in the tracking document so the editor can distinguish my responses from those of the Referees. One thing I used to do, but have got away from lately, was to write 'The referee is correct' or 'The referee is incorrect' before each response. My intent was to raise a flag for the editor to show where I agreed and disagreed with a referee, but I found this to be a bit wordy and pedantic when I had a lot of comments to deal with. You might choose to do something similar depending on your writing style.

Dealing with the 'Can't Fixes' will take the most effort on your part. For these, you'll need to explain why you disagree with a referee and do it in a clear and compelling way. This takes a lot of skill and may force you to provide additional evidence to the editor to show why you are correct. That said, I often find that referees are rarely wrong (consider that they are often experts in your field); rather, these referee concerns highlight an area in the manuscript where there is a problem with my logic or my writing was not clear. Thus, I am not disagreeing with the referee, rather I am using their feedback to refine my manuscript to get my point across. Responding to these types of comments is not really a cause for much gnashing of teeth and appeals to authority, but a chance to assess my own writing with the goal of making my point clearer and easier to understand.

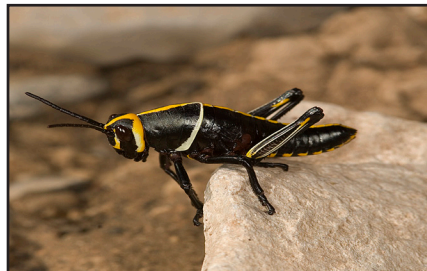
Regardless of the reason for the referee's comment, strive to use your very best writing when responding to the editor. Keep it brief, to the point, and be compelling. If a referee is wrong, you need to show why. Never let the editor have reason to think that you are trying to hide something by ignoring a referee; that's a sure-fire way to wind up with a rejected paper.

Once you've dealt with all the comments, go through and double check both the manuscript and the response to the editor. It is more than likely that with all the work you've done there have been changes to the figure order, references, or section numbering. This will likely be the last chance you get to revise the manuscript before you see the galley proofs (assuming it's accepted for publication). You'll also want to make sure that page and line numbers in your tracking document agree with the revised manuscript. Finally, you'll want to write a short letter to the editor where you highlight the significant changes in the manuscript and indicate whether these have had an impact on the overall findings of the paper. It probably doesn't hurt to add a few kind words to the Acknowledgements, especially if the referees' suggestions have improved your paper!

Good luck, Ootio! I hope your paper gets published. The process of revision can seem worse than writing the original manuscript. Keep reminding yourself that you're more than 50% of the way to seeing your work published, so isn't it worth just a bit more effort to take your manuscript this one last step?

Happy publishing!

Buggy



Steve Marshall

Taeniopoda eques (Romaleidae)



Hello! My name is Chandra Moffat and I am the new Chair of the ESC Student Affairs Committee (SAC). I am a MSc candidate at the University of British Columbia, Okanagan Campus, in Kelowna. My thesis investigates the ecology of a cynipid gall wasp, proposed as a biological control agent for hawkweeds that are invasive in North America. My fieldwork was conducted in the European native range of these species, based at CABI Europe-Switzerland, in the summer of 2010.

As SAC Chair, I am eager to serve the student members of the ESC. Specifically, I am committed to ensuring that undergraduates are not only allowed to present their work at our Joint Annual Meetings, but are also eligible to compete in prize categories. The ESC Board has already expressed support for this endeavour, and we are working to make it happen!

I would like to thank the outgoing SAC Chair, Aynsley Thielman, who devoted countless hours to student-related matters within the ESC. With roughly a quarter of the ESC membership being made up of students, this position requires balancing the diverse needs of many entomology students across Canada. Aynsley worked extremely hard to advocate on behalf of students, increase awareness of job, graduate school and scholarship opportunities and to show us all a good time at the

Bonjour! Je m'appelle Chandra Moffat et je suis la nouvelle présidente du comité des affaires étudiantes de la SEC. Je suis étudiante à la maîtrise à l'Université de Colombie-Britannique, au Campus Okanagan à Kelowna, C.-B. Mon mémoire explore l'écologie d'une guêpe à galle *Cynipidea*, proposée comme agent de lutte biologique contre les épervières envahissantes en Amérique du Nord. Mon travail de terrain a eu lieu dans la zone de distribution native de ces espèces, à partir du centre CABI Europe en Suisse durant l'été 2010.

J'ai hâte de servir les étudiants de la SEC en tant que présidente du comité. Plus particulièrement, je m'engage à m'assurer que les étudiants au premier cycle ne soient pas seulement autorisés à présenter leurs travaux aux réunions annuelles, mais qu'ils soient éligibles à participer aux compétitions pour des prix. Le CA de la SEC a déjà exprimé son soutien envers cette proposition, et nous travaillons afin de le concrétiser !

J'aimerais remercier la présidente sortante de ce comité, Aynsley Thielman, qui a consacré un nombre incalculable d'heures pour les affaires étudiants de la SEC. Avec environ le quart des membres de la SEC qui sont étudiants, ce poste demande d'équilibrer les différents besoins de beaucoup d'étudiants en entomologie au Canada. Aynsley a travaillé très dur afin de plaider en faveur des étudiants, augmenter la diffusion des offres d'emploi, d'études et de bourses, et afin de nous donner du bon temps lors des cocktails étudiants aux réunions conjointes annuelles. L'exemple d'Aynsley a joué un grand rôle dans ma candidature pour ce poste, et je voudrais donc la remercier de m'avoir guidé. Je suis très enthousiaste concernant ce poste, et je vais travailler dur pour servir les membres étudiants de la SEC, j'espère aussi bien que Aynsley l'a fait.

Bien sûr, tout comité nécessite une forte participation de ses membres afin d'atteindre ses objectifs. Je voudrais donc remercier également les anciens membres du comité

Student Mixers of the Joint Annual Meetings. Aynsley's mentorship played a strong role in my seeking out of this position, so I thank her for her continued guidance as well. I am very excited to fill this role, and I will work hard to serve the student members of the ESC, hopefully as well as Aynsley has done.

Of course, any committee requires the strong participation of its members to achieve its goals. To this end, I would also like to thank the previous members of the SAC for their hard work and dedication. I have already seen what a critical role they play for students within the ESC. Along with the other members of the SAC (below), I am working to further connect with students across the country, and have tried to have most regions of Canada represented by students on the SAC. On that note, I would like to introduce the members of the 2011 SAC, all but one of which are new members:

Alicia Leroux

Alicia recently completed her undergraduate degree in Agroecology at the University of Manitoba. She tried to get away, but was lured back to the University of Manitoba for another 2 years, or so, to start collaborative work with CABI-Europe-Switzerland concerning the host range of a potential weed biological control agent, *Euphranta connexa* (Diptera: Tephritidae) on the invasive weeds *Vincetoxicum nigrum* and *V. rossicum*. She hopes to also look at the agents' reproductive potential as well as their developmental rates.

Julia Mlynarek

Julia is a PhD student at Carleton University in Ottawa. Julia is also the new Assistant Editor of the *Bulletin*. Congrats to Julia! You can hear more from her in The last word.



pour leur travail acharné et leur dévouement. J'ai déjà pu observer le rôle important qu'ils jouent pour les étudiants de la SEC. Avec les autres membres du comité (ci-dessous), je travaillerai aussi pour lier davantage les étudiants du pays, et j'ai essayé d'avoir un représentant de la plupart des régions du Canada sur le comité. À ce sujet, je voudrais vous présenter les membres du comité des affaires étudiantes 2011, tous sauf un étant des nouveaux membres :



Alicia Leroux

Alicia a récemment terminé son baccalauréat en agro-écologie à l'Université du Manitoba. Elle a tenté de s'éloigner, mais a été attiré à nouveau à l'Université du Manitoba pour deux autres années environ, afin de commencer un travail de collaboration avec CABI Europe en Suisse au sujet de la gamme d'hôtes d'un agent potentiel de lutte biologique contre les mauvaises herbes, *Euphranta connexa* (Diptera : Tephritidae) sur les mauvaises herbes envahissantes *Vincetoxicum nigrum* et *V. rossicum*. Elle espère également regarder le potentiel reproducteur ainsi que le taux de développement des agents.

Julia Mlynarek

Julia est une étudiante au doctorat à l'Université Carleton à Ottawa. Julia est également la nouvelle rédactrice adjointe du *Bulletin* : félicitations Julia ! Vous pouvez en savoir plus sur elle dans Le dernier mot.

Paul Abram

Paul is in the second year of a Master's degree at Carleton University in Ottawa. His summer research takes place out of CABI Europe-Switzerland, and is focused on the European parasitoids of the swede midge (*Contarinia nasturtii*), which is invasive in Canada. His research interests include parasitoid/host ecological relationships and the assessment of potential biological control agents.



Paul Abram

Paul est en seconde année de maîtrise à l'Université Carleton à Ottawa. Ses recherches estivales prennent place à CABI Europe en Suisse et traite des parasitoïdes de la cécidomyie du chou-fleur, espèce envahissante au Canada. Ses intérêts de recherche incluent les relations écologiques hôte-parasitoïdes et l'évaluation des agents potentiels de lutte biologique.

Lauren Pinault

Lauren is finishing her PhD with Fiona Hunter at Brock University, studying the ecology of malaria vectors in highland Ecuador, particularly how land use and climate change might modify habitat suitability and distribution.



She completed her MSc in forest entomology with Dan Quiring at the University of New Brunswick, studying the ecology of the pale-winged gray moth (*Iridopsis ephyraria*), and a BSc thesis in weevil systematics with Robert Anderson and Jon Houseman at the University of Ottawa.

Lauren Pinault

Lauren termine son doctorat avec Fiona Hunter à l'Université Brock sur l'écologie des vecteurs de malaria dans les hautes terres en Équateur, et plus particulièrement sur la façon dont l'utilisation des terres et les changements climatiques peuvent modifier l'adéquation et la distribution des habitats. Elle a terminé sa maîtrise en entomologie forestière avec Dan Quiring à l'Université du Nouveau-Brunswick sur l'écologie de *Iridopsis ephyraria* et son baccalauréat sur la systématique des charançons avec Robert Anderson et Jon Houseman à l'Université d'Ottawa.

Léna Durocher-Granger

For her collegial studies, Léna did a technical 3-year course at Cégep de Saint-Laurent in Techniques d'inventaire et de recherche en biologie. Afterwards, she completed undergraduate studies at l'Université du Québec à Trois-Rivières in Sciences biologiques et écologiques. She is now finishing her MSc in Entomology in collaboration with McGill University and Agriculture and Agri-Food Canada at St-Jean-sur-Richelieu with Guy Boivin. Her thesis investigates sperm and larval competition in the egg parasitoid *Trichogramma euproctidis*.



Léna Durocher-Granger

Durant ses études collégiales, Léna a fait une technique d'inventaires et de recherche en biologie au cégep de Saint-Laurent. Par la suite, elle a complété un baccalauréat en Sciences biologiques et écologiques à l'UQTR.



Kevin Reeh

Kevin is a MSc candidate working with Chris Cutler at the Nova Scotia Agricultural College (Dalhousie University) located in Truro, Nova Scotia. His project examines the ability of commercially produced bumblebees to disseminate microbial antagonists into wild blueberry; a technique that remains relatively unexplored, especially for field applications. He previously completed two undergraduate degrees at Brock University (2003-2010) and has done a variety of work with various disease vectors, including the blacklegged tick.

