



Bulletin

Entomological Society of Canada
Société d'entomologie du Canada

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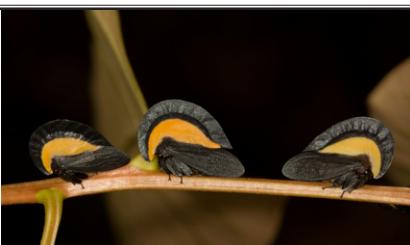
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Images

Sous le titre: *Cucullia lychnitis* sur une tige de *Verbascum* (Escalona, Aragon, Espagne) 1 juillet 2011. Photo: Francois Lieutier

1 La jeune entomologiste Aya Hoover inspectant un cadre d'abeilles (*Apis mellifera*) (ferme de recherche Beaverlodge, Alberta, Canada). Photo: Shelley Hoover

2 Un des rares Lucanidés du Canada, *Sinodendron rugosum*, marche dans la mousse (Burnaby Mountain, Colombie-Britannique, Canada), 31 juillet 2013. Photo: Sean McCann

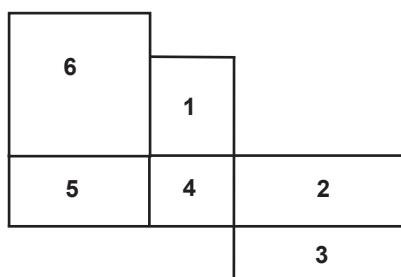
3 Femelle *Phidippus regius* (Lake Placid, Floride, États-Unis d'Amérique). Photo: Guillaume Dury

4 Charançon de la graine du chou (*Ceutorhynchus obstrictus*), un ravageur envahissant du canola (Delémont, Suisse). Photo: Tim Haye

5 Ces Membracidés ont été trouvés le long d'un petit arbre en Guyane sous la garde de fourmis (pas montrées). Photo: Steven Paiero

6 *Platypedia areolata*, émergée de sa chrysalide (Idaho, Etats-Unis d'Amérique). Photo: Malcolm Furniss

Couverture arrière: Un orthoptère indéterminé (trop de segments tarsaux pour un criquet) déplaçant sa biomasse vers le haut de la chaîne alimentaire. L'honneur est au moucherolle à ventre roux... Photo: Bob Lalonde



Up front / Avant-propos

Rebecca Hallett, President of ESC / Présidente de la SEC



As I sit down to write my final Up Front column, I can't believe how quickly my term as President has passed! As I look towards my last few months as President, I find myself both imagining the future of the Society and looking back over the issues and activities of this past year. In my first column, I wrote about the budgetary and technological challenges that the ESC is facing that will require strategic approaches and changes to the way the Society manages its business. In my second column, I provided status reports on a number of these initiatives and activities, and in the third, I highlighted some of the changes to our elections as a result of our transition to the Canada Not-for-Profit Corporation Act (CNCA). It seems appropriate then in this, my final, column to provide status reports on our activities, as well as to share some of my thoughts on future changes and challenges that the Society may need to address.

JAM Registration: In response to frustrations experienced both by members and JAM organizers in previous years, we are employing a new conference registration system for the ESC-ESS JAM 2014. I am very interested to hear what members think of the system used this year – in particular the process and

A lors que je m'installe pour rédiger ma dernière rubrique Avant-propos, j'ai du mal à croire que mon mandat de présidente ait passé si vite! Je regarde vers mes derniers mois comme présidente et je m'imagine le futur de la Société tout en considérant les sujets et activités de cette dernière année. Dans ma première rubrique, j'ai écrit sur les défis budgétaires et technologiques auxquels la SEC fait face et qui nécessiteront des approches stratégiques et des changements dans la façon dont la Société gère ses affaires. Dans ma seconde rubrique, j'ai fourni des rapports sur l'état de nombre de ces initiatives et activités, et finalement dans la troisième, j'ai souligné quelques-uns des changements dans nos procédures d'élections suite à notre transition vers la loi canadienne sur les organisations but non lucratif (LCOBNL). Il me semble donc approprié, pour ma dernière rubrique, de fournir des rapports sur nos activités, ainsi que de partager quelques-unes de mes pensées sur les futurs changements et défis que la SEC devra affronter.

Inscriptions à la réunion conjointe annuelle : En réponse aux frustrations vécues par les membres autant que par les organisateurs de la réunion durant les années précédentes, nous utilisons maintenant un nouveau système d'inscription pour la réunion conjointe annuelle SEC-SES 2014. Je suis vivement intéressée à entendre ce que les membres pensent du système utilisé cette année – en particulier sur les procédures et les aspects que vous trouvez particulièrement utiles ou problématiques.

Si vous ne vous êtes pas encore inscrits à la réunion 2014 « L'entomologie dans un monde en changement », visitez le site Internet sur <http://entsocsask.ca/esc/sec-ses.html> pour plus d'information et pour vous inscrire en ligne. Tous les membres actifs ont reçu un code promotionnel par courriel le 2 mai. Si vous

any features that you found to be particularly helpful or problematic.

If you haven't registered yet for JAM 2014 "*Entomology in a Changing World*", visit the JAM website at

<http://www.entsocsask.ca/esc/esc-ess.html>

for more information and to register on line. All active members were sent the members' discount code by email on May 2. If you have lost the code or have recently renewed your membership, please email the ESC Office (entsoc.can@bellnet.ca) to request the code. Online registration ends on 1 October.

Standing Rules: As a result of our transition to the CNCA, we have had to undertake a complete revision of all Standing Rules of the Society and its committees. A copy of the new Standing Rules should now be available for your review in the Members section of the ESC website. If you have any comments on the Standing Rules, please let Bill Riel, Chair of the Bylaws, Rules & Regulations Committee, know before the AGM. Members will be asked to approve the new Standing Rules at the AGM on 30 September 2014.

Headquarter Operations: In January, the Ad hoc Committee on Headquarter Operations was charged with examining staffing and headquarter options, and with recommending an operational structure to the Board, which would both reduce our operational costs and best serve the long-term needs of the Society. This committee, chaired by Bernie Roitberg, has been working hard to assess different options that would help to streamline society business operations and save us money. The options are still under consideration, but it is my hope that we will have a clear view of the way forward by the end of the year. Any restructuring obviously needs to be given careful consideration and in making its decision on how to move forward the committee and Board are mindful of the need to ensure fiscal sustainability of any new format adopted. It is my hope also, that whatever format we adopt will help to

l'avez perdu, on si vous avez renouvelé votre adhésion récemment, écrivez au bureau de la SEC (entsoc.can@bellnet.ca) afin de demander le code. Les inscriptions en ligne se terminent le 1^{er} octobre.

Règlement intérieur : Suite à notre transition vers la LCOBNL, nous avons entrepris une révision complète du règlement intérieur de la Société et de ses comités. Une copie de ce nouveau règlement intérieur devrait être disponible pour révision dans la section des membres du site de la SEC. Si vous avez des commentaires sur le règlement intérieur, merci de contacter Bill Riel, président du comité des règlements, avant l'AGA. Les membres devront approuver le nouveau règlement intérieur à l'AGA du 30 septembre 2014.

Opérations du siège social : En janvier, le comité *ad hoc* sur les opérations du siège social a été mandaté d'examiner les options sur les employés et le siège social, et de recommander une structure opérationnelle à la Société. Ce comité, présidé par Bernie Roitberg, a travaillé fort afin d'évaluer les différentes options qui aideraient à simplifier les opérations des affaires de la Société et de nous faire économiser de l'argent. Les options sont encore en considération, mais j'ai espéré que nous aurions une vision plus claire de la voie à prendre d'ici la fin de l'année. Toute restructuration doit évidemment être examinée attentivement et le conseil d'administration prendra en considération la durabilité fiscale de tout nouveau format adopté lors de la prise de décision. J'espère également que, peu importe le format adopté, ce dernier aidera à alléger la charge de nos bénévoles, améliorera les services aux membres, et permettra à la Société d'être stratégique pour les initiatives futures, afin que le dur labeur de tous nos bénévoles amène le plus grand bénéfice possible à la Société et à nos membres.

Renouvellement et élections en ligne : La Société a vu une baisse préoccupante dans la participation des membres aux élections, ainsi

lighten the load on our volunteers, improve membership services, and allow the Society to be strategic about future initiatives, so that the hard work of all our volunteers can have the biggest benefit for the Society and our members.

Electronic Renewals & Elections: The Society has seen a distressing downturn in member participation in our elections, as well as a higher than usual number of members that have yet to renew for this year. While there may be a number of explanatory variables at play, it seems to me that one major factor must be that both voting and member renewals are now done electronically. The benefits of electronic voting processes are multiple: labour-savings for staff and volunteers responsible for sending out and counting ballots, reduced environmental impact by reducing paper usage, increased convenience for members needing only to click a link rather than find a stamp and a mailbox, and cost-savings for both the Society and members. However, a quick review of election participation data over the past 9 years, reveals that participation rates have dropped from roughly half of our members casting votes in elections between 2006-2012 (mean 174.4 votes cast) to less than one-fifth of members (mean 70.5 votes cast) casting votes in the past two years, since electronic voting came into use. With a planned move to fully electronic membership renewal in 2015, and the need to keep costs for elections and membership processing low, this is an issue that the Society and members will need to address in the near future. There's a trade-off between the benefits of electronic voting and the inconvenience of multiple renewal and election reminder notices coming into our Inboxes through the year. I'd love to hear from any members who have ideas about how we might increase member participation again in the future.

Strong membership numbers are important to the Society as a whole, as a strong, well-populated society enriches our experience as members of this vibrant entomological

qu'un nombre de membres plus élevé qu'à l'habitude n'ayant pas encore renouvelé leur adhésion pour cette année. Bien qu'il y ait bon nombre de variables explicatives en jeu, il me semble qu'un facteur majeur puisse être que le renouvellement et les élections se font maintenant électroniquement. Les avantages des procédures de vote électronique sont multiples : la réduction de la charge de travail pour les employés et bénévoles responsables de l'envoi et du décompte des bulletins, la réduction de l'impact environnemental par la réduction de l'utilisation de papier, la facilité pour les membres qui n'ont qu'à cliquer sur un lien plutôt que de trouver un timbre et une boîte aux lettres, et l'économie monétaire pour la Société et les membres. Cependant, une rapide révision des données de participation aux élections dans les 9 dernières années révèle que le taux de participation a chuté, passant d'environ la moitié de nos membres ayant voté durant les élections entre 2006-2012 (une moyenne de 174,4 votes) à moins d'un cinquième des membres (une moyenne de 70,5 votes) ayant voté dans les deux dernières années, depuis que le vote électronique est en usage. Avec un passage planifié vers le renouvellement de l'adhésion entièrement électronique en 2015, et le besoin de garder les frais d'élections et d'adhésion bas, il s'agit d'un sujet que la Société et ses membres devront adresser dans un futur rapproché. Il y a un compromis entre les avantages du vote électronique et les inconvénients des multiples avis de rappel de renouvellement et d'élections arrivant dans votre boîte de réception durant l'année. J'aimerais entendre l'avis des membres qui ont des idées sur la façon dont nous pourrions augmenter la participation des membres dans le futur.

Avoir un grand nombre de membres est important pour la Société en tant que telle, puisqu'une société forte et bien peuplée enrichit notre expérience en tant que membre de cette communauté entomologique vibrante. Le fort engagement des membres dans les affaires de la Société et les élections renforce et facilite le fonctionnement de la

community. Strong engagement of members in Society business and elections strengthens and facilitates the running of the Society and enhances our experiences as members. I feel strongly that the greater the level of one's engagement with the Society, the more benefit one receives from being a member. So, be selfish about belonging to this Society - maintain your membership every year, cast your ballot to influence the running of the Society, get involved - and reap the benefits of membership!

My thanks go out to all of the members that enrich my experience in this Society, and to all of the dedicated volunteers who share so much of their time and talents with us!

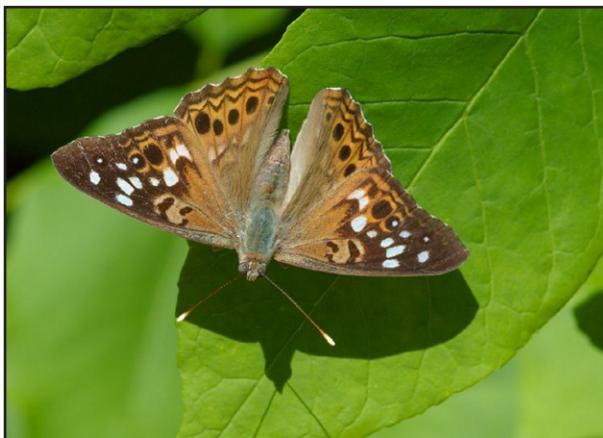
I look forward to seeing all of you in Saskatoon at the end of the month!

Société et améliore notre expérience en tant que membres. Je crois fortement que plus quelqu'un s'implique dans la Société, plus il recevra d'avantages à être membre. Alors, soyez égoïste au sujet de votre appartenance à la Société – maintenez votre adhésion tous les ans, votez afin d'influencer le fonctionnement de la Société, impliquez-vous – et collectez les avantages de votre adhésion!

Je tiens à remercier tous les membres qui ont enrichi mon expérience dans cette Société, et tous les bénévoles dévoués qui partagent tant de temps et de talents avec nous!

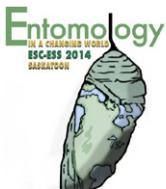
J'ai hâte de vous voir tous à Saskatoon à la fin du mois!

Max Larrivée



Asterocampa celtis

Joint Annual Meeting / Réunion annuelle conjointe



ESC-ESS JAM 2014

Entomology in a Changing World

Saskatoon, Saskatchewan



Hello ESC members!

The Entomological Society of Saskatchewan is pleased to welcome you to Saskatoon for the 2014 Joint Annual meeting of the Entomological Societies of Canada and Saskatchewan at the Radisson Hotel, 405 20th Street East, Saskatoon from 28 September to 1 October 2014.