Students and the Biological Survey of Canada

Did you know that Canada has a Biological Survey, and that it started as an initiative of the Entomological Society of Canada? The Biological Survey of Canada (<http://www.biology.ualberta.ca/bsc/bschome.htm>) is soliciting input and new members to help shape its future direction. This is a great opportunity to get involved! You can check out more about it and contribute your ideas at the Biological Survey of Canada's blog at <http://biologicalsurvey.wordpress.com/>. A few ideas for students to get involved in are helping organize a biodiversity event at the Joint Annual Meeting (a "biobash" perhaps?) or submit a proposal for the next BioBlitz - where entomologists come from all over to collect and help conduct a biological survey in your area. I encourage you all to check out the blog for more information and to join the BSC (do so by emailing Donna Giberson, at giberson@upeji.ca your name and contact details). Membership is even free!

Elle termine présentement sa maîtrise en entomologie en collaboration avec l'Université McGill et Agriculture et Agroalimentaire Canada sous la supervision de Guy Boivin à St-Jean-sur-Richelieu. Son mémoire porte sur la compétition spermatique et larvaire chez le parasitoïde des œufs *Trichogramma euproctidis*.

Kevin Reeh

Kevin est un étudiant en maîtrise avec Chris Cutler au Nova Scotia Agricultural College (Université de Dalhousie) situé à Truro en Nouvelle-Écosse, depuis mai 2010. Son projet porte sur l'habileté des bourdons produits commercialement à disséminer des antagonistes microbiens dans des bleuets sauvages : une technique qui demeure relativement peu explorée, particulièrement pour des applications sur le terrain. Il a précédemment complété deux baccalauréats à l'Université Brock et a fait une variété de travaux avec différents vecteurs de maladies, incluant la tique à pattes noires.

Les étudiants et la Commission biologique du Canada

Saviez-vous que le Canada a une commission biologique qui a débuté en tant qu'initiative de la Société d'entomologie du Canada? La Commission biologique du Canada (<http://www.biology.ualberta.ca/bsc/cbchome.htm>) demande des idées et veut recruter de nouveaux membres afin d'aider à établir ses directions futures. Il s'agit d'une superbe opportunité de s'impliquer! Vous pouvez consulter le forum de discussion afin d'obtenir plus d'information et partager vos idées (<http://biologicalsurvey.wordpress.com/>). Quelques suggestions sur la façon dont les étudiants peuvent s'impliquer incluent d'organiser un évènement sur la biodiversité à la réunion conjointe annuelle ou de soumettre une proposition pour le prochain BioBlitz - lorsque les entomologistes viennent d'un peu partout pour aider à mener un échantillonnage dans votre région. Je vous encourage à consulter le forum de discussion et à joindre la Commission biologique du Canada (en donnant votre nom et vos informations de contact à Donna Giberson, giberson@upeji.ca).

The 2011 Graduate Student Symposium

Plans are already under way to organize the 2011 Graduate Student Symposium (GSS). If you have defended or plan to defend your thesis within 1 year of JAM 2011, I encourage you to apply to speak in the GSS. The GSS differs from the President's Prize categories, in that speakers are given 25 minutes to speak (rather than 12-13 minutes), the competition runs prior to the session (only selected speakers participate), and the abstracts of the talks are published in the *Bulletin*. More information on the GSS will be published in the June edition of the *Bulletin*.

Thesis Roundup

As always, we like to know when a student defends their thesis. If you (or anyone you know of) have defended your thesis recently, please send me your name, degree and date achieved, thesis title, supervisor's name, university and email address to me at students@esc-sec.ca.

Other Student-related Matters

I encourage you to check out the Student Affairs Section of the ESC website, where you can find updates, awards, the Directory of Entomology in Canada (a great resource if you are looking for a graduate supervisor) and newly updated job and graduate school opportunities. If you know of any job, scholarship/award, or graduate school positions, please pass those along too! We also keep an active Facebook page, so please visit often and post away!

If there is anything you want to see here in the Student Wing, in the Student Affairs Section of the website, or that you want to discuss with me, please contact me anytime. I look forward to hearing from you and I wish you all the best of luck with your studies and research this spring!

Until June,
~Chandra
students@esc-sec.ca

L'adhésion est gratuite !

Le symposium des étudiants gradués 2011

Des plans sont déjà en cours afin d'organiser le symposium des étudiants gradués en 2011. Si vous avez soutenu, ou pensez soutenir votre thèse moins d'un an après la réunion annuelle 2011, je vous encourage à appliquer pour présenter lors de ce symposium. Le symposium diffère des sessions du prix du président, puisque les orateurs ont 25 minutes pour présenter (plutôt que 12-13 minutes), que la compétition a lieu avant la session (seuls les orateurs sélectionnés participent) et que les résumés sont publiés dans le *Bulletin*. Plus d'informations seront publiées dans l'édition de juin du *Bulletin*.

Foisonnement de thèses

Comme à l'habitude, nous aimons savoir quand les étudiants défendent leur thèse. Si vous (ou quelqu'un que vous connaissez) a récemment soutenu sa thèse, merci de m'envoyer vos nom, diplôme et date d'obtention, titre de la thèse, nom du directeur, université et courriel à students@esc-sec.ca.

Autres sujets d'intérêt pour les étudiants

Je vous encourage à vérifier la section des affaires étudiantes du site Internet de la SEC, où vous pouvez trouver des mises à jour, prix, le répertoire des formations en entomologie au Canada (une bonne ressource pour trouver un directeur) et les nouvelles opportunités d'emploi. Si vous connaissez des offres d'emploi, prix/bourses ou des offres d'études graduées, merci de les faire passer aussi ! Nous avons également une page Facebook active, alors visitez là souvent et affichez des informations!

S'il y a quoi que ce soit que vous voudriez voir ici, dans l'Aile étudiante, dans la section des affaires étudiantes du site Internet ou si vous voulez discuter avec moi, vous pouvez me contacter à tout moment. J'ai hâte de vous entendre et je vous souhaite la meilleure des chances avec vos études et vos recherches ce printemps!

Jusqu'à juin,
~Chandra
students@esc-sec.ca

Thesis Roundup Submission Form

Name: _____

Email address: _____

Degree: _____

Date: _____

Title: _____

Supervisor(s): _____

Institution: _____

**Please note: students and/or supervisors may be contacted to verify the information if sent from second parties.

Formulaire de soumission – Foisonnement de thèses

Nom: _____

Courriel: _____

Diplôme: _____

Date: _____

Titre: _____

Directeur(s): _____

Institution: _____

**Veuillez noter que les étudiants et/ou les directeurs pourront être contactés pour vérifier les informations si envoyées par une tierce personne.

Please send to/Envoyer à:

Chandra Moffat
Unit of Biology and Physical Geography
University of British Columbia, Okanagan Campus
ASC 201, 3333 University Way
Kelowna BC V1V 1V7

Trips, traps, triumphs and tribulations: A journey from childhood dreams to a dream-career in entomology

Modified from the Heritage Lecture presented at the Joint Annual Meeting of the Entomological Societies of Canada and British Columbia, Vancouver, 2 November 2010

When first asked to deliver the 2010 Heritage Lecture (Fig. 1), I immediately started thinking about what the word “heritage” actually means. I turned to the authoritative Wikipedia for the answer, and found the following (<http://en.wikipedia.org/wiki/Heritage>):

“Heritage” refers to something inherited from one’s ancestors. It has several different senses, including:

Natural heritage, a group’s inheritance of fauna and flora, geology, landscape and landforms, and other natural resources

Cultural heritage, the legacy of physical artifacts and intangible attributes of a group or society: man-made heritage

In entomology, our heritage combines these two, but it is really cultural heritage that makes humans what they are, in that we can pass accumulated knowledge down from generation to generation. Knowledge isn’t acquired by osmosis, however. All of us have had people in our lives who have guided and inspired us, our mentors. Returning to the web, I found the following:

Mentor - A wise and trusted counselor or teacher

Mentorship - “... informal transmission of knowledge... relevant to work, career, or professional development

Mentoring entails informal communication... during a sustained period of time, between ... the mentor and ...the protégé.” (Modified from Bozeman and Feeny 2007)

This paper is not meant to focus on me, but rather to recognize the importance of heritage and mentorship. Specifically, I want to recognize the importance of the people who created knowledge from which I have benefitted, some long before my time, as well as those who directly inspired and mentored me throughout my life. I also wanted to link my Swedish heritage to my career by highlighting the connection between Swedish entomologists and entomology in Canada. My journey from a somewhat geeky child to a decidedly geeky adult merely serves as the common thread.

I grew up in Sweden, a country where even non-biologists tend to be naturalists. From a very early age, it was clear that the parts of nature I was interested in were usually hiding under rocks

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Dezene Huber

Fig. 1. Staffan presenting the Heritage Lecture.

or pieces of bark – many photographs of me as a child show me on all fours, or with a collecting jar in my hand, regardless of the occasion (Fig. 2). I was fortunate to have parents that both tolerated and encouraged my interests. My father, Rune, had little formal education (Grade 6), but all my friends thought he knew everything. He had an unquenchable thirst for knowledge, and read everything that he could get his hands on. He also had a love for everything British, which fostered in me an interest in the English language. My father learned English by listening to BBC radio and reading English books, where he wrote words in the margin translated with the aid of an English-Swedish dictionary. Who knows where I'd be if I had inherited his drive! My mother was equally important; she tolerated my collections of everything from spiders to lizards (but drew the line at snakes). At one point, I cleaned out the basement of the apartment building where we lived of female *Tegenaria domestica* (Clerck) - they all lived out their lives in glass jars that I kept in my bedroom closet!



Rune Lindgren

Fig. 2. Staffan, about 1962, with the mandatory collecting jar and dressed to kill.

When we study our favourite insects, it is easy to forget the painstaking work that was done to enable us to identify and categorize them with relative ease. Sweden has been the home of a large number of such people (Table 1), none more noteworthy than Carolus Linnaeus, of course. In spite of many changes, we still use the binomial nomenclature that he devised, and some early Latin names persist intact to this day. For example, *Araneus angulatus* Clerck 1757, is the oldest known arthropod species named by one of Linnaeus' students, and it is still valid today (Dal 1974). Next time you use a Latin name and its authority, think about the significance of that person's contribution, because it represents considerable effort, which represents an extremely valuable heritage! We should protect and promote classical taxonomy, because without it the diversity of the insect world would be not just a wilderness, but an impenetrable jungle!

Linnaeus had many students, but one of them is of particular interest in the context of this essay as he hails from my hometown of Piteå, went abroad at a young age, and ended up in an English-speaking country, much like myself. Daniel Solander was quite influential during his

Table 1. Some significant Swedish entomologists from the 18th and 19th Century (Dal 1974). Many were students of Carolus Linnaeus.

Name	Years	Specialty
Carl DeGeer	1720-1778	Various
Carl Clerck	1709-1765	Araneae, Lepidoptera
Gustaf von Paykull	1757 -1826	Coleoptera
Leonard Gyllenhaal	1752 - 1840	Coleoptera
Carl Fredrik Fallén	1764-1830	Diptera, Hemiptera
Carl Johan Schönherr	1772 -1848	Coleoptera
Johan Wilhelm Zetterstedt	1785-1874	Diptera
Carl Henrik Boheman	1796 -1868	Coleoptera
Anders Gustaf Dahlbom	1806-1859	Hymenoptera
Carl Stål	1833-1878	Hemiptera
Carl Gustaf Thomson	1824-1899	Coleoptera, Hymenoptera



Torbjörn Kronestedt

Fig. 3. Åke Holm in the field, Kärkevagne, Sweden, 1969.

life, but he is perhaps the least known of Linnaeus' students since he published precious little of his discoveries, in part because he died at a relatively young age. He was the biologist on Captain Cook's voyage on the "Endeavour", and would have been the first biologist to set foot on New Zealand and Australia (as a result, he is rather well known there). He did collect insects, but few formal descriptions were completed, perhaps in part because of the ease of preservation of insects for later examination, and the presence in London of J.C. Fabricius, a Danish student of Linnaeus (Wheeler 1983) (and as such I'll claim him as an honorary Swedish entomologist!). A limited number of specimens collected by Solander during Cook's first voyage are apparently at the British Museum, and at the Hunterian Museum of the University of Glasgow, and it is possible that additional specimens are hidden in Fabricius' collections (Wheeler 1983).

As a child, I was obviously blissfully unaware of these people, and I was not much wiser at the early stages of my entomological career either, if truth be told. I was very much

aware of another prominent Swedish entomologist whose legacy can be found in a huge body of literature on the Carabidae of Canada – Carl H. Lindroth (Lindroth 1961-69). At first, I didn't know him as an entomologist, however, but as a member of a panel of experts on a popular Swedish television show, "Fråga Lund" (Ask Lund), where Lund refers to Lund University. His importance to Canadian entomology was a pleasant discovery when I started looking at ground beetles shortly after accepting my current position at UNBC. I never had the pleasure to meet Carl Lindroth, but his brother Arne was the professor, and his nephew Svante a graduate student (graduate students did most of the undergraduate teaching in those days) at the Department of Ecological Zoology, Umeå University, so I had some tangential connection, if nothing else.

To a large extent, we learn how to behave from those we interact with and look up to – an important form of mentorship for young people in particular. Carl Lindroth's wit and pleasant personality on the television show impressed me, and probably contributed to my view of professors in general (professors were pretty much demi-Gods to me at that age). Several other academics also influenced my perception of scientists, but none was more important than Åke Holm, an arachnologist in the Department of Entomology, Uppsala University, specializing in the family Linyphiidae (Kronstedt 1991) (Fig. 3). As a Grade 6 student, I wrote to him after reading a newspaper article about his work. His reply was prompt and very encouraging, and we corresponded off and on for many years after this. I did meet him when I studied in Uppsala many years later. In retrospect, it would be interesting to know what he thought of the mangled spider specimens contained in match boxes he received through the mail from me. Be that as it may, his kindness and encouragement made a huge impression on me, and I have tried to emulate him throughout my career by always responding when I get inquiries from youth.

Another important influence in my life was a year spent as an exchange student in the United States. Along with seven other students from six different countries, I studied at a small high school in south central Michigan. Apart from giving me the confidence to later apply to university in Canada, it taught me a lot about people from different cultures. I have been a strong proponent of exchange ever since, as I believe that if we understand people from other cultures, we are less likely to judge or dislike them.

I was lucky in that I knew I wanted to study and do research. I grew up in a forestry-dependent community, so I even knew that I wanted to be a forest entomologist early on (at least after I had passed every biology student's seemingly mandatory period of wanting to become a marine biologist). I pursued every opportunity to learn about arthropods, including a stint identifying spiders for a PhD student, two entomology courses at Uppsala University, and a summer job surveying aquatic insects around Umeå.

In terms of formal education, I studied entomology under two professors in Sweden, Bertil Kullenberg, Professor of Entomology, Uppsala University, and Bertil Lekander, Professor of Forest Entomology, Royal College of Forestry, Stockholm. (Incidentally, Carl Lindroth was the author of the textbook we used at Uppsala University (Lindroth 1968)). I didn't realize it at the time, but the respective expertise of these mentors would merge to become my own area of focus, perhaps showing how we are influenced by those who teach us. Bertil Kullenberg was a pioneer in chemical ecology and plant-insect interactions (see Vereecken et al 2009). He also epitomized the public's stereotype of an entomology professor – he seemed to have boundless energy and incredible passion for his research – I remember vividly a short film showing him bouncing through a meadow with an insect net, presumably in pursuit of some bee. Although he did only a limited amount of the actual face-to-face lecturing, his direction was particularly evident in the advanced course I enrolled in, and it made a strong impression. Bertil Lekander was an expert in bark beetles, specifically their larval taxonomy (Lekander 1968), and kindly allowed me to enroll as a special interest student in the forest entomology courses, reinforcing my desire to work with forest insects.

After finishing my undergraduate education I was at a crossroads of sorts. I had several options, but opted for pursuing a PhD in endocrinological research working on testosterone production in rats, largely because funding was in place. I learned a little bit about doing research, but more importantly I learned the importance of following your passion – I may admire rats, but I am far from passionate about them – in fact I don't really like them. I returned to pursue my passion for entomology, and that decision has served me well.

Having failed miserably as a lab rat scientist, I once again found myself at a crossroads. The Master of Pest Management program at Simon Fraser University was brought to my attention when I inquired about opportunities to work for the Centre for Overseas Pest Control in the UK. As a non-British subject, I was ineligible, but with their discouraging reply came a pamphlet about the MPM program. To make a long story short, I found myself on a flight to Vancouver about a year later, with funding from the Sweden-America Foundation. My intent was to return to Sweden, but that's when I met John Borden, who was to become supervisor for both my graduate degrees. Only weeks after landing in Vancouver, and still rather homesick, John gave me an offer I couldn't refuse. After a very long time of waffling, I finally agreed to stay on for a PhD, and the rest is history, as they say. John was an incredible mentor – after bucket-loads of red ink, he even managed to turn me into a decent writer! The part I remember the most, however, was that no matter how much I had bungled something, John always had something positive to say just before I left his office. His success as a mentor is evident in the incredible impact he has had on forest entomology in British Columbia – his legacy will no doubt be the heritage that benefits generations of foresters and forest entomologists to come. I have tried to emulate John in everything that I do as a university professor, but I fall woefully short when it comes to passion, energy and ability. To me, he is the energizer bunny of entomology, and he still wears me out with his boundless enthusiasm for every new project. Nevertheless, it was a particularly rewarding moment when I, Dezene Huber and Lisa Poirier, also benefactors of his mentoring, successfully nominated John for an Honorary Doctorate at UNBC (Fig. 4).

John in turn had been mentored by another pioneer of chemical ecology, David L. Wood,

professor at the University of California, Berkeley. Along with Robert M. “Milt” Silverstein, a chemistry professor at The State University of New York, Syracuse, he laid the foundation for the research I did for my PhD. I first met David at some point during the early 1980s, and although he never directly took part in any research I did, his influence is undeniable and profound. David is kind, accommodating, and willingly shares his knowledge with students and colleagues. I never really fully understood how important he has been until I was at a very well attended symposium in his honour at the Entomological Society of America’s annual meeting in San Diego last year. When David and Milt Silverstein started their collaboration, multi-authored publications were viewed as inferior and therefore undesirable, particularly for someone pursuing tenure at a major university. David ignored that standard, and now multi-authored papers are the norm. The



Fig. 4. John Borden and Staffan at the UNBC convocation, May 29, 2009.

Alex Michalos

individuals that are prepared to stick their necks out are the ones who pave the way for the rest of us – David has certainly been one of those individuals.

Perhaps most people know me as the inventor of the “Lindgren funnel trap” (Lindgren 1983) (Fig. 5). When I started my PhD, bark beetle pheromone research was done with sticky traps - horrible contraptions that required the use of nasty solvents and left specimens in a less than pristine condition. The invention of the multiple funnel trap came about from my dislike of anything sticky, laziness, and simple observation of beetle behavior. Necessity is the mother of invention! In this context I must acknowledge Michael G. Banfield, without whom the trap would probably not have been commercialized. (Mike was also instrumental in facilitating my immigration to Canada, again demonstrating the importance of networking). I also came up with a small bioassay trap for grain beetles made of plastic weighing boats (Lindgren et al. 1985), and since then I have also introduced, or helped design, other traps. Perhaps my affinity for



Leslie Chong

Fig. 5. Staffan with prototype III of the Lindgren funnel trap, 1981.

traps is in my genes, as Swedes figure prominently in the insect collecting-design world. For example, the Malaise trap is named for René Malaise, an entomologist and explorer of French descent but born and raised in Stockholm – his immigrant father was the chef at an up-scale restaurant (Sjöberg 2004). Albert Tullgren improved the extraction of litter samples by adding the heat source, meaning that most people use the Tullgren funnel, rather than the Berlese funnel (http://en.wikipedia.org/wiki/Tullgren_funnel). More recently, my colleague and friend Göran Nordlander designed a modified pitfall trap, the Nordlander pitfall trap, which I adopted and use on a regular basis after working with it in Sweden (Nordlander 1987, Lemieux and Lindgren 1996). Niklas Björklund, a former student of Nordlander’s, solved a long-standing problem while a post-doctoral fellow in my lab by designing the Björklund trunk trap (Björklund 2009), which has enabled us to effectively live-trap *Hylobius warreni* Wood for use in behavioural studies.

After my PhD, I spent some time as a post-doctoral fellow in John McLean's lab at UBC. John epitomizes a glass-half-full attitude, and has been extremely supportive, and a very positive influence throughout my career. My time in his lab also provided the bridging time that enabled Phero Tech Inc. (then PMG/Stratford) to employ me. I spent 10 years with Phero Tech before leaving for my current position, and enjoyed the opportunity to work with university, government and industrial collaborators – all extremely valuable experiences. An industrial post-doctoral fellowship from the Science Council of British Columbia (SCBC) funded the first few years of my time with Phero Tech, and that brings me to the importance of funding. When I started my PhD, the SCBC was ramping up, and thanks to John Borden I was first in line for a so-called GREAT Award (Graduate Research in Engineering and Technology) (the SCBC folks loved acronyms). Thanks to John I got to keep it as well, as SCBC suddenly realized that I was an alien and briefly contemplated reversing the decision! I enjoyed a very good and beneficial relationship with SCBC, and became something of a poster child for them after utilizing virtually all of their various funding sources – GREAT Award, industrial post-doc, and research grants, both for myself and for post-docs and students. John Borden taught me a fair bit about applying for grants, and my time in industry allowed me to hone those skills over the years. Money isn't everything, but it sure helps! Nevertheless, the importance of mentorship cannot be understated in this context!

In 1994 the new campus of the University of Northern British Columbia opened its doors, and I was fortunate enough to be there as a charter faculty member. The experience was truly exhilarating – we had nothing, not even chalk or blackboards (this is the truth – the administrators figured we would be more technologically advanced than that!). Working with a team of wonderful colleagues, we quickly turned the fledgling university into a fairly respected research institution. I was the lone entomologist to begin with, but in 2001 Lisa Poirier joined UNBC, and in 2005, entomology at UNBC got an enormous boost courtesy of the mountain pine beetle. We were joined by Dezene Huber as a Canada Research Chair and Brian Aukema as a Canadian



Fig. 6. Members of the UNBC Forest Insect Research Group at JAM2010. Back row, left to right: Kendra Schotzko, Caitlin Pitt, Staffan Lindgren, Jordie Fraser, Brian Aukema (now at the University of Minnesota), Dezene Huber. Front row: Kishan Sambaraju, Lisa Poirier, Kathryn Berry, Erin Clark, Celia Boone. Tamara Richardson is missing from the photograph.