2014 JAM souvenir polo shirts

Order your limited edition JAM 2014 Polo shirt in your choice of four colours ([I want one!](#)), only available by pre-order and pick up. New to the website: Polo shirt models! Bulletin Editor Dr. Cedric Gillott is wearing a men's large in Charcoal grey and his wife Anne is modeling a woman's medium in Dill green ([Now I really want one!](#)). Please note, shirts are ONLY available through pre-order on the conference website prior to 1 Sept ([I'll order it now!](#))

Graduate Student Auction

Are you downsizing your ento-library? Have any ento-related paraphernalia to donate? Please bring your donations to the 2014 JAM and drop them off at the student-run silent auction table to support ESC graduate student scholarships ([I want to help out!](#)).

If you haven't done so, please [Register online](#) for the conference.

Visit the meeting's website at <http://www.entsocsk.ca/esc/esc-ess.html> for more information. Book your hotel room now (promo code ENTOMO). ([Click, while there are still vacancies!](#)).

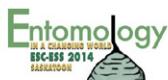
Program details In addition to the traditional offerings at joint annual meetings, including the Gold Medal Address, Heritage Lecture, Graduate Student Showcase, poster and oral submissions for the President's Prizes, and contributed talks and posters, five special symposia are being organised. The banquet entertainment features the improvisational comedy of the Saskatoon "Insecticidal" Soaps and after-conference hour's entertainment includes a "World brew tour" and sampling Saskatoon microbrews.

The five symposia focus on key areas of entomological interest in Canada: 1) Advances in insect -omics (Dr. Martin Erlandson). 2) The changing face of biological control (Drs. Bernie Roitberg and Dave Gillespie). 3) Urban Forest Entomology (Jeff Boone) considers recent invaders to the urban forest landscape and their management 4) Biological Survey of Canada (BSC) symposium titled "Opposite ends of the time scale - ancient and recent changes in insect diversity". This symposium includes a series of talks examining the recent and not so recent changes in distribution of insects in Canada across various taxonomic groups, individual species, and particular ecosystems. The symposium will be followed by the general meeting of the BSC. 5) Canadian Forum for Biological Control Symposium and AGM.

Registration Details

Early Bird and Title Submission Deadline: passed-Member - \$450, Non Member - \$550, Student - \$250





ESC-ESS JAM 2014

L'entomologie dans un monde en changement

Saskatoon, Saskatchewan



Aux membres de la SEC,

Nous préparons tout pour vous accueillir à la réunion annuelle conjointe 2014 des Sociétés d'Entomologie du Canada et de la Saskatchewan le Dimanche 28 septembre – mercredi 1 octobre 2014 a L'Hôtel Radisson.

Polos JAM 2014

Commandez votre Polo édition limité JAM 2014, de la couleur de votre choix ([Je veux un!](#)), disponible uniquement sur commande et à récupérer au bureau d'inscription de la conférence. Nouveau sur le site : des mannequins pour nos polos ! Le responsable du bulletin, Dr. Cedric Gillott porte un élégant polo homme, taille L, de couleur gris charbon et sa femme Anne met en valeur un polo femme, taille M, de couleur vert aneth ([Maintenant, j'en veux vraiment un!](#)). N'oubliez pas que les T-shirts ne sont disponibles que par précommande sur le site web de la conférence, et cela avant le 1er septembre 2014 ([J'en commande un maintenant!](#)).

Vente aux enchères

Trop de livres sur l'entomologie? Ou envie de donner du matériel entomologique? Apporter vos donations à la vente aux enchères organisée par les étudiants lors de la conférence JAM 2014. Les profits iront aux bourses destinées aux étudiants gradués ESC ([Je veux aider!](#)).

Si vous ne l'avez pas encore fait, [Inscrivez-vous vite en ligne](#) pour participer à la conférence.

Réservez votre chambre d'hôtel aujourd'hui (code promotionnel ENTOMO)([Cliquez maintenant!](#)).

Détails de program La réunion de 2014 comportera les événements habituellement présentés lors des réunions annuelles précédentes telles que l'attribution de la Médaille d'or SEC et du prix du Président, l'allocution sur le patrimoine, le salon des étudiants gradués ainsi que les présentations orales et d'affiches. A cet effet, Cinque symposiums spéciaux seront organisés. L'un d'eux portera sur les progrès réalisés dans le domaine des « insect -omique » (organisateur: Dr. Martin Erlanson). Le suivant abordera les changements au niveau de la lutte biologique (organisateurs: Drs. Bernie Roitberg et Dave Gillespie) et le dernier traitera de la gestion des insectes nouvellement introduits dans les milieux urbains végétalisés (organisateur: Jeff Boone). 4) Commission biologique du Canada (BSC) symposium intitulé «Les extrémités opposées de l'échelle de temps - anciens et récents changements dans la diversité des insectes». Ce colloque comprend une série d'entretiens examinant les changements récents et moins récents dans la répartition des insectes au Canada dans divers groupes taxonomiques, les espèces individuelles et des écosystèmes particuliers. Le colloque sera suivi par l'assemblée générale du BSC. 5) Forum canadien symposium de lutte biologique suivi par une assemblée générale. En fin de banquet, le groupe des « Saskatoon Soaps Improv Comedy » nous présentera une comédie d'improvisation « insecticide ». Après les festivités et la comédie, ceux qui le souhaitent pourront participer à une tournée des microbrasseries de Saskatoon.

Registration Details

Date limite pour l'inscription hâtive et la soumission des titres : passée
Membre: \$450, Non-membre: \$550, Étudiant: \$250



ESC 2014 award winners / Récipiendaires des prix SEC 2014



Gold Medal Award

David R. Gillespie

Dr David R. Gillespie is the 2014 recipient of the Entomological Society of Canada's Gold Medal. This award, now in its 52nd year, recognizes outstanding achievement in Canadian entomology, including "superior research accomplishment", "meritorious contribution to entomological scholarship", and "dedicated and fruitful service in the field of entomological education in Canada", all of which eminently exemplify Dave Gillespie's career.

Dave Gillespie grew up on the west coast of British Columbia, where tide pools and things under rocks sparked his interest in biology and biodiversity. He enrolled at Simon Fraser University (SFU), fully intending to pursue a career in marine biology. An introductory course in insect biology, taught by Professor Thelma Finlayson, dramatically and permanently changed his career course. Thelma Finlayson, Bryan Beirne, John Borden and Manfred Mackauer had a strong influence on his career and were especially important teachers and mentors for Dave. Thelma's focus on student mentoring had a particularly strong influence.

Since obtaining his PhD at SFU in 1982, Dave has been employed by Agriculture Canada / Agriculture and Agri-Food Canada at Sidney, Vancouver, and Agassiz, British Columbia. Dave has maintained a close association with faculty and students of

Médaille d'or

David R. Gillespie

Dr David R. Gillespie est le récipiendaire 2014 de la Médaille d'or de la Société d'entomologie du Canada. Ce prix, qui en est à sa 52^e année, reconnaît des contributions exceptionnelles en entomologie canadienne, incluant « l'exécution de recherches de qualité supérieure », « la contribution méritoire à l'avancement des connaissances en entomologie », ainsi que « l'engagement dévoué et fructueux en matière d'éducation en entomologie », qui sont tous éminemment représentés par la carrière de Dave Gillespie.

Dave Gillespie a grandi sur la côte ouest de la Colombie-Britannique, où les mares et les bestioles cachées sous les roches ont allumé son intérêt pour la biologie et la biodiversité. Il s'est inscrit à l'Université Simon Fraser (SFU) avec la ferme intention de poursuivre une carrière en biologie marine. Un cours d'introduction sur la biologie des insectes donné par Thelma Finlayson a drastiquement changé le cours de sa carrière. Thelma Finlayson, Bryan Beirne, John Borden et Manfred Mackauer ont eu une forte influence sur sa carrière, et ont été des professeurs et mentors particulièrement importants pour Dave. Le don de Thelma pour guider les étudiants a eu une influence particulièrement forte.

Depuis l'obtention de son doctorat à SFU en 1982, Dave a été embauché par Agriculture Canada à Sidney, Vancouver, et Agassiz, en Colombie-Britannique. Dave a conservé des liens serrés avec la faculté et les étudiants du Centre de gestion des ravageurs à SFU, et est présentement professeur associé au département des sciences biologiques. Il a obtenu de nombreuses subventions de recherche et des contrats, certains en collaboration avec la faculté du Centre de gestion des ravageurs à SFU et du département de biologie de l'Université de Windsor, en Ontario, où Dave est associé depuis 2009. Il a aussi été nommé professeur *ad hoc* au département d'entomologie de l'Université Cornell à New York en 2009.

the Centre for Pest Management at SFU, and is currently an adjunct Professor in the Department of Biological Sciences. He has held many research grants and contracts, some in collaboration with the faculty of the Centre for Pest Management at SFU and the Department of Biology, University of Windsor, Ontario, where Dave has been an adjunct professor since 2009. He was also appointed *ad hoc* professor, Department of Entomology, Cornell University, New York, in 2009.

Dave Gillespie has had a highly productive career with over 200 publications, including 88 peer reviewed and 34 books or book chapters. His research on natural enemies of insects and mites has contributed directly to the widespread use of many of these species for biological control in commercial greenhouse operations around the world. Research on responses of greenhouse insects to colour led to the use of colour traps for monitoring greenhouse pests, specifically the development of yellow sticky traps for monitoring greenhouse whitefly and blue sticky traps for monitoring western flower thrips. On a more fundamental level, his research program has centred on developing a theoretical framework for selecting a natural enemy for use in classical, augmentative and inundative release programs. Inherent in this are studies on the biotic and abiotic constraints that affect the interaction between natural enemies and target and non-target organisms, and between natural enemies in food webs. During the past 10 years of his career, Dave has concentrated his efforts on developing biological control agents for outdoor vegetable and field crops. He is currently the principal investigator for an AAFC project on the biological control of cabbage seedpod weevil in Canada. This insect pest costs the canola industry millions of dollars per year in yield loss. Under Dr Gillespie's capable leadership, considerable progress has been made by his team in identifying a key European biological control agent that may significantly reduce both the damage from the pest weevil and reduce the pesticide input in the canola crop. The second aspect of his program has been to develop

Dave Gillespie a eu une carrière très productive avec plus de 200 publications, incluant 88 articles évalués par les pairs et 34 livres ou chapitres de livre. Ses recherches sur les ennemis naturels des insectes et des acariens ont contribué directement à l'utilisation étendue de plusieurs espèces pour la lutte biologique dans des serres commerciales autour du monde. La recherche sur les réponses aux couleurs des insectes en serre a mené à l'utilisation de pièges colorés pour dépister les ravageurs des serres, plus spécifiquement le développement de pièges collants jaunes pour surveiller les aleurodes en serre et les pièges collants bleus pour surveiller les thrips des petits fruits. À un niveau plus fondamental, son programme de recherche s'est centré sur le développement d'un cadre théorique pour sélectionner un ennemi naturel pour l'utilisation dans des programmes de lâchers classiques, inoculatifs et inondatifs. En lien avec ces recherches se situent les études sur les contraintes biotiques et abiotiques qui affectent l'interaction entre les ennemis naturels et les organismes ciblés et non-ciblés, et entre les ennemis naturels dans les réseaux trophiques. Durant les 10 dernières années de sa carrière, Dave a concentré ses efforts sur le développement d'agents de lutte biologique pour les cultures de légumes et des grandes cultures à l'extérieur. Il est actuellement le chercheur principal d'un projet d'AAC sur la lutte biologique du charançon de la graine du chou au Canada. Ce ravageur coûte des millions de dollars par année en perte de récolte à l'industrie du canola. Sous la gouverne de Dr Gillespie, des progrès considérables ont été faits par son équipe en identifiant un agent de lutte biologique européen important qui pourrait réduire significativement les dommages du charançon ravageur et réduire l'utilisation de pesticides dans les cultures de canola. Le second aspect de son programme a été de développer un cadre théorique qui permet aux chercheurs de penser à, et d'étudier les interactions ravageur-ennemi naturel dans le contexte de paysages durables. Ces projets se sont concentrés sur les effets des changements globaux sur les processus des écosystèmes, et l'influence du paysage et de la

theoretical structure that lets researchers think about and study pest-natural enemy interactions in the context of sustainable landscapes. These projects have focused on global change effects on ecosystem processes, and the influence of landscape and community structure on natural enemy impacts on target pests. His significant contributions include

- *Use of omnivorous predators in biological control*
- *Biological control of aphids in greenhouses*
- *Climate change and biological control communities*
- *Classical biological control and non-target host evaluation*

Dave has had a very significant impact in agriculture, and has contributed many innovative ideas and new natural enemies for biological control of important arthropod pests. Brian Spencer, General Manager, Applied Bio-nomics, Sidney, summed up Dave's impact in a statement made in 2010: "In the world of Biological Pest Control, Dave Gillespie stands out as the single most productive and supportive researcher for the past 30 years in Canada. In my opinion, no other individual has contributed as much during this period."

Dave Gillespie worked for the first 20+ years of his career with the greenhouse vegetable industry in Canada. He has played an important role in the development of an international industry for the production of natural enemies for use in greenhouse agriculture, including companies based in Canada, resulting in drastic reduction of reliance on pesticides on our greenhouse vegetables (tomatoes, peppers and cucumbers). In recognition of Dave's extraordinary contributions to the biocontrol producers, both in terms of providing new agents and expert advice, Applied Bio-nomics requested that a previously unknown predaceous mite be named in Dave's honour. This species was formally named *Gaeolaelaps gillespiei* Beaulieu, 2009. In addition to this species, Dave has been directly involved in introducing to the greenhouse industry

structure des communautés sur les impacts des ennemis naturels sur les ravageurs ciblés. Ses contributions importantes incluent :

- *Utilisation de prédateurs omnivores en lutte biologique*
- *Lutte biologique contre les pucerons en serre*
- *Changement climatique et lutte biologique des communautés*
- *Lutte biologique classique et évaluation des hôtes non-ciblés*

Dave a eu un impact très important en agriculture, et a contribué à plusieurs idées innovatrices et à l'utilisation de nouveaux ennemis naturels en lutte biologique contre les arthropodes ravageurs importants. Brian Spencer, directeur général de Applied Bio-nomics, Sidney, a résumé l'impact de Dave dans une déclaration faite en 2010 : « *Dans le monde de la lutte biologique contre les ravageurs, Dave Gillespie ressort comme le chercheur le plus productif et apportant le plus de soutien des 30 dernières années au Canada. Selon moi, personne d'autre n'a contribué autant durant cette période* »¹.