Forest Service research scientist. All of a sudden UNBC's Forest Insect Research Group (FIRG) (Fig. 6) was one of the best forest entomology research groups in North America. Being surrounded by these young, bright scientists and their students has been extremely rewarding for me. It didn't happen completely by accident – I worked actively to attract all three to UNBC and was fortunate enough to succeed. You have to be lucky, but to a considerable extent you make your own luck!

The scientists I have mentioned above have all left considerable legacies – a valuable heritage for us all. Ideally, I guess those of us who engage in research would all like to leave something significant behind. Apart from the Lindgren funnel trap and having a rove beetle named after me (*Metocalea lindgreni* Klimaszewski) (Klimaszewski and Pelletier 2004), I don't know that my legacy will be particularly noteworthy. After the delivery of my lecture, one of my former graduate students, Greg Smith, reminded me that those I have supervised are also part of my legacy. He reminded me that at the same time as I

emphasized the importance of mentorship to me, I forgot to recognize the importance of my role as a mentor to my students. Greg is right, of course, and it serves as yet another reminder of the importance of mentorship.

I have been fortunate to work in a discipline where egos are generally checked at the door. Perhaps it is the baffling diversity of form and function that we encounter that tend to make us humble, at least by scientist standards. Numerous of my entomology colleagues – too many to name here - have become like an extended family, and my graduate students are almost like adopted children. I do have to specifically mention the role of my immediate family for the sacrifices and support they made on this journey. My wife enthusiastically supported a 6-month sabbatical in Sweden and our move to Prince George, and looked after pretty much everything for the first 5 years or so while I pursued tenure and promotion. Without her support it would not have been possible for me to succeed, despite the rich heritage and excellent mentorship I have enjoyed. A health-related setback in 2007 gave me the most important lesson of all: entomology and professional success are important, but in the end good health, friendship, and family are most important.

Acknowledgments

I sincerely thank the organizing committee of the 2010 Joint Annual Meeting of the Entomological Societies of Canada and British Columbia for inviting me to give the Heritage Lecture. I am grateful to all the people who helped me with information and/or photographs: Åke Lindelöw, Bengt Ehnström, Mattias Forshage, Anders Lekander, Marie Svensson, Torbjörn Kronestedt and Björn Holm. Finally, I would like to thank all my entomology colleagues in Canada and elsewhere, especially my colleagues at UNBC. Most importantly, I thank my wonderful family: my wife, Laurie Friskie, who I met through entomology, and whose support has enabled me to succeed, and my sons Mitchell and Jordan, for making me proud of their achievements.

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Meeting announcements / Réunions futures

Northeast Natural History Conference 2011: A prime regional forum for networking about natural history research.

Albany, New York, 6-9 April 2011.

http://www.eaglehill.us/NENHC_2011/NENHC2011

Ento '11 (Royal Entomological Society Annual Meeting), including International Symposium (Chemical Ecology: Reception, Detection and Deception)

University of Greenwich, Medway Campus, 7-9 September 2011

www.royensoc.co.uk

7th International Conference on Arthropods: Chemical, Physiological, Biotechnological and Environmental Aspects. (Stefan Kopeć Memorial Conference)

Białka Tatrzńska near Zakopane, Poland, 18-23 September 2011

<http://VIIarthropods.stud.wchuw.pl>

6th International Symposium on Molecular Insect Science

NH Grand Krasnapolsky, Amsterdam, The Netherlands, 2-5 October 2011

www.molecularinsectscience.com/index.html

Entomological Society of Ontario Annual Meeting

Brock University, St. Catharines, Ontario, 21-23 October 2011.

Joint Annual Meeting of the Entomological Society of Canada and the Acadian Entomological Society

Halifax, Nova Scotia, 6-9 November 2011

www.acadianes.ca/jam2011

59th Annual Meeting of the Entomological Society of America

Reno-Sparks Convention Center, Reno, Nevada, 13-16 November 2011

<http://www.entsoc.org/entomology2011>

ECE X (Tenth European Congress of Entomology)

York, United Kingdom, 3-8 August 2014

www.ece2014.com

Criddle/Vane Homestead at Aweme, Manitoba, receives a facelift

Joe D. Shorthouse

Likely the most famous historical site of entomological importance in western Canada is the Criddle/Vane Homestead in southwestern Manitoba. Here, the Criddle and Vane families from London, England, settled in 1882 and raised 13 children including Norman Criddle, a self taught naturalist who became an entomologist for the federal government. I visited the site of the homestead in 2000 and then again as part of a Manitoba vacation in August of 2010 with my wife Marilyn and two grandsons. In 2000, the homestead was overgrown with brush and the buildings were in poor condition (Fig. 1), but by 2010, the site had become a provincial park known as the Criddle/Vane Homestead Provincial Heritage Park. The old laboratory had been refurbished (Fig. 2), the grounds cleared, and educational signage (Figs. 3 and 4) installed explaining the historical and scientific significance of the site.



J. D. Shorthouse.



Figs. 1 & 2. Norman Criddle's insect laboratory in 2000 (left) and 2010 (right).

The Criddle/Vane Homestead is situated at Aweme (no longer found on most maps of Manitoba) between Shilo and the Assiniboine River in southwestern Manitoba, about 40 km southeast of Brandon. It was established in 1882 on a quarter section of virgin grassland that contained representatives of the Moist Mixed Grassland ecoregion to the west and the Lake Manitoba Plains ecoregion with its tallgrasses to the east (Shorthouse 2010). After living in tents for a period, a log house was constructed in 1882 which Percy christened "St Albans". A larger house (Fig. 5) was built in 1905-06, a second "St. Albans" which still stands today.

The homestead and surrounding lands are significant to entomologists because of the extensive studies of insect biology that were undertaken here by Norman Criddle (1875-1933). The Criddles also operated a weather station, which provided one of the longest continuous records of weather in Canada. Thanks to the Criddle/Vane children, the natural history of the area likely has been studied more intensively than any other locality in Canada (Roughley 2000).

Joe Shorthouse (roses@cyberbeach.net) is a professor in the Department of Biology at Laurentian University in Sudbury, Ontario, where he has taught entomology and Canadian Environmental Biology for 36 years. He has travelled extensively across Canada studying and photographing insects and their habitats. For examples, see his chapters in Volume I of the Arthropods of Canadian Grasslands series. He has been Chair of the Scientific Committee of the Biological Survey of Canada, and more recently President, for the past 14 years.



Figs. 3 & 4. Plaques commemorating the 'Bug House' (left) and Norman Criddle (right).

However, the history of the Criddle/Vane Homestead is intriguing for more than its entomological connections. Students in introductory entomology courses learning about the contributions of the Criddles to the natural history of Manitoba are equally fascinated by the unconventional social fabric of this eminent pioneering family. Fascinated because Percy Criddle, Norman's eccentric father and the patriarch of the family, had a mistress with children he sired, when he met and married another woman who was to become Norman's mother. Even more bizarre was the decision of Percy, for both his wife and mistress, along with the children of each, to leave their secure lives in London and re-establish themselves on the unbroken grasslands of Manitoba!

The story of how Percy met his mistress, Elise Vane, who bore him six children between 1867 and 1875, before he met and married Alice Nicol in 1874, who bore him four children while in London, one of whom was Norman, is described by Holliday (2006). If only one could have been a fly-on-the wall the day Percy announced to his wife in 1882 that he had a mistress with children he fathered himself, they were all moving to Manitoba, and the extended family of two women, and nine children would live together on a homestead, at a time when Manitoba had barely become a province. To complicate matters, Percy had no farming experience and they often found themselves with little food or money in an area of Canada with notoriously cold winters. Even so, the family managed to survive and in time their home became the social and scientific centre of the area where they built tennis courts and golf courses.

The Criddle/Vane children were home taught by Norman's mother and all 13, especially Norman, developed a keen interest in natural history, along with a deep respect for all species (Holliday 2006, Roughley 2000). Norman spent most of his life at the site where he, along with his brothers, collected large numbers of insect specimens in a region around the homestead that was to become known as 'Aweme'. To this day, specimens labeled 'Aweme, Man., Norman Criddle' are found in museums around the world, including the Canadian National Collection of Insects in Ottawa and the J. B. Wallis Museum at the University of Manitoba.

Norman Criddle the entomologist

Although he had no formal education, Norman became an outstanding entomologist who exchanged information with researchers



Fig. 5. Original family home, referred to as "St. Albans", built in 1905-1906.

around the world. The homestead became a Mecca for scientists of all stripes who came great distances to study prairie plants and insects with him. The homestead has since become a unique and invaluable site for studies of climate change, because of the records that Norman and his family kept (Roughley 2000). The 2004 Biological Survey of Canada BioBlitz was held on the Criddle/Vane Homestead at Aweme on June 5 and 6 (Roughley 2005).

Norman was a gifted artist and his paintings of weeds, grasses and native flowers, along with his knowledge of insects, caught the attention of the Dominion Department of Agriculture in Ottawa. He was appointed western Canada's first entomologist by Dominion Entomologist C. Gordon Hewitt in 1913 who also arranged for the construction of western Canada's first entomology field station (Fig. 2) on the Criddle property in 1915 (Holliday 2006).

Norman's work in this laboratory on grasshoppers, white grubs, Hessian fly, wheat stem sawfly, and the wheat stem maggot led to many published articles on insect biology and life histories (Riegert 1980). Among his publications were the descriptions of the egg pods of 72 species of grasshoppers, the life history of about 70 species, and the hosts of 80 species (Holliday 2006). The Rocky Mountain locust, along with the lesser migratory grasshopper, were responsible for the grasshopper plague of 1898 to 1904, and Norman actively searched for controls (Riegert 1980). Norman discovered that a mixture of Paris Green, salt and horse manure, soon to be called the 'Criddle Mixture' was an ideal bait for attracting and killing grasshoppers. The last outbreak of the Rocky Mountain locust occurred from 1898-1903 and it subsequently became extinct (Lockwood 2004). Norman is credited with making the last collection of the species in Canada in 1902 (Holliday 2006).

Riegert (1980) includes a photograph of Norman Criddle, whom he referred to as the Dean of Entomology in western Canada, as the frontispiece of his book, and a picture of the laboratory in 1915 with Norman standing at the front door. One genus and 29 species of insects were named after Norman (Holliday 2006), and 11 bibliographies were written about him following his death (Roughley 2000), an indication of the esteem to which Norman was recognized.

Homestead is now a Provincial Park

The Criddle/Vane Homestead became the 79th provincial park in Manitoba on 24 February 2004, with the official name 'Criddle/Vane Homestead Provincial Park'. The Park comprises 130 hectares with the goal of protecting the heritage value of the homestead along with the biota of its remaining mixed-grass prairie. The Criddle and Vane families were pioneers well known for their contributions to science, art, sports, and culture as well as for their eccentric lifestyle. A group of volunteers, called the Criddle-Vane Homestead Heritage Committee, have improved the educational and cultural nature of the Park, restored the buildings, and built picnic tables. Two self-guiding walking trails – the 'Homestead Interpretive Trail' and the longer 'Tent Patch Trail' have been added.

Today, the Criddle homestead has become an island of grassland habitat, surrounded by large blocks of centre-pivot irrigation for growing potatoes. References to the plants and natural history of the homestead are listed by Roughley (2000). European grasses such as Blue Grass and Brome Grass are common at the site and trembling aspen has become more dominant.

A Criddle rises from the grave!

I first visited the site in 2000 with the late Rob Roughley of the University of Manitoba. Rob had a keen interest in the Criddle/Vane families, the preservation of the site, and continued studies of insect biodiversity on and near the homestead. As we drove up to the site around noon on a warm September day, we noticed a half-ton truck parked near a treed area where Rob told me the Criddle family cemetery was located. Rob headed off to see who was visiting the cemetery while I headed to the grassy fields south of the main house to search for wild roses.

I walked back to the parked truck about 30 minutes later to find Rob talking to a gentleman who was on his hands and knees removing poison ivy and weeds from around Norman's grave stone. As I approached, the gentleman stood up, removed his gloves, and Rob introduced us. It turned out I was shaking the hand of Paul Criddle, Norman's nephew. While reliving the experience during the drive back to Winnipeg, I remember remarking to Rob that we were likely the only entomologists to observe a Criddle rising from the family cemetery! By luck, I was able to contact Paul Criddle on 19 January 2011 at his home in Brandon. He remembered the visit by Rob and me and told me of plans to put a porch on the back of the house in the summer of 2011 and to continue improving the buildings and the educational experience for Park visitors.

Entomologists from across the country are encouraged to visit the Criddle/Vane Homestead Provincial Park and experience this cornerstone of entomological history. For those who teach introductory entomology, I suggest you include the story of Norman Criddle and his family in your lecture on the history of entomology in Canada. Once students hear about the entomological contributions of Norman Criddle, along with the story of his bizarre family, they often suggest that the story should be made into a Hollywood-type movie.

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M. Lamivée

Evers amyntula (Lycaenidae)

Positions available

Post-doctoral Research Associate: Insect Ecology and Behavior

We are seeking a post-doctoral researcher to lead two projects in lowbush blueberry entomology. Project 1 will examine predatory behaviors of carabid beetles for applications in biological control. Complementary molecular experiments will develop diagnostic tools to identify and quantify gut contents of carabids in the field. Project 2 will study the role of non-crop berries and weeds in the population dynamics of blueberry maggot, *Rhagoletis mendax*. This position is available immediately.

Applicants should have a PhD in entomology and an interest in insect ecology. Experience in molecular biology would be an asset. Salary will be commensurate with qualifications and experience. For additional information contact Dr Chris Cutler, Department of Environmental Sciences, Nova Scotia Agricultural College, Box 550, Truro, NS B2N 5E3, Canada; e-mail: ccutler@nsac.ca

Graduate Research Assistantship (PhD) Available in Entomology at the University of Tennessee-Knoxville

Revisionary Studies of Nearctic Seepage Midges (Diptera: Thaumaleidae)

Project description: Historically, the Thaumaleidae have been understudied and taxonomically difficult. This project is a collaborative research and training project between the entomology laboratories of the University of Tennessee and Canadian National Collection of Insects. The project will provide new information on the biology, diversity, and ecology of North American seepage flies, with extensive fieldwork in the western Cordillera. Research will involve the description of new species, species redefinition and re-evaluation of generic concepts using collection-based specimens, rearing of immature stages, molecular analyses, implement DNA-based fingerprinting to discriminate all 21 known species of western Nearctic *Androprosopa*, and development of a standard polytene chromosome map for the genus *Androprosopa*.

Start date: August 2011 or when suitable candidate found. Screening of applicants will begin 15 April 2011.

Stipend: \$19,000+ per year for 3 years, with both in- and out-of-state tuition waived and health insurance included.

Qualifications: The successful PhD candidate will have a MS in biology or a related science. Applicants will be evaluated on the basis of grades, letters of recommendation, GRE scores, resumé, and letter of intent. The University of Tennessee is an EEO/AA/Title IX/Section 504/ADA employer.

Environment: The Department of Entomology and Plant Pathology is located on the Agricultural Campus of UT. The PI is housed in the new Plant Biotechnology Building that is equipped with modern equipment for biotechnology research. Knoxville, a city of 180,000, is the economic and cultural center of eastern Tennessee and is consistently ranked as one of the ten most livable cities in the USA. It lies just 40 miles west of The Great Smoky Mountains National Park.

Interested persons should contact:

John K. Moulton (Department of Entomology & Plant Pathology, 2431 Joe Johnson Dr., 205 Ellington Plant Sciences Building, The University of Tennessee, Knoxville, Tennessee 37996-4560, USA; jmoulton@utk.edu)

or

Bradley Sinclair (Canadian National Collection of Insects, Ottawa Plant Laboratory – Entomology, CFIA, K.W. Neatby Building, C.E.F., 960 Carling Ave., Ottawa, ON, Canada K1A 0C6; bradley.sinclair@inspection.gc.ca)

Assistant Professor in Veterinary and Wildlife Entomology

The Department of Entomology, University of Manitoba, is seeking to fill a tenure-track assistant professor position in Veterinary and Wildlife Entomology. A full advertisement for the position will not be available until after this *Bulletin* issue goes to press. Those interested in learning more about this opportunity should watch for the advertisement on the ESC website at <http://www.esc-sec.ca/jobs.html> or can email Neil_Holliday@UManitoba.ca to request to receive a copy of the advertisement when it appears.

Recent publications

Canadian Journal of Arthropod Identification

The Canadian Journal of Arthropod Identification has two magnificent new publications available:

1. Marshall, Whitworth and Roscoe. 2011. Blowflies (Diptera; Calliphoridae) of eastern Canada. *CJAI* 11.

2. Brunke, et al. 2011. Staphylinidae of eastern Canada and adjacent United States. *CJAI* 12.

These can be accessed or downloaded at: <http://www.biology.ualberta.ca/bsc/ejournal/ejournal.html>

Journal of Integrated Pest Management (Online)

The Entomological Society of America (ESA) has released the first issue of its newest periodical, *Journal of Integrated Pest Management (JIPM)*, which is available online for free. JIPM is an online-only, open-access, peer-reviewed extension journal that covers the field of integrated pest management. The intended readership for the journal is any professional who is engaged in any aspect of integrated pest management, including, but not limited to, crop producers, individuals working in crop protection, retailers, manufacturers and suppliers of pest management products, educators, and pest control operators. "The *Journal of Integrated Pest Management* is ESA's first new journal in 39 years. This journal takes the science of entomology, and other pest disciplines, and delivers it to an audience outside of our scientific community. The journal gives ESA an outlet for making our science relevant to pest management practitioners and the general public," said editors-in-chief Marlin Rice and Kevin Steffey. "JIPM is truly a novel concept. It will publish peer-reviewed, scientifically-based, open-access articles on the Internet, which are specifically written to target a non-scientific readership. The journal will be the perfect vehicle for communicating pest management information to the general public." The journal is multi-disciplinary in scope, publishing articles in all pest management disciplines, including entomology, nematology, plant pathology, weed science, and other subject areas. Articles in JIPM are written to help IPM professionals work on pest management issues, and are divided into three categories:

- 1) Profiles of insects, including scientific name, description of stages, biology, life history, host plants, potential for economic damage, sampling or scouting procedures, and management and control options.
- 2) Emerging IPM Issues, including information on the issue's relevance, why the issue developed, balanced perspectives on the issue, and possible solutions.
- 3) Recommendations on pest-control and pest-management topics which are based upon the principles of integrated pest management and supported by published research and validation data when available.

More information about JIPM is available at <http://www.entsoc.org/pubs/periodicals/jipm/index.htm>. The first issue of JIPM is available for free at <http://esa.publisher.ingentaconnect.com/content/esa/jipm>.

61st Annual General and Governing Board Meetings

The Annual General Meeting of the Entomological Society of Canada will be held at the Westin Nova Scotian Hotel, Halifax, Nova Scotia on Tuesday, 8 November 2011, from 17:00 to 17:45. The Governing Board Meeting will be held at the same location on Saturday, 5 November 2011 from 08:30 to 17:00. Matters for consideration at either of the above meetings should be sent to Annabelle Firlej, Secretary of the ESC.

Call for nominations: Second Vice-President, Director-at-Large

Nominations for the Second Vice-President and Director-at-Large must be signed by three active members of the Society and should be received by the Secretary of the Entomological Society of Canada, Annabelle Firlej, by 30 April 2011 (see inside back cover for contact details).

61^{ème} Assemblée générale annuelle et la réunion du conseil d'administration

L'assemblée générale annuelle de la Société d'entomologie du Canada aura lieu à l'Hôtel Westin Nova Scotian, Halifax, Nouvelle-Écosse, le mardi 8 novembre 2011 de 17:00 à 17:45. La réunion du conseil d'administration aura lieu au même endroit le samedi 5 novembre 2011 de 08:30 à 17:00. Veuillez faire part à la secrétaire, Annabelle Firlej, de tout sujet pouvant faire l'objet de discussion lors de ces réunions.

Appel de Nominations : Deuxième vice-président, Conseiller

Les nominations pour deuxième vice-président et conseiller doivent être signées par trois membres actifs de la Société et devront être reçues par la Secrétaire de la Société d'Entomologie du Canada, Annabelle Firlej, avant le 30 avril 2011 (voir intérieur de la couverture arrière pour les coordonnées détaillées).



Mycotretus duodecimguttatus (Erotylidae)

S. Marshall

Seventh Annual Photo Contest

The Seventh Annual Photo Contest to select images for the 2012 covers of *The Canadian Entomologist* and the *Bulletin of the Entomological Society of Canada* is underway. The cover images are intended to represent the breadth of entomology covered by the Society's publications. Insects and non-insects in forestry, urban or agriculture; landscapes, field, laboratory or close-ups; or activities associated with physiology, behaviour, taxonomy or IPM are all desirable. A couple of 'Featured Insects' (for the spine and under the title) are also needed. If selected, your photo will grace the cover of both publications for the entire year. In addition, winning photos and a selection of all submitted photos will be shown on the ESC website.

Contest rules are as follows:

Photos of insects and other arthropods in all stages, activities, and habitats are accepted. To represent the scope of entomological research, we also encourage photos of field plots, laboratory experiments, insect impacts, research activities, sampling equipment, etc. Photos should, however, have a clear entomological focus.

For the current Photo Contest only, submissions are particularly sought of images of Diptera. Photos for the cover of the 2012 volume of *The Canadian Entomologist* and the *Bulletin* will have a dipteran theme. Other photos will still be considered for use on the website.

Digital images must be submitted in unbordered, high-quality JPG format, with the long side (width or height) a minimum of 1500 pixels.

Entrants may submit up to five photographs. A caption must be provided with each photo submitted; photos without captions will not be accepted. Captions should include the locality, subject identification as closely as is known, description of activity if the main subject is other than an insect, and any interesting or relevant information. Captions should be a maximum of 40 words.