Dave Gillespie a travaillé pendant les 20 premières années de sa carrière avec l'industrie de légumes en serres au Canada. Il a joué un rôle important dans le développement d'une industrie internationale pour la production d'ennemis naturels pour utilisation en agriculture de serre, incluant des compagnies situées au Canada, résultant en une réduction drastique de notre dépendance aux pesticides sur nos légumes de serres (tomates, poivrons et concombres). En reconnaissance des contributions extraordinaires de Dave pour les producteurs en lutte biologique, autant pour fournir des nouveaux agents que des conseils d'expert, Applied Bio-nomics a demandé qu'un acarien prédateur anciennement inconnu soit nommé en l'honneur de Dave. Cette espèce a été formellement nommée *Gaeolaelaps gillespiei* Beaulieu, 2009. En plus de cette espèce, Dave a été directement impliqué dans l'introduction d'un nombres d'insectes et d'acariens bénéfiques comme agents de lutte

¹Traduction du comité du bilinguisme de la SEC

a number of beneficial insects and mites as biological control agents including *Amblyseius cucumeris*, a predatory mite for western flower thrips control; *Stratiolaelaps scimitis*, a predatory mite for fungus gnat and thrips control; *Feltiella acarisuga*, a predatory midge for two-spotted spider mite control; *Dicyphus hesperus*, a true bug for whitefly control; *Micromus variegatus*, a brown lacewing for whitefly control (being developed currently by Applied Bio-nomics); and *Praon unicum*, a parasitic wasp for foxglove aphid control (being developed currently by Koppert, The Netherlands).

These biological control agents are offered by major international producers, such as Koppert, Biobest (Belgium), and Hydro-Gardens (USA). One of Dave's first discoveries, *S. scimitis*, continues to be one of the largest selling and most widely used beneficial mites in the world. This mite is also the most common "first introduction" for greenhouse managers making the transition from pesticide applications into biological pest control of greenhouse crops.

Dave has had a significant impact on the careers of many students of entomology in Canada. He has co-supervised and served on the thesis supervisory committees for 15 graduate students (MSc, Master of Pest Management [MPM] and PhD) at SFU and other institutions, and has served as external and public examiner on thesis defenses. In addition, Dave has supervised undergraduate co-operative education students, providing many with their first experience in a research environment. Some of the recipients of his mentorship are now conducting productive research in academic, government and private institutions across the country. For example, Dave's former post-doctoral fellow, Dr Sherah VanLaeerhoven, is now a professor at the University of Windsor, and has been recognized with "Canada's Top 40 under 40" award (2006), and the Entomological Society of Canada's "C. Gordon Hewitt Award" (2009). In addition to direct supervision of students, Dave has generously committed time to share his expertise with students

biologique pour l'industrie des serres, incluant *Amblyseius cucumeris*, un acarien prédateur pour le contrôle de thrips des petits fruits; *Stratiolaelaps scimitis*, un acarien prédateur pour le contrôle des mouches du terreau et des thrips; *Feltiella acarisuga*, un acarien prédateur pour le contrôle des tétranyques à deux points; *Dicyphus hesperus*, une punaise pour le contrôle des aleurodes; *Micromus variegatus*, un névropêtre pour le contrôle des aleurodes (présentement développé par Applied Bio-nomics); et *Praon unicum*, une guêpe parasitoïde pour le contrôle du puceron de la digitale (présentement développé par Koppert aux Pays-Bas).

Ces agents de lutte biologique sont vendus par les principaux producteurs internationaux, tels que Koppert, Biobest (Belgique), et Hydro-Gardens (É.-U.). Une des premières découvertes de Dave, *S. scimitis*, continue d'être un des plus grands vendeurs et l'acarien bénéfique le plus utilisé dans le monde. Cet acarien est aussi la « première introduction » la plus commune pour les gestionnaires de serres qui font la transition de l'application de pesticides vers la lutte biologique des ravageurs en production de serre.

Dave a eu un impact significatif sur la carrière de plusieurs étudiants en entomologie au Canada. Il a co-supervisé et fait partie de comité de thèse pour 15 étudiants gradués (maîtrises, maîtrise en gestion des ravageurs [MPM] et doctorats) à SFU et dans d'autres institutions, et il a été examinateur externe et public pour des soutenances de doctorat. De plus, Dave a supervisé des étudiants de premier cycle coopératif en éducation, fournissant à plusieurs d'entre eux leur première expérience dans un environnement de recherche. Certaines personnes qui ont été sous son mentorat mènent actuellement des recherches productives dans des institutions académiques, gouvernementales et privées dans tout le pays. Par exemple, l'ancienne post-doc de Dave, Dr Sherah VanLaeerhoven, est maintenant professeure à l'Université de Windsor, et a été récompensée par le prix « Canada's Top 40 under 40 » (2006), et le prix C. Gordon Hewitt de la Société d'entomologie du Canada (2009). En

and the public through lectures, courses, and field trips. Dave has interacted with hundreds of students in the above mentioned capacities, sharing his wealth of knowledge and enthusiasm for natural history, pest management, entomological research, experimental design, statistical analyses, and much more. He has also contributed to increased awareness of ongoing research and the importance of agricultural research in general through public presentations such as *Ag in the City*, a technology transfer event.

Dave Gillespie is a member of many professional societies. He has contributed to the Entomological Society of Canada as Director at Large (2002–2005); Chair, Student Awards Committee (2000–2003); and Chair, Finance Committee (2004–2007). He has also served as the President, Entomological Society of British Columbia (1997); President, Professional Pest Management Association of British Columbia (1986–1987); Secretary, Canadian Forum for Biological Control (1998–1999); and Chair, Organizing Committee for the International Organization for Biological Control (IOBC) joint meeting of the West Palearctic and Nearctic greenhouse IPM working groups, Victoria, British Columbia, 2002.

Dave Gillespie has been recognized for his contributions to pest management, biocontrol and agriculture through several prestigious awards, including the *Award of Excellence* from the Professional Pest Management Association of British Columbia (1997), the *Award of Excellence from the Association of Natural Biological Control Producers (ANBP)* of North America (2003), the *Gold Harvest Award* from Agriculture and Agri-Food Canada (2011), and most recently he became an *Honorary Member of the International Organization for Biological Control*, awarded at the International Congress of Entomology in Korea, 2012.

plus de la supervision directe d'étudiants, Dave a généreusement donné de son temps pour partager son expertise avec les étudiants et le public par des séminaires, des cours et des sorties de terrain. Dave a interagi avec des centaines d'étudiants dans les fonctions mentionnées plus haut, partageant la richesse de ses connaissances et son enthousiasme pour l'histoire naturelle, la gestion des ravageurs, la recherche entomologique, le design expérimental, les analyses statistiques et bien plus. Il a également contribué à augmenter la conscience de la recherche en cours et l'importance de la recherche en agriculture en général par des présentations grand public tel que *Ag in the City*, un évènement de transfert de technologie.

Dave Gillespie est membre de plusieurs sociétés professionnelles. Il a contribué à la Société d'entomologie du Canada en tant que conseiller (2002–2005), président du comité des prix étudiants (2000–2003), et président du comité des finances (2004–2007). Il a également été président de la Société d'entomologie de Colombie-Britannique (1997), président de l'association professionnelle de gestion des ravageurs de Colombie-Britannique (1986–1987), secrétaire du Forum canadien pour la lutte biologique (1998–1999), et président du comité organisateur pour la réunion conjointe des groupes de travail sur la lutte intégrée en serre des régions paléarctique ouest et néarctiques de l'Organisation internationale pour la lutte biologique (OILB) à Victoria en Colombie-Britannique en 2002.

Dave Gillespie a été reconnu pour ses contributions à la gestion des ravageurs, la lutte biologique et l'agriculture par différents prix prestigieux, incluant le *Prix d'excellence* de l'association professionnelle de gestion des ravageurs de Colombie-Britannique (1997), le *prix d'excellence* de l'Association des producteurs en lutte biologique naturelle (ANBP) de l'Amérique du Nord (2003), le prix *Moisson d'or* d'Agriculture et agroalimentaire Canada (2011), et il est plus récemment devenu un *Membre honoraire de l'Organisation internationale de lutte biologique*, remis au congrès international d'entomologie en Corée en 2012.



C. Gordon Hewitt Award

Patrice Bouchard

Dr Patrice Bouchard is the recipient of the 2014 Entomological Society of Canada C. Gordon Hewitt Award. This award recognizes outstanding achievement in Canadian entomology by a researcher within 12 years of defending their PhD.

Pat obtained his BSc (1995) in Applied Zoology and MSc (1997) in Entomology at McGill University, before moving “down under” to complete a PhD (2002) in Entomology at the University of Queensland, where he was co-supervised by Dr D.K. Yeates, a renowned Diptera systematist, and Dr Geoff Monteith, curator at the Queensland Museum. Pat’s dissertation work investigated the systematics and biogeography of Coelometopini (Coleoptera: Tenebrionidae: Coelometopinae) of the Australian wet tropics. After his dissertation, Pat returned to his native Canada, where he was a NSERC Post-Doctoral Fellow with Dr R.S. Anderson at McGill and the Canadian Museum of Nature, studying the evolution and natural history of Neotropical darkling beetles (Tenebrionidae). In 2003 he was hired to his current position as a Research Scientist in the Canadian National Collection of Insects, Arachnids and Nematodes (CNC), Agriculture and Agri-Food Canada (AAFC), Ottawa, to conduct research on the systematics of two important groups, weevils (Curculionidae) and darkling beetles

Prix C. Gordon Hewitt

Patrice Bouchard

Dr Patrice Bouchard est le récipiendaire du prix C. Gordon Hewitt 2014 de la Société d’entomologie du Canada. Ce prix reconnaît une contribution exceptionnelle à l’entomologie canadienne par un chercheur dans les 12 ans suivant sa soutenance de thèse de doctorat.

Pat a obtenu son baccalauréat (1995) en zoologie appliquée et sa maîtrise (1997) en entomologie à l’Université McGill avant de compléter son doctorat (2002) en entomologie à l’Université de Queensland, où il a été co-supervisé par Dr D.K. Yeates, un systématicien des diptères renommé, et Dr Geoff Monteith, curateur au Musée Queensland. Pat travaillait sur la systématique et la biogéographie des Coelometopini (Coleoptera : Tenebrionidae : Coelometopinae) des milieux tropicaux humides australiens. Après son doctorat, Pat est retourné dans son Canada natal où il obtenu un financement postdoctoral CRSNG avec Dr R.S. Anderson à McGill et le Musée canadien de la nature afin d’étudier l’évolution et l’histoire naturelle des ténébrionides (Tenebrionidae) sub-tropicaux. En 2003, il a été embauché dans son poste actuel comme chercheur scientifique à la Collection nationale canadienne d’insectes, d’arachnides et de nématodes (CNC), à Agriculture et agroalimentaire Canada (AAC) à Ottawa afin de conduire des recherches sur la systématique de deux groupes importants, les charançons (Curculionidae) et les ténébrionides (Tenebrionidae).

Durant son relativement court mandat depuis ses débuts à la CNC, Pat a établi un programme de recherche indépendant, bien financé et productif qui contribue à faire avancer la systématique des coléoptères au Canada et dans d’autres parties du monde. La plupart de ses travaux depuis son arrivée à la CNC se sont concentrés sur les charançons, un groupe d’insectes qui continue à être la source autant de ravageurs exotiques que

(Tenebrionidae).

During his relatively short tenure at CNC, Pat has established a well-funded and productive independent research program that continues to advance the systematics of beetles in Canada and other parts of the world. Much of his work since arriving at the CNC has focused on weevils, an insect group that continues to be a source of both alien pests and beneficial biological control agents. Pat is the project coordinator of a large, multi-institutional and multidisciplinary project funded by the Government of Canada with the objective to improve Canada's ability to monitor invasive alien and quarantine species for protection of Canadian biodiversity and trade from the impacts of global change. This project makes up almost half of the approximately \$8.8 million Pat has attracted either independently or as a key member of collaborative teams. He is also Co-Principal Investigator of the AAFC-funded Invertebrate Biodiversity project, involving a team of 16 scientist colleagues plus support staff.

Although his research broadly encompasses the systematics of Coleoptera (beetles), as noted the focus is on the Curculionidae and the Tenebrionidae. He has been extremely productive, and has already authored or co-authored more than 41 journal articles, 4 books, 8 book chapters, 5 book reviews, and 5 popular articles. He is a sought-after speaker and has made more than 29 invited and submitted presentations. Of particular note are his contributions as senior author of the widely acclaimed *Family-group Names in Coleoptera (Insects)* published in 2011, and as co-author of *Tenebrionidae Beetles of Australia: Descriptions of tribes, keys to genera, catalogue of species*, published in 2008, and awarded the "Whitley Commendation for Systematic Zoology" in 2009. A book project entitled "*The Book of Beetles: A life-size guide to six hundred of nature's gems*" that he has led will be published by the University of Chicago Press in the fall of 2014 (<http://press.uchicago.edu/ucp/books/book/chicago/B/bo19341340.html>). Pat's work is widely cited, and his broad

d'agents de lutte biologique bénéfiques. Pat est le coordonnateur d'un gros projet multi-institutionnel et pluridisciplinaire financé par le gouvernement du Canada avec pour objectif d'améliorer la capacité du Canada à détecter les exotiques envahissants et les espèces de quarantaine pour la protection de la biodiversité canadienne et les effets des changements globaux. Ce projet prend pratiquement la moitié des 8.8 millions \$ approximatifs que Pat a attiré soit indépendamment, soit en tant que membre clé d'équipes collaboratives. Il est également un des deux chercheurs principaux du projet financé par AAC sur la biodiversité des invertébrés, impliquant une équipe de 16 scientifiques ainsi que du personnel de soutien.