The entrant must be a member in good standing of the Entomological Society of Canada. Photos must be taken by the entrant, and the entrant must own the copyright.

The copyright of the photo remains with the entrant, but royalty-free use must be granted to the ESC for inclusion on the cover of one volume (6 issues) of *The Canadian Entomologist*, one volume (4 issues) of the *Bulletin*, and on the ESC website.

The judging committee will be chosen by the Chair of the Publications Committee of the ESC and will include a member of the Web Content Committee.

The Photo Contest winners will be announced on the ESC website, and may be announced at the Annual Meeting of the ESC or in the *Bulletin*. Winning photographs, and a selection of all entries, will be exhibited on the website.

There is no cash award for the winners, but photographers will be acknowledged in each issue the photos are printed.

Submission deadline is July 31, 2011. Entries should be submitted as an attachment to an email message; the subject line should start with "ESC Photo Contest Submission". Send the email message to: photocontest@esc-sec.ca

Septième concours annuel de photographie

Le septième concours annuel de photographie visant à sélectionner des images pour les couvertures de *The Canadian Entomologist* et du *Bulletin de la Société d'entomologie du Canada* en 2012 est en cours. Les images sur la couverture doivent représenter l'étendue entomologique couverte par les publications de la Société. Des photos représentant des insectes ou autres arthropodes forestiers, urbains ou agricoles, des paysages, du travail de terrain ou de laboratoire et des gros plans, ainsi que des activités associées à la physiologie, au comportement, à la taxonomie ou à la lutte intégrées seraient souhaitées. Deux « insectes vedettes » (pour le dos et sous le titre) sont également recherchés. Si elle est sélectionnée, votre photo ornera la couverture des deux publications pour l'année entière. De plus, vos photos gagnantes et une sélection de photos soumises seront montrés sur le site Internet de la SEC.

Règlements du concours :

Les photos d'insectes et autres arthropodes à n'importe quel stade, effectuant n'importe quelle activité et dans n'importe quel habitat sont acceptés. Afin de représenter les sujets de la recherche entomologique, nous encourageons également les photos de parcelles de terrain, expériences de laboratoire, impacts des insectes, activités de recherche, équipement d'échantillonnage, etc. Les photos doivent, cependant, avoir un intérêt entomologique clair.

Pour le concours de photo actuel seulement, nous encourageons particulièrement les soumissions d'images de diptères. Les photos des couvertures de 2012 de *The Canadian Entomologist* et du *Bulletin* auront un thème autour des diptères. Les autres photos seront considérées pour le *Bulletin* et le site Internet.

Les images numériques doivent être soumises sans bordure, en format JPG de haute qualité, avec le plus grand côté (largeur ou hauteur) d'un minimum de 1500 pixels.

Chaque participant peut soumettre jusqu'à cinq photographies. Une légende doit être fournie pour chaque photo soumise : les photos sans légendes ne seront pas acceptées. La légende doit inclure la localisation, l'identification du sujet le plus précisément possible, la description de l'activité si le sujet n'est pas un insecte, et toute information intéressante ou pertinente. Les légendes doivent avoir une longueur maximale de 40 mots.

Les participants doivent être membres en bonne et due forme de la Société d'entomologie du Canada. Les photos doivent avoir été prises par le participant, et le participant doit en posséder les droits d'auteurs.

Le participant conserve les droits d'auteur de la photo, mais l'utilisation libre de droits doit être accordée à la SEC afin de l'inclure sur la couverture d'un volume (6 numéros) de *The Canadian Entomologist*, un volume (4 numéros) du *Bulletin*, et sur le site Internet de la SEC.

Le comité d'évaluation sera choisi par le président du comité des publications de la SEC et inclura un membre du comité du contenu du site Internet.

Les gagnants du concours de photographie seront annoncés sur le site Internet de la SEC et pourront être annoncés à la réunion annuelle de la SEC ou dans le *Bulletin*. Les photographies gagnantes et une sélection de toutes les soumissions seront affichées sur le site Internet.

Il n'y a aucune récompense financière pour les gagnants, mais les photographes seront remerciés dans chaque numéro où les photos seront imprimées.

La **date limite de soumission est le 31 juillet 2011**. Les soumissions doivent être faites en pièces jointes d'un courrier électronique. L'objet du message doit débiter par « Soumission pour le concours de photographies de la SEC ». Envoyez vos courriels à : photocontest@esc-sec.ca

Seeking Secretary

The Entomological Society of Canada is looking to fill the position of Secretary, beginning in October 2011. Please note that the Secretary is considered a Trustee of the Society and is expected to attend meetings of the Governing Board and the Executive Council. The Secretary prepares meeting agendas; records the minutes for, and identifies action items arising from, all meetings of the Board and of the Society; prepares all ballots; notifies Board Members and Members of the Society of forthcoming meetings; distributes reports and other material as required, using the *Bulletin* and Website when appropriate; and assists the President by helping to prepare committee lists, communicating concerns from members of the Board, Committee Chairs and the Society, and providing information on past activities of the Society from electronic and archived files. The ability to work in both French and English, experience as a past board member, and a general knowledge of the bylaws, standing rules and committee guidelines of the society would be an asset. Please express your interest in the position to the President, Peter Mason, by **31 May 2011** (peter.mason@agr.gc.ca). The final selection will be made by an ad hoc committee convened by the President.

Secrétaire recherché

La Société d'entomologie du Canada cherche à combler le poste de secrétaire, dès octobre 2011. Veuillez noter que le secrétaire est considéré comme un fiduciaire de la Société et doit assister aux réunions du conseil d'administration et du conseil exécutif. Le secrétaire prépare l'ordre du jour des réunions ; prépare le compte-rendu et identifie les actions à prendre suite à toutes les réunions du conseil d'administration et de la Société ; prépare les bulletin de vote ; notifie les membres du conseil d'administration et les membres de la Société des réunions à venir ; distribue les rapports et autres items requis, utilise le *Bulletin* et le site Internet lorsqu'approprié ; et assiste le président en aidant à la préparation des listes de comités, en communiquant les questions aux membres du conseil d'administration, aux présidents des comités et à la Société, et en fournissant les informations sur les activités antérieures de la Société à partir des archives papier et électroniques. La capacité à travailler en français et en anglais, l'expérience en tant que membre du conseil d'administration, et une connaissance générale du règlement intérieur, des règles permanentes et des lignes directrices des comités de la Société sont un atout. Merci de communiquer votre intérêt dans ce poste au président, Peter Mason, au plus tard le **31 mai 2011** (peter.mason@agr.gc.ca). La sélection finale sera effectuée par un comité ad hoc convié par le président.

News from the Entomological Society of Ontario

More kudos for gold medalists

Freeman McEwen and Bernard Philogène, ESC gold medalists in 1983 and 2000, respectively, were honoured as Fellows at the Entomological Society of Ontario Meeting in October 2010. John Huber has been appointed Editor of the Journal of the ESO for a 2-year term.



It's All About Shoes

(continued from page 44)

These protozoan parasites are a very interesting group, they only infect invertebrates, but they infect the great majority of them. They are especially successful at parasitizing odonates, so I am particularly interested in host-parasite coevolution in this system.

However, I haven't always been fascinated by damselflies or their parasites. During my MSc at McGill University, I studied Diptera systematics. I worked on the phylogeny of a tribe in the family Chloropidae under the supervision of Terry Wheeler. It was an awesome project and I'm applying the skills I learned at the Lyman Entomological Museum to a very different field.

My research interests may seem a little scattered, but I believe that creating links between different fields in biology is necessary for a good understanding of the natural world around us. It also gives me a lot of appreciation for all the diverse fields that make up biology, and especially entomology.

But coming back to the current responsibility that I have been given, I'm very excited to have the opportunity to be the Assistant Editor of the *Bulletin*. I know I have big shoes to fill and I'm looking forward to the challenge!

Les souliers

(suite de la page 44)

Ce fut un projet génial et j'applique maintenant les compétences que j'ai acquises au Musée entomologique Lyman dans un domaine très différent.

Mes intérêts en recherche peuvent paraître un peu dispersés, mais je crois que créer des liens entre différentes sphères de la biologie est nécessaire pour apprécier la nature qui nous entoure. Ça me donne également une appréciation des diverses facettes de la biologie, et particulièrement de l'entomologie.

Pour retourner au sujet de la responsabilité qu'on vient de m'assigner, je suis très contente d'avoir cette opportunité d'être rédactrice adjointe du *Bulletin*. Je sais que j'aurai de grands souliers à chausser mais je suis prête pour le défi!



Julia Mlynarek

Calopteryx maculata (Calopterygidae)

The Amazing Monarch: The Secret Wintering Grounds of an Endangered Butterfly. Turley, W. 2010. Ben Bella Books Inc., 6440 N. Central Expressway, Suite 503, Dallas, Texas. 122 pp. ISBN 978-1935251-94-1. Can \$37.95, hardcover.

Book reviewers often overuse the word unique. In the true meaning of the word, of course, every book is 'unique', but the recently released *The Amazing Monarch: The Secret Wintering Ground of an Endangered Butterfly* is truly unique. It is also about a truly unique life form on earth, the amazing Monarch Butterfly *Danaus plexippus*.

The first unique aspect of the book is its size. It is 29 X 40 cm (about the surface size of a tabletop printer). However, it is only 2 cm thick (despite being a hardcover volume) because it is only 122 pages. The second unique aspect is that it is mostly photographs (all of adult Monarchs) and some of them fill two opposing pages giving

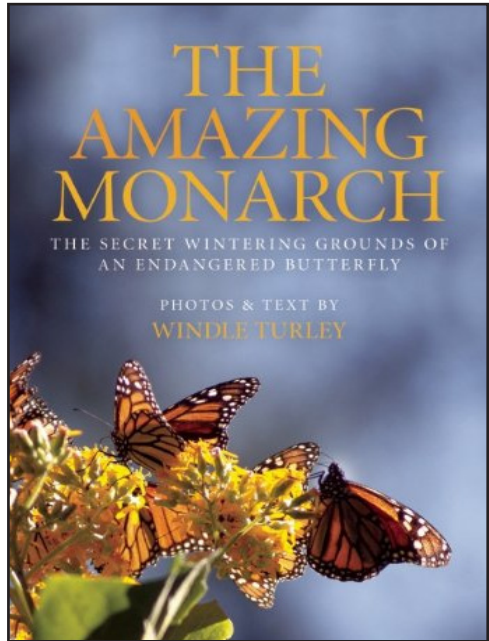
them the appearance of mid-sized posters. The book is also liberally scattered with pages each with a single quote, sometimes single sentences, or poem, some very short, about butterflies. While some of the poems/quotes have authors, many are simply labelled Author Unknown, which makes you wonder where they came from.

In essence, all of this makes it a coffee-table-type book. It does have 10 pages of text near the end discussing various aspects of the Monarch Butterfly: wintering sites, spring's northward migration, Monarch breeding and the lifecycle, the milkweed migration, fall migration, threat to the Monarch and its migration. It also has 10 pages of endnotes giving the source of the 129 footnotes contained in the 10-page text. Some paragraphs have a footnote for every sentence.

So much for the overall look of the book and its contents. What about its impact and usefulness?