Bien que ses recherches englobent la systématique globale des coléoptères, tel que mentionné, celles-ci se concentrent davantage sur les Curculionidés et les Ténébrionidés. Il a été extrêmement productif, ayant déjà publié ou co-publié plus de 41 articles de revues, 4 livres, 8 chapitres de livre, 5 révision de livres et 5 articles vulgarisés. Il est un conférencier recherché et a donné plus de 29 présentations invitées ou soumises. Mentionnons particulièrement ses contributions comme auteur senior sur la publication acclamée *Family-group Names in Coleoptera* publiée en 2011, et comme co-auteur de *Tenebrionidae Beetles of Australia: Descriptions of tribes, keys to genera, catalogue of species*, publié en 2008 et ayant reçu le prix «Whitley Commendation for Systematic Zoology» en 2009. Un projet de livre intitulé *The Book of Beetles: A life-size guide to six hundred of nature's gems* qu'il a mené sera publié par les presses de l'Université de Chicago à l'automne 2014 (<http://press.uchicago.edu/ucp/books/book/chicago/B/bo19341340.html>). Les travaux de Pat sont largement cités et son approche apporte une influence stabilisatrice à la taxonomie et la nomenclature des coléoptères.

Il a été impliqué dans la supervision et le mentorat d'étudiants de premier cycle et gradués. Il a également contribué

approach provides a stabilizing influence to the taxonomy and nomenclature of the Coleoptera.

He has been involved in the supervision and mentoring of both undergraduate and graduate students. He has also contributed significantly to public outreach, for example, through participation as a scientific advisor in the development and production of a factual television series on arthropods. He has provided expert opinion for a court case involving major losses of goods to stored product beetle infestations (he generously donated his professional fees from that case to the ESC Scholarship Fund), and reviewed petitions for release of non-native organisms into North America.

Pat has a strong record of service at the federal and department level, serving as CNC Curator of Coleoptera, Co-Chair of the Database Committee, and Chair of the CNC Handbook Committee. He has chaired and participated in staff hiring committees, and provided expert identifications for the AAFC National Identification Service. He is also highly engaged in both national and regional societies. He has been an active supporter of the Entomological Society of Canada, for which he served as Treasurer from 2004–2011 and continues to serve as Chair of the Finance Committee and representative for the Entomological Society of Ontario (ESO) on the ESC Board of Directors. He is currently a Subject Editor (2011–present) and was Associate Editor under the previous editorial system for *The Canadian Entomologist*. He also serves as Director and Treasurer of the Biological Survey of Canada as well as the Biological Survey Foundation, and Chair and member of the Grants Committee of the CanaColl Foundation, and was formerly a Director of the ESO. Pat is a member of the Editorial Boards of the journals *Zoological Bibliography* and *ZooKeys*.

Pat Bouchard is an exceptionally talented scientist, a model citizen, and is early in what will become a long and distinguished career in entomology in Canada.

significativement à la sensibilisation du public, par exemple par la participation en tant que consultant scientifique dans le développement et la production d'une série télévisée factuelle sur les arthropodes. Il a donné son opinion d'expert pour un procès en cour impliquant des pertes majeures de produits entreposés par des infestations de coléoptères (il a généreusement donné ses frais professionnels provenant de ce procès au Fonds des bourses étudiantes de la SEC), et a révisé des pétitions pour les lâchers d'organismes non-natifs en Amérique du Nord.

Pat a un fort dossier de service aux niveaux fédéral et départemental, servant comme curateur des coléoptères à la CNC, co-président du comité des bases de données, et président du comité des manuels de la CNC. Il a présidé et participé à des comités d'embauches et a fourni des identifications expertes pour le service national d'identification d'AAC. Il est également très engagé dans les sociétés nationale et régionale. Il a été un défenseur actif de la Société d'entomologie du Canada, pour laquelle il a servi comme trésorier de 2004 à 2011 et continue à servir comme président du comité des finances et représentant de la Société d'entomologie d'Ontario (SEO) sur le conseil d'administration de la SEC. Il est actuellement éditeur thématique (2011-aujourd'hui) et a été éditeur associé dans le précédent système éditorial de *The Canadian Entomologist*. Il a aussi servi comme directeur et trésorier de la Commission biologique du Canada ainsi que pour la fondation de la Commission biologique, président et membre du comité des subventions pour la Fondation CanaColl, et a été directeur de la SEO. Pat est membre du comité éditorial des revues *Zoological Bibliography* et *ZooKeys*.

Pat Bouchard est un scientifique exceptionnellement talentueux, un citoyen modèle, et n'en est qu'au début de ce qui sera certainement une carrière longue et distinguée en entomologie au Canada.



Bert and John Carr Award

Mr Todd Lawton

The 2014 recipient of the Entomological Society of Canada Bert and John Carr Award is Mr Todd Lawton. The Bert and John Carr Award is a cash award given to support research activities on the faunistics, natural history or taxonomy of Canada's insect fauna.

Mr Lawton will use the award to complete a survey of northern Manitoba tiger beetles in the genus *Cicindela* initiated in August 2005. Surveys conducted by Mr Lawton to date (2005-2008) have resulted in range extensions for seven species in northern Manitoba. Additionally, the purpose is to collect specimens to investigate variation in colour and maculations for *C. limbalis*, *C. tranquebarica* and any other species where atypical colour or pattern is observed, and to document any unusual behaviours in the north; for example, in 2008 Mr Lawton observed *C. limbalis* feeding and mating near dusk, well beyond their normal activity period. Emphasis will also be placed on finding

Prix Bert et John Carr

M. Todd Lawton

Le récipiendaire 2014 du prix Bert et John Carr de la Société d'entomologie du Canada est M. Todd Lawton. Le prix Bert et John Carr est un prix en argent remis afin de soutenir des activités de recherche sur la faunistique, l'histoire naturelle ou la taxonomie de la faune entomologique du Canada.

M. Lawton utilisera ce prix pour terminer un inventaire des cicindèles du genre *Cicindela* dans le nord du Manitoba débuté en août 2005. Les inventaires menés jusqu'à maintenant par M. Lawton (2005-2008) ont fourni des extensions de l'aire de répartition pour sept espèces dans le nord du Manitoba. De plus, le but est de capturer des spécimens afin d'étudier les variations de couleur et de maculations pour *C. limbalis*, *C. tranquebarica* et toute autre espèce pour laquelle des couleurs ou des patrons atypiques sont observés, et afin de documenter tout comportement inhabituel dans le nord. Par exemple, en 2008, M. Lawton a observé *C. limbalis* se nourrissant et s'accouplant presqu'à la brunante, bien au-delà de la période normale d'activité. L'emphase sera également mise afin de trouver des populations additionnelles de *C. hirticollis*, une espèce rare et écologiquement sensible. M. Lawton visitera des sites antérieurs en plus d'étendre son inventaire dans le coin nord-ouest de la province. Le travail de terrain sera complété durant 3 semaines en mai et début juin 2015. Les résultats de ces inventaires au nord seront publiés dans *Cicindela*, une revue trimestrielle dévouée aux cicindèles.

M. Lawton a étudié l'écologie et l'évolution à l'Université de l'ouest de l'Ontario (UWO) de 1979 à 1981, et a de l'expérience en recherche par des postes d'été à l'UWO et au musée national du Canada et en tant que technicien avec Énergie atomique du Canada. Depuis 1989, il a été préposé de soutien pour le Main Street Project Inc. (un refuge

additional populations of *C. hirticollis*, a rare and ecologically sensitive species. Mr Lawton will revisit previous sites as well as extend the survey into the northwest corner of the province. The field work would be completed during 3 weeks in May and early June 2015. Results from these northern surveys will be published in *Cicindela*, an American quarterly journal devoted to Cicindelidae.

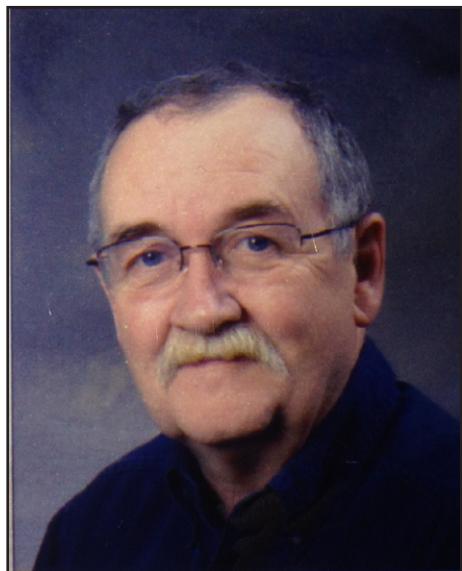
Mr Lawton studied Ecology and Evolution at the University of Western Ontario 1979-1981, and has research experience from summer positions at UWO and the National Museum of Canada, and as a technician with Atomic Research Canada. Since 1989, he has been a Client Support Worker at the Main Street Project, Inc. (a shelter for homeless persons in Winnipeg), and he is Founder and Executive Director of Quagga Stray Cat Rescue, a no-kill cat shelter in Winnipeg.

Mr Lawton has a long-standing interest in the Carabidae, and particularly the Cicindelinae. He has studied and collected *Cicindela* for 16 years and maintains the most complete (and perhaps largest [20,000 specimens]) Canadian collection of North American species. He has also assembled a collection of domestic and international *Carabus*, comprising approximately 4000 specimens and 450 species, and North American *Scaphinotus*, with approximately 2000 specimens and 50 species.

Of particular note is that Mr Lawton had the pleasure of meeting the Carrs several times during the 1980's. He first met them at the Fox Valley Sand Dunes in Saskatchewan, where they happened to be searching for tiger beetles on the same day. Thus, he has a personal connection to both the people for which the award is named and the province in which the 2014 JAM is held.

pour les sans-abris à Winnipeg) et il est le fondateur et directeur exécutif de Quagga Stray Cat Rescue, un refuge pour les chats sans euthanasie à Winnipeg. M. Lawton a un intérêt de longue date pour les carabes, et particulièrement les cicindèles. Il a étudié et capturé des *Cicindela* pendant 16 ans et maintient la collection canadienne la plus complète (et peut-être la plus grosse [20 000 spécimens]) d'espèces nord-américaines. Il a également assemblé une collection de *Carabus* domestiques et internationaux, comprenant environ 4000 spécimens et 450 espèces, et de *Scaphinotus* nord-américains, avec environ 2000 spécimens et 50 espèces.

À noter que M. Lawton a eu le plaisir de rencontrer les Carr à plusieurs reprises durant les années 1980. Il les a rencontrés pour la première fois à Fox Valley Sand Dunes en Saskatchewan, où ils cherchaient justement des cicindèles le même jour. Il a donc une connexion personnelle avec les gens en l'honneur de qui le prix a été nommé et la province dans laquelle la réunion conjointe 2014 se tient.



Norman Criddle Award

Brian Olson

The Norman Criddle Award recognizes the contribution of an outstanding non-professional entomologist to the furtherance of entomology in Canada. The recipient is selected by the affiliate society that hosts the annual meeting of the Entomological Society of Canada.

The Entomological Society of Saskatchewan is pleased to nominate Brian David Olson of Hazlet, Saskatchewan, as the 2014 Criddle Award winner.

Brian Olson is a teacher by inclination and training. He received his Bachelor of Education degree from the University of Regina, and was a classroom teacher, vice-principal, principal, and school division administrator for 30 years spanning 1974 to 2004. During that time, Brian focused his teaching on senior science programs, especially biology. In his role as a biology teacher Brian instilled in his students a wonder of their natural environment and introduced them to the fascinating world of insects.

Prix Norman Criddle

Brian Olson

Le prix Norman Criddle reconnaît la contribution exceptionnelle d'un entomologiste amateur à l'avancement de l'entomologie au Canada. Le récipiendaire est sélectionné par la société affiliée qui reçoit la réunion annuelle de la Société d'entomologie du Canada. La Société d'entomologie de Saskatchewan est heureuse de nommer Brian David Olson de Hazlet, Saskatchewan, comme récipiendaire du prix Criddle 2014.

Brian Olson est enseignant par intérêt et formation. Il a reçu son baccalauréat en éducation de l'Université de Régina, et a été enseignant, vice-directeur, directeur et administrateur de commission scolaire durant 30 ans de 1974 à 2004. Durant ce temps, Brian a concentré ses enseignements aux programmes de sciences séniors, particulièrement en biologie. Dans son rôle d'enseignant en biologie, Brian a instillé à ses étudiants les merveilles de leur environnement naturel et les a introduits au monde fascinant des insectes.

Dans son engagement pour la croissance personnelle et professionnelle, Brian a obtenu un baccalauréat en science de l'Université de Regina en 2000. Son œil de lynx pour les détails l'a amené à prendre un cours en illustration scientifique à distance de l'Université du Nebraska de 2001 à 2005. Brian a de nombreuses illustrations publiées à son crédit. Il a dessiné les illustrations du livre *Grasshopper Identification and Control: Methods to Protect Crops and the Environment*, écrit par Dan Johnson de l'Université de Lethbridge et publiés par AAC et Sask Pulse Growers. L'illustration du criquet *Metator pardalinus* (Saussure)

In his commitment to personal and professional growth, Brian obtained a Bachelor of Science degree from the University of Regina in 2000. His keen eye for detail led him to take a class in scientific illustration by distance from the University of Nebraska from 2001-2005. Brian has numerous published illustrations to his credit. He drew the illustrations for the book *Grasshopper Identification and Control: Methods to Protect Crops and the Environment*, written by Dan Johnson of the University of Lethbridge and published by AAFC and Sask Pulse Growers. The illustration below of the grasshopper *Metator pardalinus* (Saussure) is an example of Brian's formidable drawing talent.

In 2006 Brian obtained a Master of Science degree with a specialization in Entomology from the University of Nebraska in the subject area of grasshopper diversity in disturbed habitats (oilfield reclamation). As an example of "Once a teacher, always a teacher", Brian was contracted by the Graduate Studies Department of the University of Nebraska to develop an evaluation instrument which would be administered to all potential graduates as a pre-requisite to granting a M.Sc. in Entomology.

Besides introducing students to the fascination of insects, Brian has furthered the knowledge of entomology in Canada by working with Dan Johnson in a survey of entomological species in the Great Sand Hills of Saskatchewan-Alberta. His broad knowledge of biological systems was recognized when he recently served as the Integrated Pest Management Specialist with the Saskatchewan Ministry of Agriculture.

Brian is truly a renaissance man. Prior to his 30 year career as a biology teacher, Brian was an instructor in weaponry and the outdoors to recruits in the Canadian Armed Forces Reserves; there he specialized in the subjects of mines, high-explosives, and chemical and biological warfare. He has been a fur trapper, municipal weed inspector, pest control officer, and hail adjuster for a hail insurance company, where he developed new methods in

plus bas est un exemple du formidable talent pour le dessin de Brian.

En 2006, Brian a obtenu une maîtrise en science avec une spécialisation en entomologie de l'Université du Nebraska sur la diversité des criquets dans les habitats perturbés (remise en état des champs pétroliers). Pour illustrer la devise « prof un jour, prof toujours », Brian a été engagé sous contrat par le département des études graduées de l'Université du Nebraska pour développer un outil d'évaluation qui pourrait être administré à tous les étudiants gradués potentiels comme prérequis pour accéder à la maîtrise en entomologie.

En plus d'introduire les étudiants au monde fascinant des insectes, Brian a approfondi la connaissance de l'entomologie au Canada en travaillant avec Dan Johnson sur un inventaire des espèces entomologiques à Great Sand Hills en Saskatchewan-Alberta. Sa vaste connaissance des systèmes biologiques a été reconnue quand il a récemment servi comme spécialiste de la lutte intégrée auprès du ministère de l'agriculture de Saskatchewan.

Brian est réellement polyvalent. Avant ses 30 ans de carrière comme professeur de biologie, Brian était instructeur en armes et plein air afin de recruter dans la réserve des forces armées canadiennes : il s'est spécialisé dans les mines, explosifs et armes chimiques et biologiques. Il a été trappeur, inspecteur municipal de mauvaises herbes, officier du contrôle des ravageurs, et expert en grêle pour une compagnie d'assurance contre la grêle, où il a développé de nouvelles méthodes pour déterminer les pertes causées par la grêle dans les lentilles. Il a surveillé l'établissement d'insectes pour la lutte biologique contre l'euphorbe érosive dans une municipalité de Saskatchewan. Brian a travaillé pour le département de biologie de l'Université de Régina durant une saison, établissant une station biologique à Fort Walsh, Saskatchewan. Afin de documenter l'histoire naturelle de la région, il a clôturé environ 10 km de brousse. Cette expérience a

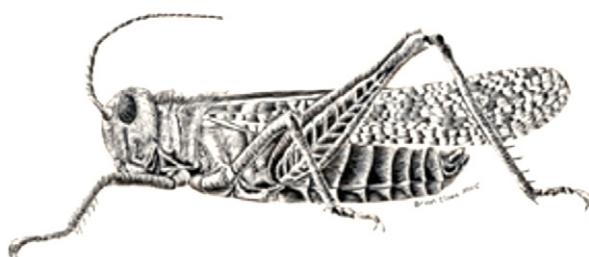
determining hail losses in lentils. He oversaw the establishment of insects for the biological control of leafy spurge in a Saskatchewan municipality. Brian worked for the Biology Department of the University of Regina one season, establishing a biology field station at Fort Walsh, Saskatchewan. In the process of cataloguing the natural history of the area, he fenced approximately 10 km of bush land. This experience may have whetted his appetite for wood work; Brian is an experienced house contractor, and has built a log house from cutting and peeling logs to completely finishing the home.

Brian is an active member of the Saskatchewan Natural History Society, the Canadian Wildlife Federation, and the World Wildlife fund, where he is a member of the Operation Rescue Team for Endangered Wildlife.

Brian Olson is the quintessential field naturalist, and is well deserving of the Norman Criddle Award for 2014.

peut-être aiguisé son appétit pour le travail du bois : Brian est un entrepreneur d'expérience, et a bâti une maison en bois rond, de la coupe des bûches à la finition de la maison.

Brian est un membre actif de la Société d'histoire naturelle de Saskatchewan, de la Fédération canadienne de la faune, du Fonds mondial pour la nature pour lequel il est membre d'une équipe d'opération de sauvetage pour les espèces menacées.



Metator pardalinus (Saussure) drawn by Brian Olson. Ink on Scratchboard. Hexapod Herald Vol. 17, No. 3, June 2005. Department of Entomology, University of Nebraska - Lincoln, Lincoln, Nebraska.

Metator pardalinus (Saussure) dessiné par Brian Olson. Encre sur carton de grattage. Hexapod Herald Vol. 17, No. 3, juin 2005. Département d'entomologie, Université du Nebraska - Lincoln, Lincoln, Nebraska.

Dear Buggy / Cher Bibitte

Chris MacQuarrie



Dear Buggy,

Well, it finally happened. I have an interview for my first 'real' job. This is very exciting, but also a bit scary. Do you have any advice for me on how to prepare?

Signed 'Interviewing in Invermere'

First, let me congratulate you on the interview! Just reaching this stage is a big step forward in your career. Even if you don't get the job you will have gained some valuable experience to help you the next time around. You're right though, an interview can be very scary. The best way to make it less so is to be prepared ahead of time.

Do your homework

It seems that this should go without saying. Obviously, you need to know what type of job you will be interviewing for and the job advertisement should give you a general idea of the scope of the position. However, it is dangerous to rely solely on the ad, as the roles and duties of a given job will vary among employers, and may differ from your own perception of the position (for instance, your idea of what an entomological technician is may differ wildly from that of your potential employer). Moreover, job ads are often written to be very generic so having some specific knowledge about the company and their work can help you anticipate the type of questions you may receive during your interview.

Start by researching the employer and their work. If the job is with industry or government, peruse the official website to gain insight on the projects that are currently underway. If the job is with a scientist at a university or in a research laboratory, then look at the researcher's website for ideas on the scope of their current research program. Can't find a website for the scientist? Then look at the last few papers they've published. From this research, you should be able to get an idea of the employer's expectations. In some cases, you can ask for a list of the skills and abilities that you must be able to demonstrate in the interview. These are sometimes referred to as the 'knowledge requirements' for the position and are often listed along with the job posting. If they're not, it doesn't hurt to ask.

So now that you've done your homework and found out all you can about the position, what should you do with this information? You study. For instance, say you are interviewing as a field agent for a crop protection firm and your research indicates the company provides pest management advice for weeds. This suggests that the successful candidate for the job would be expected to be able to identify weeds, along with insects. Now, you may never have learned about weeds in your degree program. So you buy a weed guide and over the course of a few evenings you familiarize yourself with the most common weeds you might encounter in your region. Will you become an expert? No, but that's not the point (and your CV will reveal this anyway). By demonstrating that you can learn and act to anticipate the needs of the business, you put yourself in a better position to impress a potential employer during the interview.

Chris MacQuarrie is a research scientist with Natural Resources Canada's Canadian Forest Service in Sault Ste. Marie, Ontario. This is the penultimate column for 'Dear Buggy' if you have comments on this or any of the past columns please email them to me at cjkmacquarrie@gmail.com; drop me a line on Facebook via the student group or contact me on Twitter at @cmacquar.

Know the lay of the land

When you do your homework, you're learning about the job. To learn the lay of the land is to understand the culture of the company or laboratory. Why is this important? A big part of getting a job is convincing an employer that you fit in with the rest of the team. For your own sake, you also want to understand the nature of the work environment. For starters, you want to make sure it's the kind of place you want to work. Toxic workplaces are real and you want to avoid any situation where you would be uncomfortable. Second, you want to anticipate what kind of organizational structure exists at the workplace and anticipate how you would fit within this structure. If the job involves a lot of time spent working alone, you will want to demonstrate to the employer that you can take initiative and solve problems independently. Conversely, if the workplace is big on teams, you will want to show that you play well with others. Lastly, you want to understand the culture in the workplace. Culture sounds like a funny word to apply here, but it's appropriate. If you're the relaxed type but the boss runs a high-pressure environment, you'll need to know how to adapt.

Learning about your potential employer and workplace culture can be harder than finding out about the job itself. It's not like you can just call up and ask them. During your time in grad school, I hope that you have been building a network of colleagues and peers. Now is the time to use that network. Having a source 'on the inside' is best, but those folks can be hard to come by. A friend in the same industry, or working with a similar group could have some insight, and fortunately, at least in Canada, the entomologist community is small enough that it is likely you'll have a connection through someone. Social media can help here too. Finding out this kind background information is part of the reason why services such as LinkedIn exist. Use your connections as best you can in order to give yourself a leg up on the competition.

Ask the right questions

All interviews have a section where the interviewer will ask you if you have any questions for them. This is the best place to show them kind of person you are, and the kind of employee you'd be. This part of the interview is also a great chance to show that you've done your research. You could ask about the projects you might be working on ("I noticed on your website you're working on projects X, Y and Z; would I be working on any of these projects?") or show how you fit into the workplace ("I know you like to work in a team structure. What kind of role would I be playing?"). If you can't think of anything, or these aspects have been covered already in the interview, then use this as an opportunity to interview the interviewer. You could ask about something you found in your research and were genuinely curious about ("I read your recent paper in *The Canadian Entomologist*. Where did you come up for the idea for that project?"). Or you could ask questions that may give you more insight into the workplace culture. If time and location allows, you can also ask to have a tour of the facility where you may be working. Even if the timing does not work, it shows a level of interest that is generally appreciated by potential employers. Just be aware, this needs to seem natural and make sense in the conversation, you don't want to give the wrong impression. What you're doing is trying to show that you're an engaged and interested candidate. If you can show that, then it's likely the interviewer is going to think that you're an engaging and interesting person, perhaps someone they might want to have around.

On a related note, during this part of the interview it's fair to ask about specific duties and compensation. Most employers are professional and won't hold it against you. If they do, that's a sign perhaps it's likely not a great place to work. (Just be aware that sometimes the interviewer might not be able to answer this question. For instance, in government the person interviewing you won't be the person who decides your compensation. Regardless, they still should be able to give you the broad parameters).

Practice, practice, practice

Like you said, a job interview can be scary. You'll be nervous, dressed in uncomfortable clothes and be in unfamiliar surroundings. Under those conditions, it's difficult to do your best. In that respect it's not much different than presenting at a conference and so the same advice applies. Practice your interview skills ahead of time so you're comfortable with your responses. Your university's career centre might offer the opportunity to do a mock interview from which you could get some expert feedback. If that's not an option, then ask a friend to play the part of the interviewer. Preferably, this would be someone who works in the field or has participated in an interview process before. Even if your practice session is nothing like your real interview, you'll still have had the chance to think about what you're going to say before you get to the main event.

Of course, if you will be required to give a presentation, then it goes without saying that you need to know it cold. This will likely be the most important presentation that you'll ever give. You should know it inside out and backwards and be able to give it in your sleep. Practice it until you're sick of it, then practice it some more.

Well *Interviewing*, I hope that this helps. Interviews are a strange beast, they are perhaps one of the few times in life that being good at something means you don't get to do it that often. By being prepared for each interview, you give yourself a good chance of getting the job you want. Of course, that means you likely won't have to interview again, or at least I hope not for a very long time.

Good luck!

Data Loggers for Environmental Research

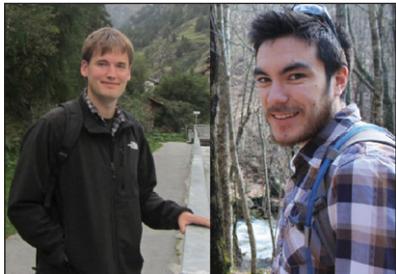
Onset data loggers, weather stations, and software enable you to gather, track, and analyze the full range of environmental data - accurately and reliably, every time.



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onset
HOBO Data Loggers

(paid advertisement/ publicité payée)



Whether you were sweeping, tapping, trapping, or pipetting, hopefully you had a successful summer of research! The ESC Joint Annual Meeting in Saskatoon is coming up soon, and we hope to see you there. Events relevant to students include the Student Mixer (details to be announced), an opportunity to meet with other students from all over the country, and the Graduate Student Showcase on Sunday evening, where you can see completed graduate projects presented in a more in-depth format.

Silent Auction Donations

The Student Affairs Committee will be holding a silent auction of books, art, and other knick-knacks at the meeting in Saskatoon, with all proceeds going to the ESC student scholarship fund. If you have entomology-related books that you are no longer using or you don't want to haul along during your next move, you can bring them to the meeting and donate them to support the ESC. If you are an artist or photographer, small pieces of your art or framed photos make a great donation.

Getting involved with the ESC

The Student Affairs Committee (SAC) is looking for new members. Volunteering for the SAC is a great way to get involved with the society and promote entomology to students across Canada. If you are interested in joining the SAC, or just have suggestions for new initiatives in the coming year, find one of us at the meeting or email us at students@esc-sec.ca.

See you at the meeting!

Paul & Boyd

Que vous fauchiez, tapiez, capturiez ou pipetez, nous espérons que vous avez eu un été de recherche réussi! La réunion conjointe annuelle de la SEC à Saskatoon arrive bientôt, et nous espérons vous y voir. Les évènements pertinents pour les étudiants incluent le cocktail étudiant (les détails suivront) – une opportunité de rencontrer d'autres étudiants de tout le pays – et la vitrine aux étudiants gradués le dimanche soir, où vous pourrez voir des présentations de projets gradués terminés dans un format plus approfondi.