The title itself is misleading. Even the author in the text calls the Monarch migration an endangered phenomenon, which is how it should be, and is, referred to by conservation organizations. The Monarch butterfly itself is not an endangered species as it exists on most continents as non-migratory populations. Even in Mexico, at lower altitudes than the migratory Monarch sanctuaries, there exist resident non-migratory Monarchs.

The author is a trial lawyer from Dallas, Texas, who has a passion for travel and for photographing wildlife. That is why this is a book of Monarch photographs with all images having been taken at two Monarch sanctuaries in central Mexico – Los Saucos in the state of Mexico and Sierra Chincua in the state of Michoacan – from 2005 to 2007. The large images of the massed Monarchs in their wooded valleys are stunning, as to be expected. However, many of the closer-up images of individual or small butterfly groups are disconcertingly out of focus. In some instances, this may be just a result of the large size of so many of the images, but even some of the smaller photos have the same problem. Sharper photos would have been appreci-



ated. And, of course, since they are all photos of adult Monarchs, a feeling of repetitiveness is perhaps inevitable. However, I suspect this was the intention of the author: to be an overwhelming record of the Monarchs on their wintering grounds. There are no captions to the photos (mostly not needed), but I would like to know what happened to the butterfly figured on page 49. It is awkwardly 'perched' on the end of a twig with a very shrivelled abdomen.

To ask - did I learn anything new from the book? - is perhaps an unfair question as I have been exposed to the Monarch and its amazing migration since I was a young boy and began my butterfly studies. I have also visited the Mexico overwintering sites, and even met, as a teen, Fred Urquhart from the University of Toronto who was the scientific discoverer of the Monarch sanctuaries (mentioned several times by the author). But, I did learn some new things as Windle Turley quotes and references many recent scientific studies on the butterfly (probably the most studied insect in the world).

As is emphasized by the author, I knew that it was the late summer/early fall emerging butterflies in the northern part of its range that fly all the way to Mexico and then partly return towards the north in the spring. This is the most amazing feat performed by the Monarch. I also knew that the wintering sites cover extraordinarily small (40 acres in total) parcels of land in certain high, wooded valleys in Central Mexico. This is probably its weakest point in terms of conservation as these wintering roosts are under pressure from illegal logging and other human activities.

I hadn't heard that the Monarchs from Canada sometimes fly a non-straight line of about 4300 miles to cover what is a straight-line distance of 2800 miles to Mexico. I also didn't know that recent research (mainly by Stephen Reppert according to the footnotes) has disclosed that complicated cellular and molecular mechanisms in the Monarch trigger a sophisticated circadian clock in the butterfly's brain that helps to process sunlight through receptors around the eye into a time-compensated compass for orientation as it migrates. Since it is the polarized UV light (that penetrates clouds) entering these receptors and triggering proteins signalling the clock, the butterfly can navigate even in cloudy conditions. I am not a Monarch specialist, but these are still fascinating things to know.

While you could go straight to the scientific studies on the Monarch to find out about the latest on the Monarch and its migrations, the text section of this book serves as a useful compilation of those studies with references via the endnotes to more details if you so wish.

In summary, even though *The Amazing Monarch* is a visually satisfying book, its size makes it an awkward one to deal with outside of leaving it sitting on the coffee table for visitors to be enthralled. If you really want to know more about the Monarch, and what's being done to preserve it, you would be better advised to go to the works by noted Monarch specialist Lincoln Brower or to the excellent overview book by Canadian author Phil Schappert called *The Last Monarch Butterfly: Conserving the Monarch Butterfly in a Brave New World*.

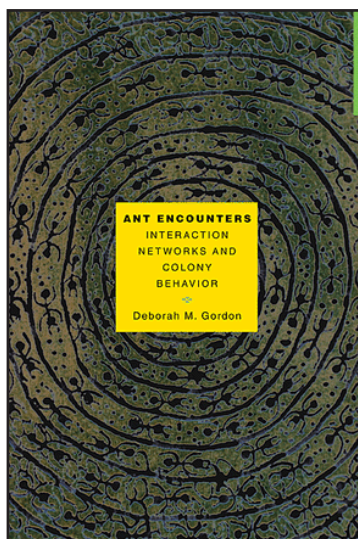
Peter Hall

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Ant Encounters. Interaction Networks and Colony Behavior. Gordon, Deborah M. 2010. Princeton University Press, Princeton and Oxford. ix + 167 pp. ISBN 978-0-691-13879-4, CDN\$21.95, Softcover.

The title of this book captures its major theme extremely well. Written by Deborah Gordon, a pre-eminent behavioural ecologist at Stanford University, it emphasizes throughout the importance of how ants encountering each other influences, if not directly determines, how individual ants behave, and how this in turn leads to colony structure, task allocation and overall functioning. The book is part of a series called “Primers in Complex Systems”, produced by the Santa Fe Institute, and consequently, a reader seeking a conventional book on ants would be disappointed, or at least somewhat perplexed. Given that the book isn’t necessarily directed at biologists, it is also written in a casual style suitable for a layperson, and Dr Gordon carefully avoids the use of myrmecological terms without an accompanying explanation. She also inserts sporadic, often humorous, analogous explanations of ant behavior from human society, even including her own family life! It took me some time to get used to the presentation style, but I think the best way to describe it is as the summary of numerous hours and conversations about ant behavior, ecology and evolution, that is, the entire book is essentially one big brain-storming session. Rather than the reference citations we are used to, the discussion is supported by notes, expressed in text in the same way you would in a discussion with a colleague. Many of the thoughts on how ant colonies function draw upon Dr Gordon’s own research, particularly her extensive and intensive study of a population of *Pogonomyrmex barbatus* harvester ant colonies in Arizona for almost 30 years (see Gordon 1999 for more details), but there are obviously ample examples from the literature regarding other species as well.

The book is organized into seven chapters. Chapter 1, *The Ant Colony as a Complex System*, creates the framework for the rest of the book by a historical account of our understanding of ants, including some biographical notes on the development of Dr Gordon’s early career, and placing this in the context of complex systems. The objectives and organization of the book is presented at the end of this chapter. Chapter 2 (“*The Diversity of Ant Behavior*”, “*From Individual to Collective Behavior*”, “*Division of Labor*”, “*Ants Switch Tasks*”, “*Age Polyethism*”, “*What Ants Respond To*”, and “*Task Allocation*”) provides the biological foundation for the rest of the book in the sense that Dr Gordon discusses within colony processes, primarily at the level of the individual and groups of individuals. Chapter 3 is perhaps the key in how this book fits into the *Primer to Complex Systems* series. What constitutes a ‘network’ is first introduced, and then applied to how ant colonies function. Dr Gordon contends that the behaviour of ants is unpredictable, but that the predictable colony behaviour resulting from this is a result of the nature and frequency of interactions. The interaction network in an ant colony is a fluid system where the individual ant carries information, which is transferred to other ants when it encounters them. The information is primarily chemical, for example, pheromones or cuticular hydrocarbons, but can also have other modalities. The effect of information transfer may de-



pend on the rate at which it is received, that is, the amount of reinforcement that message gets. Furthermore, individual ants may respond differently, that is, there is a fair bit of individual variation among ants. Chapter 4 discusses the effect of colony size, reinforcing the idea that how an ant responds to information depends on the environment. You can see that by disturbing a small vs. a large colony of many common ants, for example. I have observed this with *Formica aserva* - the workers of a small nest tend to hide, while those of a large colony will aggressively defend the nest. Chapter 5 discusses colony interactions, that is, how ants interact with their neighbors. This brings together the information transfer and colony size arguments, as ants have to recognize nest mates relative to non-nest mates, and how they respond will depend on the relative encounter rates of the two. Chapter 6 switches gear somewhat in that it discusses the evolution of sociality in ants. This draws less on Dr Gordon's own experience than the previous chapters, and I feel that she leaves out some fairly important findings from numerous studies using molecular tools. Dr Gordon does bring up some very interesting questions, however, and in her defense, the book is not intended to be a comprehensive review of ant biology, but rather a discussion in the context of complex systems. The final chapter, Chapter 7, is a brief discussion of "*Modeling Ant Behavior*". This is a short chapter which outlines how Dr Gordon would approach such an exercise, and the difficulties in generating anything that would be truly representative of ants in general, or even of a single species in some cases. I was surprised at the meager reference to existing work in this area; for example, three chapters in Camazine et al. (2001) are devoted to ants.

The conclusion I sense that Dr Gordon has arrived at is not surprising at all – essentially that the more we learn the more we realize how little we know. She states that of some 10 000 known species (I think it is 12 000 now) we only know bits and pieces of roughly 50 species that have been studied in some detail. As this book is not primarily aimed at biologists, I found it somewhat difficult to review. In spite of a modest format, there is a lot of information in it, but I think that its primary value lies in the opportunity to get a glimpse into how a scientist of Dr Gordon's status thinks. In spite of struggling slightly with the format and presentation, I found the book informative and valuable. For a graduate student it may be of interest as a case study of how science progresses, but for specific information on ant behavior and ecology, I would probably go elsewhere. Given its modest price tag this book could potentially be a goldmine of ideas for someone studying similar systems, however. The book is as much about what we don't know as what we do know, which is very valuable information to have when trying to formulate research questions. I certainly learned a lot!

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- Gordon, D.M. 1999. *Ants at Work: How an Insect Society is Organized*. The Free Press, New York.

B. Staffan Lindgren
University of Northern British Columbia
Prince George

Philip Barker passed away on 3 May 2009 at the age of 75. Phil was a long time honorary member of the Entomological Society of Manitoba, and active contributor to the Society, serving as its President (1970) and Editor (1971-1972, 1975-1982). For over 30 years he was a Research Scientist working as an entomologist in Winnipeg at the Cereal Research Centre of Agriculture and Agri-Food Canada. Phil's career is also remembered in the *Newsletter of the Entomological Society of Manitoba*, 2009, 36(1): 7-8.

Phil was born in Mexico to an English family, but received early schooling in Spanish in Chile and Argentina. His first entomological work was at the Rockefeller Institute in Mexico. From there he went to the University of California, Berkeley, and completed his MSc thesis on the biology of strawberry whitefly in 1960. His PhD thesis on the basis of DDT-resistance was completed in 1965 at McGill University. Phil then moved to Winnipeg to begin his career in stored product entomology for the Department of Agriculture, publishing the first of many papers on chemical control of mite and insect pests of stored grain in 1966.

During most of his career Phil focussed his research on the biology of mites living on stored grain and the chemical control of mites and insect pests of stored grain, particularly control by chemical fumigants. He produced over 50 publications on these topics. A list of Phil's publications is published in the *Proceedings of the Entomological Society of Manitoba*, 2011.

Phil may have saved his best work for last, at least as far as those of us who work on field crop entomology are concerned. Forever inquisitive, Phil developed a special interest in the wheat midge just before his retirement. Initially, he charted the first serious outbreak of the pest in Manitoba, and then began investigating the distribution of larvae on wheat spikes. He obtained samples of wheat spikes from breeding plots to investigate the ups and downs in levels of infestation at the research farm at Glenlea. Phil was capable of spending hours on painstaking dissections, listening all the while to German opera or polka music. He routinely received small sheaves of wheat from Ron McKenzie, a wheat breeder at the Centre. As a result of a lifetime of looking at wheat seeds, Phil soon noticed a curious tendency in some winter wheat lines to produce short, misshapen seeds that he called 'tubbies'. Even more interesting, wheat midge larvae were absent from these wheat lines. Phil had discovered a previously unknown source of resistance to wheat midge in a few lines of wheat. His discovery led to the characterization of the resistance and ultimately the registration of spring wheat cultivars with resistance to the wheat midge. These resistant wheat cultivars will result in the saving of tens of millions of dollars annually for wheat growers in western Canada and other parts of the world. From the time of his retirement until near the end of his life, Phil returned to the laboratory almost daily, spending his time dissecting thousands of spikes a year, screening breeding lines for resistance.