Dons pour les enchères silencieuses

Le comité des affaires étudiantes tiendra des enchères silencieuses de livres, artisanat, et autres babioles à la réunion à Saskatoon, tous les profits allant au Fonds des bourses étudiantes de la SEC. Si vous avez des livres en lien avec l'entomologie que vous n'utilisez plus, ou que vous ne voulez pas trimballer lors de votre prochain déménagement, apportez-les avec vous à la réunion et donnez-les pour soutenir la SEC. Si vous êtes un artiste ou un photographe, des petites œuvres ou des photos encadrées feraient de magnifiques dons.

S'impliquer au sein de la SEC

Le comité des affaires étudiantes cherche de nouveaux membres. Faire partie du comité est une excellente façon de s'impliquer au sein de la société et de promouvoir l'entomologie pour les étudiants au Canada. Si vous êtes intéressés à joindre le comité, ou si vous avez des suggestions pour de nouvelles initiatives dans la prochaine année, venez trouver l'un de nous à la réunion ou écrivez-nous à students@esc-sec.ca.

À bientôt à la réunion!

Paul & Boyd

Thesis Roundup / Foisonnement de thèses

If you or a student you know has recently defended an entomology-related thesis at a Canadian University, and would like notice of this accomplishment published here and on the ESC website, please email students@esc-sec.ca with the relevant information following the format below.

Si vous, ou un étudiant que vous connaissez, a récemment soutenu sa thèse dans un domaine lié à l'entomologie dans une université canadienne, et que vous voulez publier l'avis de cette réalisation ici et sur le site web de la SEC, merci d'envoyer les informations pertinentes selon le format ci-dessous à students@esc-sec.ca.

Catton, Haley. PhD, 2014. Patterns and impact of herbivory by a biological control insect on its target weed and a native nontarget plant. Co-supervisors: Bob Lalonde, University of British Columbia Okanagan, and Rose De Clerck-Floate, Agriculture and Agri-Food Canada, Lethbridge Research Centre.

Colwell, Megan J. MSc, 2014. Nutrition and pesticide content of honey bee-collected pollen in the Maritime provinces. Supervisor: Dave Shutler, Acadia University.

Mlynarek, Julia J. PhD, 2014. Explaining interspecific variation in susceptibility and resistance to parasitism in damselflies. Supervisor: Mark R. Forbes, Carleton University.

Mori, Boyd A R. PhD, 2014. Following the plume: Development of a pheromone-based monitoring and management program for *Coleophora deauratella* (Lepidoptera: Coleophoridae). Supervisor: Maya L. Evenden, University of Alberta.

The advertisement features a black and white photograph of a beetle with prominent mandibles and a patterned body on the left side. The right side is a green background with white text. The text reads: "ATELIER JEAN PAQUET INC.", "MATÉRIEL ENTOMOLOGIQUE ENTOMOLOGICAL SUPPLIES", "Courriel: jeanpaquet@webnet.qc.ca", and "www.atelierjeanpaquet.com".

(paid advertisement/ publicité payée)

Criddle-Vane house razed by fire

Cedric Gillott

The historic Big House at the Criddle/Vane Homestead Provincial Heritage Park at Aweme, Manitoba, burned to the ground on the night of 25 June 2014, likely the result of arsonists. When the RCMP arrived at the site around 10 p.m., the house was engulfed in flames, and firefighters from Wawanesa were unable to save the home which was completely destroyed.

The 40-foot-by-40-foot house, built in 1906 by Percy Criddle to replace a log cabin erected in 1882, was, like its predecessor, named ‘St. Albans’. It had eight bedrooms, sufficient to accommodate Percy, his mistress, wife and 13 children! For accounts of the fascinating history of the Criddle-Vane family, notably their emigration from London, England, to Canada and their homesteading at Aweme, Manitoba, see Holliday (2006) and Shorthouse (2011). One of the children, Norman, was to become an internationally known entomologist and natural historian, as well as a talented painter. He was appointed western Canada’s first entomologist by C. Gordon Hewitt in 1913, and in 1917 the first entomological laboratory in western Canada was built on the Criddle property at a cost of \$50!

The last Criddle family members left the property in 1960, and though the site was acquired by the Manitoba Government in 1970 and became a provincial park in 1974, it gradually grew into disrepair. However, starting in the early 2000s, a group of volunteers (the Criddle-Vane Homestead Heritage Committee) began refurbishing the site, including restoration of the buildings and development of interpretive trails.

Unfortunately, the remoteness of the site and lack of any security made the property an easy target for vandalism. At least eight incidents had been reported since 2009, and in its 27 February 2012 edition, the Brandon Sun carried a report of vandals breaking into some of the buildings, breaking windows, smashing furniture and kicking in walls (see Bulletin 44: 73). Though the perpetrators (five male teenagers) were eventually caught (Brandon Sun, 27 June 2014), this clearly did not dissuade others from an even greater act of stupidity!

References

- Holliday, N.J. 2006. Norman Criddle: Pioneer entomologist of the Prairies. *Manitoba History*, **51**: 8-15.
Shorthouse, J.D. 2011. Criddle/Vane homestead at Aweme, Manitoba, receives a facelift. *Bulletin of the Entomological Society of Canada*, **43**: 23-26.



The Brandon Sun



The Brandon Sun

The Big House before and after the fire.

Information for this note was taken from news reports in the Brandon Sun and the references cited. We thank the Brandon Sun for allowing us to reproduce the photographs.

Cynipid gall in stained glass as a retirement gift – where science meets the arts

Mery Martinez-Garcia, Lorraine Brosseau-Démoré, Brandy Fenwick, Andrée-Michelle D'Aoust-Messier, and Sophie Laurence

Retirement for all scientists who have devoted their lives to researching a chosen discipline is a milestone in one's career and an opportunity to reflect on past accomplishments. For friends and colleagues of the retiree, choosing a meaningful retirement gift that symbolizes an entire career can be a challenging task. The retirement of Laurentian University entomologist Joe Shorthouse in July of 2013 presented us with such a challenge, but we think we chose a perfect gift for Joe and our purpose here is to share the experience of creating it.

Before discussing the artistic components and the process of creating Joe's gift, we would like to tell you a little bit about him first. Joe first discovered his passion towards insects as a 7-year old when he was shown an insect collection at a Boys Club meeting in Lethbridge, Alberta. He specifically became interested in insect galls aged 12 when on a field trip near Lethbridge with Ruby Larson (Shorthouse 2011). After he finished graduate school at the Universities of Alberta and Saskatchewan, and an NSERC PDF with Agriculture Canada in Regina, Joe landed his dream job at Laurentian University in Sudbury, where he developed courses in general, applied, and forest entomology, along with a course in Canadian Environmental Biology. His passion for teaching, enthusiasm for the subject matter, his commitment to well-illustrated lectures, and his ability to enlighten lectures with stories was inspirational.

A couple of years ago, Joe's previous use of histology to study gall biology sparked the idea of "Guess what I had for dinner"- a histological examination of the digestive system of various insects. Joe recognized an artistic quality to the photographed images of sectioned and stained insect gut contents. Inspired by Joe's attempts at bringing together the arts and science, we were determined to honour him in an artistic way that represented his 30 years of research on insect galls. We decided to gift him with a stained glass art piece of an insect gall on a rose leaf (Fig. 1).

One of us, Mery Martinez, besides being a vertebrate physiologist in Laurentian's Department of Biology, is a stained glass artist. Lorraine Brosseau-Démoré is a technologist in the Department, who has dabbled in various artistic media. Andrée-Michelle D'Aoust-Messier and Sophie Laurence were both graduate students in the Department and Brandy Fenwick was Joe's last graduate student. Lorraine and Mery thought initially about a cynipid gall in stained glass, but needed the expert eye of Brandy who knew the anatomy of this particular gall. Andrée and Sophie did not hesitate to jump into the adventure to create the piece.

For our first meeting, we came up with a rough draft of the gall we wanted to create. Later, Brandy carefully selected some pictures of galls induced by several species of the cynipid wasp

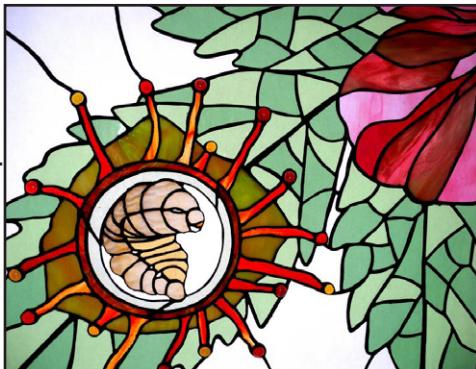


Fig. 1. Stained glass art piece of a dissected gall of *Diplolepis polita* on a rose leaf

Mery Martinez-Garcia (mmartinez-garcia@laurentian.ca) and her co-authors are from the Department of Biology at Laurentian University in Sudbury. All photos were taken by the co-authors or Joe Shorthouse.

Diplolepis. From the multiple images, we decided the gall of *D. polita* (Figs. 2 and 3) was to be our subject. Over several meetings on Saturday mornings, we laid out a design that would make our stained glass creation come to life and at the same time, be scientifically accurate. The plan was to incorporate a dissected gall with a full grown larva inside, with the correct number of segments, a layer of nutritive cells lining the larval chamber, spines, host leaflets, and petals of a nearby flower. Two tracings were made of the pattern and each of the many small pieces numbered (Figs. 4 and 5).



Fig. 2. Cluster of galls of *Diplolepis polita* on *Rosa acicularis*



Fig. 3. Dissected gall of *Diplolepis polita* with mature larva

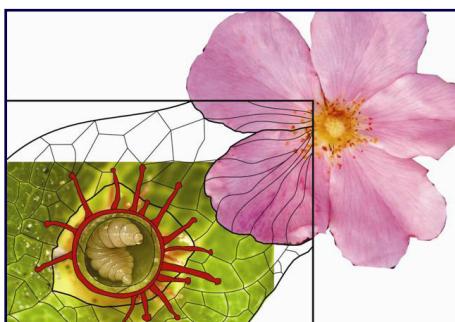


Fig. 4. Designing the stained glass pattern using photographs of a dissected gall and rose flower

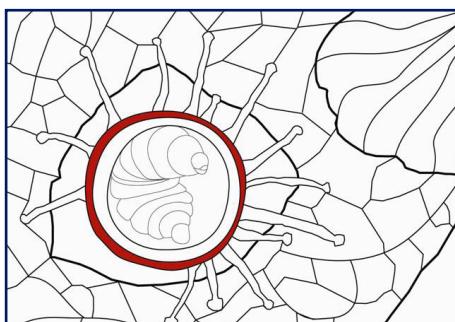


Fig. 5. Completed stained glass art pattern

While the making of a pattern is absolutely necessary, a very important aspect that we wanted to achieve was a piece that stimulates the viewer's brain differently depending on the light that moves across the glass throughout the day and the angle the piece is viewed at. To achieve this, one of the most important steps in stained glass art is the selection of the right colour and texture of glass. Furthermore, it was important to be as anatomically correct as possible during the making of the larva (Fig. 6), petals and leaves. Each piece of glass was carefully traced based on the pattern and evaluated for accuracy on shape and colour. The pieces were broken using glass pliers, then arranged on the work board resembling a jig-saw puzzle (Figs. 6 and 7). Pieces usually do not fit as planned, requiring the edges to be ground. Once all pieces were in place, the edges of each were covered with copper foil and smoothed with fingers and a wooden stick, and then the pieces were assembled once again. Melted solder was placed between the pieces on each side until the seams were filled. The heavy stained glass art piece was then installed in a frame and chains attached for hanging in a window.



Fig. 6. Cut and assembled glass pieces to form the larva of *Diplolepis polita*



Fig. 7. Assembling the glass pieces and making adjustments

We completed the piece over a 3-month period, meeting for 4 hours most Saturday mornings plus devoting hours to foiling each piece of glass in the evenings. The gift was finally presented to Joe in May of 2013, and to say he was astounded is an understatement (Fig. 8). Joe was not only impressed by the artistic nature of the piece, but was touched by the significance of the gall chosen. He studied galls of *D. polita* for his MSc at the University of Alberta (Shorthouse 1970) and again for his PhD at the University of Saskatchewan (Shorthouse 1975). It was also one of two galls Brandy researched for her MSc at Laurentian University (Fenwick 2013). The night of the unveiling, Joe also disclosed that this particular gall not only directed his career in research, but also how it impacted his personal life. He met his wife Marilyn while sampling rose galls and she has since accompanied him on countless collecting trips.

To our satisfaction, the art work we crafted has prompted more joy and reflection for Joe and Marilyn than we could ever have imagined. We are pleased that our creation shines brightly in the Shorthouse dining room window and warms the hearts of all who see it. The piece serves as an ideal example of how combining complexities of the natural world with aesthetic experiences garnered by art brings the two disciplines together to their collective advantage.

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Fig. 8. The article's co-authors presenting the completed art piece to Joe for his retirement in May 2013

The Manitoba Museum launches new virtual exhibit featuring a plant-spotting app

On 28 July 2014, The Manitoba Museum launched Prairie Pollination (www.prairiepollination.ca), a virtual exhibit aimed at helping the public learn more about pollinating insects and the wild plants they depend on. The endangerment of pollinators and plants is a topic of concern to many Canadians, and The Manitoba Museum has important collections that help to understand this issue. Plant and insect specimens are very difficult to display in regular gallery exhibits, so the Museum decided to create an online exhibit open to all.

This new virtual exhibit can be found at www.prairiepollination.ca. The exhibit was developed in partnership with the Virtual Museum of Canada (VMC) Investment Program; the Heritage Grants Program, Manitoba Culture, Heritage and Tourism Department, Government of Manitoba; and The Manitoba Museum Foundation Inc.

The project was led by The Manitoba Museum's Curator of Botany, Dr Dina Bizecki Robson. She hopes that this exhibit will foster appreciation of these organisms and motivate people to make positive changes to their lives to help save them. "Pollinators need our help, but humans need their help even more," says Dr Bizecki Robson. "Two-thirds of our crop species worldwide depend on wild pollinators to some degree! Those pollinators need more than just crop plants to survive - they need wild plants too."

"The Government of Canada is proud to invest in partnerships such as this one," said the Honourable Shelly Glover, Minister of Canadian Heritage and Official Languages. "As we approach Canada's 150th anniversary in 2017, it is a wonderful time for all of us to learn more about our country, including about our natural heritage."

Photographs of endangered and common prairie plants, and their insect and bird pollinators, are beautifully illustrated in this exhibit. Watercolour paintings of wild plants from the Museums' famous Norman Criddle collection, and virtual tours of wild prairies with pollination scientists add depth and context to the specimens. There is even a free PlantSpotting app available for Android and Apple devices that will enable users to post their own pictures of wild plants and pollinators.

Teachers will also be able to help their students learn more about pollination through the lesson plans in the Virtual Museum of Canada Teachers' Centre. Using the multimedia resources provided, students will learn about the life cycles and habitats of plants and pollinators, and evaluate human impacts on prairie ecosystems and endangered species.

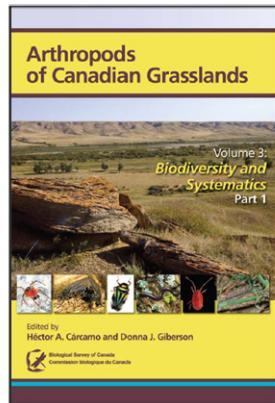
For more information or interviews, contact:

Greg Klassen
Communications and Marketing Manager
The Manitoba Museum
Direct Line: 204-988-0614
Mobile: 204-294-4024
Email: gklassen@manitobamuseum.ca

Volumes 3 and 4 in the Arthropods of Canadian Grasslands series published!

The Arthropods of Canadian Grasslands series is one of the main outcomes from the large Arthropods of Canadian Grasslands project of the BSC. With the publication of the series, the BSC hopes to increase awareness of the plight of Canada's grasslands, to draw attention to its associated arthropods, and to provide a baseline reference to support future studies of arthropods in these environments. The first two volumes focused on the formation and extent of native grasslands and subsets of their associated arthropods (Vol. 1) and arthropods in agro-ecosystems (Vol. 2). Volumes 3 and 4 provide more of a systematic treatment with checklists and ecological/distributional information for a variety of grassland insect groups.

Individual chapters are available for free download on the new Biological Survey of Canada Website (<http://biologicalsurvey.ca/monographs>), and books may be ordered through Volumes direct via <http://www.volumesdirect.com/SearchResult.aspx?KeyWords=Arthropods%20of%20Canadian%20Grasslands>



People in the news / Gens qui font les manchettes

Le 7 mai 2014, Charles Vincent a été élu «Fellow» de la Royal Entomological Society of London.

On May 7th 2014, Charles Vincent was elected a Fellow of the Royal Entomological Society of London.

Luc Carignan



Charles Vincent on the campus of Cambridge University.

Né à St-Sylvère de Nicolet, Québec, le 3 juillet 1924, Irenée Rivard fit son cours classique au Séminaire de Nicolet. En 1949, il complétait un BSc en agriculture à l'Ecole d'Agronomie (Université Laval) à La Pocatière. Il a complété une spécialisation en entomologie au Collège Macdonald de l'Université McGill en 1951 et un MSc en entomologie à l'Université Laval en 1953.

En 1948, il a travaillé comme aide-étudiant à Agriculture Canada/Belleville, sur les parasites indigènes de la Tenthredine de l'épinette et de la Tordeuse des bourgeons.

De 1949 à 1953, en tant que préposé technique à Agriculture Canada/Québec, il a travaillé dans les régions de Montréal et de Québec à des enquêtes sur les ennemis naturels de divers insectes, notamment la teigne des crucifères, la mouche de la carotte, le doryphore de la pomme de terre, la pyrale du maïs, et le perce-oreille. Il a fait des collections et l'examen de matériel pour des enquêtes sur le parasitisme naturel de la tenthredine du pin gris, de la tenthredine de l'épinette, de la tordeuse des bourgeons, de la tenthredine du bouleau, de la tordeuse du cerisier, du porte-case du mélèze et du papillon satiné.

De 1953-1955, en tant qu'agent de recherche à Agriculture Canada/Québec, il a travaillé à l'introduction de colonies de parasites des larves et des pupes de la mouche de la carotte à La Pocatière et à une étude sur leur établissement dans cette région. Il a introduit des colonies de parasites de criquets dans la région de Portneuf et en a suivi leur établissement. Il a aussi réalisé des enquêtes sur l'établissement des parasites introduits pour combattre la pyrale du pois en Gaspésie.

De 1955 à 1964, il a travaillé comme agent de recherche à Agriculture Canada/Belleville, où il a fait des études expérimentales sur l'interaction de l'aleurode des serres et de son parasite, *Encarsia formosa*. De 1956 à 1961, il a effectué des études sur l'écologie et le cycle évolutif de *Tyrophagus putrescentiae* (acarien infestant les produits d'entreposage) et de son prédateur, *Melichares dentriticus*, en vue d'établir un système écologique pour l'étude des principes de base gouvernant l'interaction d'un prédateur et de sa proie. De 1961 à 1964, il a étudié différentes espèces de Carabidés associées à diverses cultures de la région de Belleville, en vue de déterminer leur importance comme agents de lutte contre les insectes ravageurs de ces cultures.

De 1964 à 1965, il a été agent de recherche Agriculture Canada/Saint-Jean-sur-Richelieu, où il a œuvré comme chercheur de 1965 à 1982, année au cours de laquelle il a pris sa retraite. À Saint-Jean-sur-Richelieu, ses travaux avaient pour objet l'écologie, le comportement et la répression de certains insectes nuisibles aux arbres fruitiers du Québec, tels la mouche de la pomme, le chalcis du pommier, la petite pyrale de la pomme, la punaise terne, le charançon de la prune et la cochenille virgule, afin d'être en mesure d'appliquer des méthodes rationnelles de lutte intégrée contre ces mêmes déprédateurs.

Il était membre de nombreuses Sociétés scientifiques, notamment la Société d'entomologie du Québec, la Société de Protection des Plantes du Québec, la Société d'entomologie de l'Ontario, la Société d'entomologie du Canada, la Société Canadienne de Science Horticole, la Société des Zoologistes Canadiens et la Entomological Society of America.

Il a été auteur (fréquemment premier auteur) de 46 publications scientifiques, publiées notamment dans la Revue d'entomologie du Québec, Phytoprotection, le Canadian entomologist et le Canadian Journal of Zoology.

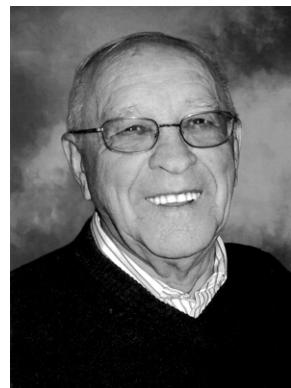
Il a été Directeur de la Société de Protection des Plantes du Québec de 1969 à 1971 et de 1974 à 1976, et Directeur de la Société d'entomologie du Québec de 1975 à 1977.

De 1970 à 1982, il a été Rédacteur en chef de la revue Phytoprotection.

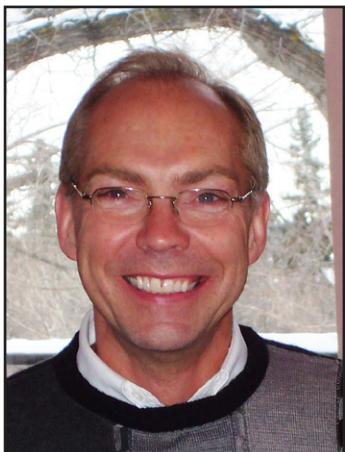
Sur la scène internationale, il a collaboré avec un groupe de travail sur la mouche de la pomme, avec des entomologistes canadiens et américains.

Irénée Rivard était un homme modéré, affable et diplomate. Il avait un sourire engageant. Il est décédé à Saint-Jean-sur-Richelieu le 19 mars 2014. Il laisse dans le deuil Edith Girard (sa femme depuis le 11 octobre 1952), cinq enfants survivants, et dix petits enfants.

Charles Vincent, AAAC, Saint-Jean-sur-Richelieu



**Irenée Rivard
1924-2014**



**Lloyd M. Dosdall
1952-2014**

Entomology lost a first-class research scientist and educator and a person of outstanding character when Dr Lloyd Dosdall passed away on 12 June 2014, at the age of only 61 years. Lloyd made very significant contributions to entomology and agriculture, but his professional achievements tell only part of the story; his many friends will also remember him as a man of remarkable kindness, generosity and integrity, with an invariably positive attitude.

Lloyd was born in Lestock, Saskatchewan, and spent his early years in the province. He completed his BSc at the University of Saskatchewan in 1974, followed in 1977 by an MSc in entomology studying the stoneflies of Saskatchewan. In 1975, he married Teresa Height, who would be his companion and best friend for the next 39 years. Lloyd then earned a BEd and for 6 years taught high-school science and biology in rural Saskatchewan. However, the lure of entomology was too strong, and in 1983 he returned to the University to begin a PhD evaluating the effects of the insecticide methoxychlor, then used for the control of larval black flies, on non-target

aquatic insects. A 2-year research associateship at the University of Manitoba's Biting Fly Centre followed, and then in 1989 Lloyd took up the position of field crop entomologist at the Alberta Environmental Centre in Vegreville, Alberta. Although he transferred with some trepidation from aquatic entomology into agricultural entomology, Lloyd made this transition with great success. He established a program on integrated management of insect pests of canola that continued for the next 25 years, both at Vegreville and after he joined the faculty of the Department of Agricultural, Food and Nutritional Science at the University of Alberta in 2001.

Lloyd was a very careful and diligent researcher, and his work on aquatic insects from the early part of his career is of high quality and still cited. In particular, his 1979 monograph on the stoneflies of Saskatchewan continues to be a standard reference for the region, and he published an update on stoneflies of the Prairie Provinces – with Donna Giberson – in 2014.

Lloyd was an excellent communicator at all levels. Of course, he had trained as a teacher, but the key to his success was his respect for and genuine interest in others, along with his concern for the accuracy and relevance of the material he taught. He was much loved both as a high school teacher and as a university professor because of his enthusiasm, commitment, love of teaching and care for students. These traits, coupled with Lloyd's assiduous preparation for occasions big and small, whether lessons, lectures, conferences or extension work, made his presentations clear and effective. Lloyd supervised 6 doctoral students and about 10 Masters students during his career at the University of Alberta, often co-supervising them with faculty members from the Department of Biological Sciences or with colleagues at Agriculture Canada. He devoted great care to all stages of graduate student supervision. Initially he secured funding and contributed thoughtful guidance to research plans. During his students' projects he introduced them to collaborative research and even arranged accommodations for field work. Finally, he supported them in the analysis of data and insisted on a high standard as they prepared papers and dissertations. He won several departmental "Teacher of the Year" awards. His obituary in the *Edmonton Journal* elicited such online tributes as "among the best professors I have ever had in my academic life", "a terrific supervisor and always so engaged and mindful of his students", and "it was hard not to be inspired".

Lloyd was extraordinarily productive, often working with multiple cooperators, not only entomologists but also weed scientists, plant breeders and agronomists. He published 144 refereed

papers in about 30 different international journals, 7 book chapters, and 56 non-refereed reports and popular articles. He made nearly 120 scientific paper or poster presentations at national and international meetings, including invited presentations, and many more at academic institutions and provincial extension meetings. Lloyd also secured substantial grants (more than \$4 million over his career), especially for the extensive field work that underpinned his research, and to support his graduate students. His skills as a writer were put to good use in both grant applications and published papers.

Lloyd's research in field crop entomology made key advances because he appreciated the complexity of natural systems. His work examined many aspects of the ecology of cropping systems in western Canada, with a particular focus on canola and its insect pests. He collaborated with other scientists to investigate agronomic practices that would reduce the impact of significant pests such as root maggots, flea beetles, and cabbage seedpod weevil. This work helped to promote the adoption of zero-tillage practices and reduce the use of insecticidal coatings on canola seeds. His studies on root maggot control were estimated to have saved Alberta producers millions of dollars annually in control costs. He also identified germplasm providing resistance to root maggots and cabbage seedpod weevils, which led to the development of resistant canola varieties. He developed a special interest in several recently invading insect pests in Alberta, particularly the very destructive cabbage seedpod weevil. These studies shed light on the life history, dispersal dynamics, and reproductive biology of the weevil, and on how populations of indigenous parasitoids responded to its invasion. The findings provide a foundation for possible future biological control of the weevil, an aspect he pursued with European collaborators.

In addition to these many studies of canola, Lloyd and his students and collaborators contributed significantly to the understanding of invasive alien pests of other crops such as the pea leaf weevil and cereal leaf beetle. He also helped to focus attention on the biodiversity of agroecosystems, and the interactions among the crop plants, insect herbivores, weeds, and natural enemies that inhabit them. This work, and Lloyd's extension efforts, sensitized the agricultural community as a whole to the great number and diversity of beneficial organisms and the need to protect them and learn more about them. As a result, Lloyd's professional and personal impact in agriculture was profound.

Lloyd's diverse audiences – researchers, faculty members, students, agriculture professionals, farmers, and others – all trusted him, a remarkable compliment to his character. Lloyd even made several well-received videos in which he talked about the pests of canola and their management (e.g. "Canola School - Cabbage Seed Pod Weevil Resistant Canola Varieties" [https://www.youtube.com/watch?v=6xDgT_Hh0Ao]). Lloyd appears to live on in such snapshots from the internet.

Lloyd's achievements in field crops research, information transfer, and improved agricultural practices were recognized by prestigious awards, such as the Alberta Science and Technology (ASTech) Leadership Award for innovation in agricultural science (2010) and the Farm Tech Award for outstanding contributions to Alberta's cropping industry (2013). He delivered presentations and workshops to audiences ranging from academic specialists to farmers in many other countries, including Australia, the Czech Republic, Egypt, Germany, New Zealand, the Peoples' Republic of China, Norway, Switzerland, the United Kingdom, and the United States of America.