Philip Shaw Barker
(1933 - 2009)

But to those of us who worked with Phil, he was much more than his scientific achievements. He was a study of contrasts and contradictions. He was an Englishman born in Mexico who spoke impeccable Spanish, an avid rugby player as a youth who, because of his size, played American football during his early university days at Berkeley until it interfered in his studies. He was an early advocate of the application of statistical methods in entomology, but disdained computers and preferred his treasured programmable calculator. A lover of warm weather he preferred to live in one of the coldest cities in Canada, and could not fathom not wearing long underwear for at least 6 months of the year. An amazing linguist, Phil decided to learn German during his retirement so he could better enjoy Oktoberfest. His knowledge of German went along with his three other languages English, Spanish and French. For Phil, there was no better way to learn the essence of a language than through its musical heritage. Soon after his first granddaughter Cassandra was born, Phil took on the challenge of learning Chinese so he could better communicate with the parents of his daughter-in-law. His knowledge of languages was also put to good entomological use: he happily translated German and French research papers as a favour to his colleagues whenever asked.

Phil relished the chance to point out the inanities of the world through the medium of comics. He especially liked Calvin and Hobbes. Later came his “Laws of Mistakes” and “Thoughts about Fools”, or the timeless words of Rudyard Kipling. Codes, or more specifically the history of cryptography, became a later passion. He often ordered utterly obscure books on old but not forgotten code methodology, books that no doubt in the past would warrant a visit from the cloak-and-dagger types. He loved to share his current interests with his work mates. We all still miss his booming cheerful voice as he greeted people each morning as he proceeded to his corner of the lab, his microscope, and the boxes of wheat spikes.

Phil’s death resulted from complications from intestinal and liver cancer that he lived with without complaint for nearly 2 years. He is survived by his wife Joan Barker, sons Douglas (Bei) and Michael (Corinne), daughter Suzanne (David), and granddaughters Cassandra and Wendy.

Robert Lamb, Ian Wise, Sheila Wolfe, Winnipeg



Alicia Leroux

Apis sp. (Apidae)

Joint Annual Meeting / Réunion annuelle conjointe

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

The Westin Nova Scotian Hotel, Halifax, Nova Scotia

Sunday 6 November – Wednesday 9 November 2011

The Acadian Entomological Society invites you to the 2011 Joint Annual Meeting of the Entomological Society of Canada and the Acadian Entomological Society to be held at the Westin Nova Scotian Hotel Halifax, Nova Scotia, from 6 November to 9 November 2011.

Room rates are \$149 per night plus taxes (extra \$30 for a Harborview room).

1181 Hollis Street

Halifax, NS, B3H 2P6

902-412-1000

<http://www.thewestinnovascotian.com/>

Program Highlights

Our meeting theme is **Beauty and Impact** – “Beauty” speaks to the aesthetic appeal of insects and the fascinating aspects of their behavior/ecology, while “Impact” covers the influence that insects have on society as pests, impact on all other fields of research, beneficial impact for humans and nature, along with the impacts humans have on insects.

*Plenary symposium theme: **Beauty and Impact: Perspectives in seeing the insect world.***

Proposed Symposia*:

Forestry (2011 is the UN year of the forest)
Graduate Student Symposium
Pollination
Canadian Forum for Biological Control
Community Ecology
Urban/Medical/Veterinary Entomology
Insect pests of *Vaccinium* spp.: a tribute to
Samuel van der Kloet
Unearthing Underground Entities: Soil insects
Biological Survey of Canada
Female Mating Failures in Insects: Applied
and Fundamental Perspectives

Heritage lecture

Student paper and poster competitions

Regular poster and presented papers sessions

*Check the AES webpage (www.acadianes.ca/2011jam/) for updated information on symposia and the call for papers.

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

Hôtel The Westin Nova Scotian, Halifax, Nouvelle-Écosse

Dimanche 6 novembre – mercredi 9 novembre 2011

La Société d'entomologie acadienne vous invite à la réunion conjointe annuelle 2011 de la Société d'entomologie du Canada et de la Société d'entomologie acadienne qui se tiendra à l'hôtel Westin Nova Scotian à Halifax, en Nouvelle-Écosse, du 6 au 9 novembre 2011.

Le tarif des chambres est de \$149 plus taxes par nuit (30\$ supplémentaire pour une chambre avec vue sur le port).

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Aperçu du programme

Le thème de la réunion est **Beauté et impact** – “Beauté” fait appel à l'esthétique des insectes et aux aspects fascinants de leur comportement et leur écologie, alors que “Impact” couvre l'influence des insectes sur la société en tant que ravageurs, impact sur tous les autres domaines de recherche, impact bénéfique pour les humains et la nature, ainsi que les impacts des humains sur les insectes.

*Thème de la session plénière: **Beauté et Impact: Perspectives dans la vision du monde des insectes.***

Symposiums proposé:*

Foresterie (2011 est l'année des forêts selon l'ONU)

Symposium des étudiants gradués

Pollinisation

Forum canadien de la lutte biologique

Écologie des communautés

Entomologie urbaine / médicale / vétérinaire

Insectes ravageurs de *Vaccinium* spp. : un hommage à Samuel van der Kloet

Déterrer les entités souterraines : les insectes du sol

Commission biologique du Canada

Échec de l'accouplement des femelles chez les insectes : perspectives appliquées et fondamentales

Allocation du patrimoine

Compétition étudiante: présentations et affiches

Sessions d'affiches et de présentations régulières

*Consultez le site Internet de la Société d'entomologie acadienne (www.acadianes.ca/2011jam/) pour les dernières informations sur les symposiums et les dates importantes.

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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: Cedric Gillott
Assistant Editor: Julia Mlynarek

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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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It's All About Shoes

Last year, I volunteered to join the Student Affairs Committee of the ESC. Instead, Peter Mason offered me the opportunity to be Assistant Editor of the *Bulletin*. At first, I thought that this would be an interesting endeavour but a big responsibility. That evening as I was flipping through the pages of a previous issue of the *Bulletin*, I realized it would be an excellent way to learn more about the Society. After speaking with Fred Beaulieu who introduced me to the job as only Fred can - with lots of enthusiasm - I knew this would be an excellent challenge. Cedric Gillott was also very encouraging and I felt that it would be great to collaborate with him. How could I not join this team with all this positive energy! I still said yes to the Student Affairs Committee, so I'm also looking forward to working with Chandra Moffat and the other members.

My scientific background is varied, but not very extensive; I still feel like a budding scientist and entomologist. I am doing a PhD with Mark Forbes at Carleton University. My project focuses on ecological and evolutionary patterns of gregarine parasitism in damselflies.

(continued on page 33)

Les souliers

L'année dernière, j'ai postulé pour le poste de représentante des étudiants. Peter Mason m'a alors demandé si je ne préférerais pas être rédactrice adjointe du *Bulletin* à la place. Ça m'a d'abord paru intéressant, malgré la grande responsabilité impliquée. Le soir même, en feuilletant un volume précédent du *Bulletin*, je me suis rendu compte que ce serait une excellente façon d'en apprendre plus sur la Société. Après avoir parlé avec Fred Beaulieu, qui m'a présenté les détails du poste - avec beaucoup d'enthousiasme - j'ai su que ça représentait un excellent défi. Cedric Gillott a aussi été très encourageant et j'ai senti que ça serait super de collaborer avec lui. Comment pouvais-je ne pas joindre cette équipe avec toute cette énergie positive! J'ai néanmoins aussi accepté le poste pour le Comité des affaires étudiantes, alors j'ai également hâte de travailler avec Chandra Moffat et les autres membres du Comité.

Mon expérience est variée, mais limitée; je me sens encore comme une scientifique et une entomologiste en pleine croissance. Je fais présentement mon doctorat à l'Université Carleton sous la direction de Mark Forbes. Mon projet de thèse se concentre sur les patrons écologiques et évolutifs du parasitisme des grégarines chez les odonates. Ces parasites protozoaires sont un groupe très intéressant qui infecte uniquement les invertébrés, mais leur grande majorité. Ils sont particulièrement prospères en tant que parasites d'odonates, et c'est pour cette raison que je suis intéressée à la coévolution dans ce système hôte-parasite.

Je n'ai toutefois pas toujours été fascinée par les libellules ou leurs parasites. Durant ma maîtrise à l'Université McGill, j'ai étudié la systématique des diptères. J'ai travaillé sur la phylogénie d'une tribu de la famille des Chloropidae sous la direction de Terry Wheeler.

(suite à la page 33)

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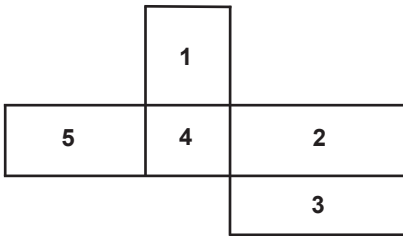
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Images

On the spine: A robber fly, *Stenopogon inquinatus* Loew (Diptera: Asilidae), photographed in the Okanagan Valley of British Columbia. One of the largest Canadian asilids, it ranges over much of western North America where it is common in dry forests and grasslands. Photo: W. Strong

Beneath the title: Mating soldier beetles, *Rhagonycha fulva* (Scopoli) (Coleoptera: Cantharidae), in a meadow near Delémont, Switzerland. This predatory European beetle was recently introduced to North America where it is now widespread. Photo: A. Leroux

1 A European species of *Plebejus* Kluk (Lepidoptera: Lycaenidae), very similar to the Nearctic species *Plebejus melissa* (Edwards). Jerisberghof, Switzerland. Photo: A. Leroux

2 Eggs of *Leptoglossus occidentalis* Heidemann (Hemiptera: Coreidae), an important pest of North American conifer seeds and European edible pine nuts. Vernon, British Columbia. Photo: W. Strong

3 A meadow grasshopper nymph, probably a species of *Chorthippus* Fieber (Orthoptera: Acrididae), in a mountain pasture near Soyhières, Switzerland. Photo: A. Leroux

4 Lars Andreassen preparing trap lures for *Aleochara bipustulata* (L.) (Coleoptera: Staphylinidae), a potential biological control agent for *Delia radicum* (L.) (Diptera: Anthomyiidae). Zurich, Switzerland. Photo: A. Leroux

5 An assassin bug nymph (Heteroptera: Reduviidae), photographed in western Massachusetts. Photo: B. Roitberg

Back cover: A platygastroid wasp, *Gryon pennsylvanicum* (Ashmead) (Hymenoptera: Scelionidae), ovipositing in eggs of western conifer seed bug, *Leptoglossus occidentalis* Heidemann (Hemiptera: Coreidae) in the Okanagan Valley of British Columbia. Photo: W. Strong

Français à l'intérieur de la couverture avant.