As might be expected, Lloyd was active too in the entomological community, and brought his quiet but effective diligence and good judgement to many roles in the Entomological Society of Alberta and the ESC. He was an active member of the ESC Governing Board, as a Director at large (1996-1999) and as Regional Director for the Entomological Society of Alberta (2007-2010). He served on several ESC committees, such as the Scientific Committee for the Biological Survey of Canada, the Science Policy Committee, and the Membership Committee, and was chair of the Publications, Public Education, and Marketing Committees. He participated in various roles in the Entomological Society of Alberta, and was its President in 2011-2012. Just before his

illness he had been elected Second Vice-President of the ESC, although then he had to decline the post. Beyond his other achievements, therefore, Lloyd was an asset to the scientific community. His universal decency and respect for others stood out to entomologists who met him for the first time: everyone he met, including a beginning student, was made to feel important and rapidly put at ease.

Lloyd studied nature with scientific skill, but also took great joy in it. He enjoyed the beauty of the organisms he studied professionally, and liked nature photography. The flowers that he tended in his garden became the envy of the neighbours. He took his positive attitude to life into other interests too. For example, he enjoyed various forms of music; he was always happy to try something new with his friends; he loved social occasions, had a quiet but wicked sense of humour, and could tell stories in a hilarious way. He was very fit, and enjoyed running, skiing, and cycling. Lloyd was highly principled, but without any righteousness, as reflected by his empathy and thoughtfulness. Typically, he would give others rather than himself the benefit of the doubt and was always considerate of other people in social settings, ready to accept a task or obligation in the interest or harmony of the group.

After all of Lloyd's activities, career achievements, and successful personal relationships, his health problems came as a great shock in 2012. A diagnosis of lung cancer when he did not smoke was unexpected. Indeed, Lloyd had taken up running in the interest of fitness, years before, partly to help avoid the risk of an early stroke, and was devastated by the cruel alternative. Even so, Lloyd's outstanding character showed through as he confronted his illness with great dignity. He did his very best in all aspects to deal with his disease, remaining committed to fitness activities such as walking in all weathers. When some treatment success allowed it, he seized the opportunity to cycle, travel and even attend conferences for a good number of months. Indeed, he dipped back into entomology among the canola plants to collect a necessary set of samples for one of his students who could not. He continued to advise his graduate students and help them with the preparation of their theses even as his condition worsened again. Finally, Lloyd handled subsequent adverse developments magnificently, and – as usual – continued to think not of himself but of others, his integrity, compassion and humour undiminished. Those near him were aware that he was sustained throughout these difficult times by his deep but unobtrusive Christian faith and by Teresa's unfailing love and dedicated care.

Lloyd's memorial service, held in Sherwood Park, confirmed just how widely he was appreciated. About 200 people, both entomologists and others, came to pay tribute. All remembered Lloyd's enthusiasm, cheerfulness, kindness, generosity, honesty, integrity, helpfulness and modesty, as well as his skills and abilities.

Lloyd took such joy in life that it seems unfair that he has gone so soon. Those who knew him are deeply saddened by his loss, and the world as a whole is poorer too. Science and the country have been deprived of the further valuable contributions to entomology and agriculture that Lloyd would certainly have made. Nevertheless, Lloyd leaves a substantial legacy. In the professional arena, his careful research and insights, and their translation into beneficial agricultural procedures, stand as an example of responsible scholarship. On a personal level, he touched so many people that he will long be remembered as a colleague, teacher, supervisor, mentor, and friend. Lloyd well deserves such a twin legacy and we, like so many others, are honoured to have known him.

Hugh Danks (Ottawa) and Alec McClay (Sherwood Park)

64th Annual Meeting of Members and Board of Directors Meetings

The Annual Meeting of Members of the Entomological Society of Canada will be held at the Radisson Hotel, Saskatoon, Saskatchewan, on Tuesday, 30 September 2014. The Board of Directors Meeting will be held at the same location on Saturday, 27 September 2014, from 8:30 to 17:00. The incoming Board of Directors will also meet immediately following the Annual General Meeting. Matters for consideration at any of the above meetings should be sent to Alec McClay, Secretary of the ESC (see inside back cover for contact details).

64e assemblée annuelle et réunions du conseil d'administration

L'assemblée annuelle de la société d'entomologie du Canada se tiendra à l'hôtel Radisson de Saskatoon, en Saskatchewan, le mardi 30 septembre 2014. La réunion du conseil d'administration se tiendra au même endroit, le samedi 27 septembre 2014 de 8:30 à 17:00. Le nouveau conseil d'administration se réunira également immédiatement après l'assemblée annuelle. Les sujets à aborder pour n'importe laquelle de ces réunions doivent être envoyés à Alec McClay, secrétaire de la SEC (voir le troisième de couverture pour les coordonnées détaillées).

Highlights from the 18 June 2014 Executive Council Meeting, by conference call.

President Rebecca Hallett reported that the final accounts have been settled for the **2013 JAM** with a profit of \$29,800; this was split evenly with the Entomological Society of Ontario with no strings attached. A letter was received from the President of the Canadian Weed Science Society proposing **closer ties among Canadian societies** involved with pest management. It was agreed that communications could be enhanced by links to each others websites and a society news corner on the ESC website. Future links could include joint public outreach efforts and jointly hosted meetings. The Canadian Phytopathological Society has asked if ESC can support its bid to hold the International Plant Protection Congress in Vancouver in summer 2019. Due to the joint meeting with the Entomological Society of America in Vancouver in 2018, it may be difficult for ESC to give organizational support. It was suggested that ESC could be involved in supporting the scientific program but not in logistics.

The Executive discussed bids received from Strauss Event & Association Management and Base Consulting for **management of ESC's administrative operations**. The Ad Hoc Committee on Headquarters Operations and the Finance Committee were charged with making a recommended choice, which will be considered by a full Board of Directors conference call in August for a final recommendation to members. An online consultation process will be set up to allow member discussion. It was agreed to offer the Office Manager a contract extension until the end of December 2014 to cover the transition time to the selected new arrangements.

Scanning of the Society's document archives at Headquarters in Ottawa is under way. About 10 years of documents have been scanned so far, working from newer to older.

Work on updating the **Standing Rules** to make them consistent with the Not-for-profit Corporations Act (NFP Act) and the new By-laws is under way and a final draft is imminent.

Treasurer Scott Brooks reported that the Society is in good financial standing. The audit of 2013 finances took place during the end of March. Initial drafts of the 2013 financial statements for the Society and the Scholarship Fund were reviewed by the Board and approved on 29 May 2014. In order to maintain the traditional late fall timing of our JAM, the Society will need to **change its financial year end** to comply with the NFP requirement that the Annual General Meeting be held no later than 6 months after the end of the preceding financial year. The Executive recommended that the financial year end should be changed to 30 June beginning in 2015; this change will need to be approved by the full Board.

The President, Treasurer, incoming Treasurer Christopher Dufault, and Chair of the Finance Committee Pat Bouchard met with John Harrison, President, BMB Consulting Services Inc., to discuss the Society's **organization, finances, and business/strategic planning process**. The President will follow up on these discussions. Meetings were also held with two investment counsellors in Ottawa to discuss ways of improving the Society's return on its **investment portfolio**.

The Canadian Entomologist remains in a healthy state, with 115 new submissions received between 1 October 2013 and 31 May 2014. With the change to the requirement for French abstracts, the time period between acceptance and sending papers to production by Cambridge University Press has been much reduced. A request from CUP to increase the page output in *TCE* by 10% in 2015 was accepted. CUP also wishes to make changes to the open-access policy which would include a 6 month embargo on sharing of the Accepted Manuscript in some scenarios, and would no longer allow any sharing of the full text Version of Record. The Publication Committee will respond to these changes. A special issue of *TCE* resulting from the Emerald Ash Borer symposium held during the 2013 JAM is scheduled. Digitizing of all past issues of the *Bulletin* is under way.

The Executive discussed plans for Society activities at the **International Congress of Entomology** in Orlando, Florida, in September 2016. There will be no Heritage Lecture, Student Mixer, or President's Prizes, but other mixers and social events will be held as normal. Murray Isman will chair an ad hoc committee to coordinate Society involvement in ICE 2016.

It was decided to withdraw from the **Entomological Society of America Committee on Science Policy Fellows**, but a Canadian version may be developed.

The **Student Affairs Committee** has begun organizing student activities for the 2014 JAM in Saskatoon and is also involved in the ICE International Student Affairs Committee, whose mandate is to engage international students of entomology in the 2016 ICE.

Webmaster Dicky Yu has been overhauling the **Society website**, changing the static webpages to dynamic webpages using PHP and MySQL, but the launch of the revised version will be held off until a decision is made on Headquarters operations, which may affect management of the website.

Rose De Clerck-Floate reported on behalf of the Board of Trustees of the **Scholarship Fund**. The Fund is being appropriately managed to ensure compliance with Charities Directorate rules by keeping the capital, donations, and interest revenue generated by the Fund separate from the Society's General Fund. To ensure a proper separation is maintained between the Scholarship Fund and the Society, she recommended that the Board of Trustees' Rules and Guidelines should be drafted by and for the Trustees only; the Society's Board or membership cannot vote to accept or change them.

ESC 2013 Financial Statements

ENTOMOLOGICAL SOCIETY OF CANADA

Consolidated Statement Of Financial Position

December 31, 2013	2013	2012
Assets		
Current		
Cash (note 7)	\$ 112,811	\$ 74,290
Accounts receivable	65,352	521
JAM recoverable	4,000	14,278
Inventory (notes 3, 7)	-	479
Prepaid expenses	622	1,718
Investments (notes 3, 5, 7)	106,335	109,011
	<u>289,120</u>	<u>200,297</u>
Restricted cash (notes 3, 7)	32,382	6,964
JAM recoverable	-	4,000
Investments (notes 3, 5, 7)	406,981	442,606
Digital archives (note 3)	51,500	51,500
Property, plant and equipment (notes 3, 6, 7)	137,058	141,101
	<u>\$ 917,041</u>	<u>\$ 846,468</u>
Liabilities and Net Assets		
Current		
Accounts payable and accrued liabilities	\$ 11,972	\$ 9,578
Deferred revenue	28,635	8,211
	<u>40,607</u>	<u>17,789</u>
Unrestricted Net Assets		
General fund	398,636	349,576
Restricted Net Assets (note 7)		
Endowment fund	67,146	73,551
Building fund	137,058	141,101
Scholarship fund	267,986	258,818
Book project fund	5,598	5,633
	<u>477,798</u>	<u>479,103</u>
	<u>\$ 917,041</u>	<u>\$ 846,468</u>

The attached notes and schedule form an integral part of these consolidated financial statements.

Approved on behalf of the Board of Directors:

ENTOMOLOGICAL SOCIETY OF CANADA

Schedule A

Consolidated Statement Of Revenue and Expenditures**For The Year Ended December 31, 2013**

	2013		2012	
	Budget (note 8)	Actual	Budget (note 8)	Actual
Revenue				
Regular membership	\$ 28,800	\$ 25,700	\$ 28,800	\$ 26,934
Student membership	3,000	3,580	3,000	2,653
Cambridge University Press	71,500	121,314	67,400	38,801
Emeritus	-	-	700	-
Subscriptions (recovered)	-	-	-	(260)
Page charges	-	-	-	2,030
TCE Back Issues/Royalties	-	12,496	-	15,629
Extra income	-	8,142	-	1,498
Sales of memoirs	-	77	-	384
Office postage	1,000	1,977	3,000	2,039
BSC publications	50	-	50	-
Miscellaneous	2,000	3,658	3,000	4,849
J&B Carr award donations	-	4,987	-	-
JAM proceeds/profits (expenses)	-	(6,279)	-	9,973
	106,350	175,652	105,950	104,530
Expenditures				
Bulletin publishing and mailing	\$ 6,000	\$ 1,472	\$ 9,000	\$ 1,823
CJAI publication cost	2,500	-	1,400	1,416
Publishing and mailing	2,000	-	12,500	-
Salaries and benefits	60,000	63,673	41,000	58,051
Cambridge University Press membership	9,000	8,045	10,000	-
Office and bank charges	7,500	12,021	7,500	13,453
Professional fees	8,000	12,425	8,000	7,843
Prizes, awards and brochures	-	2,112	1,000	978
Honoraria	7,000	4,900	7,000	5,780
Committees	2,000	-	4,000	-
Other organizations and societies	1,900	1,000	3,000	400
Editor expenses	1,000	923	-	914
JAM awards and prizes	6,500	1,502	-	-
Annual meeting				
Grant	-	-	-	1,000
Honoree	-	-	2,000	1,796
Government board				
Annual meeting	10,000	7,325	6,000	9,459
Other meetings	1,000	-	1,000	-
President's discretionary fund	1,000	700	1,000	859
General	5,000	5,934	-	5,372
Webmaster expense	1,000	390	1,000	3,635
	131,400	122,422	115,400	112,779

The complete 2013 financial statements are available in the Members' Area of the ESC website.
 Les états financiers 2013 complets sont disponibles dans la section des membres du site de la SEC.

The Canadian Entomologist: more content, better service!

The Editorial Board of *The Canadian Entomologist* (*TCE*) welcomes the comments that we receive from readers and authors. We take these comments seriously and implement appropriate changes when possible. We are pleased to announce three such changes that will further improve the speed, quality and flexibility of the service provided by *TCE*.

- Simplified submission requirement. Authors previously were required to submit papers with abstracts in both French and English. Although they can still do so, authors now need only submit an abstract in the language of the submitted paper; i.e., French or English. This change eliminates delays associated with having abstracts translated, which will accelerate manuscript publication.
- New open access option. Although *TCE* has no page charges, there has always been a subscription fee. As of 2014, authors now have the option of paying a one-time open access (OA) fee. Payment of the OA fee makes articles freely available as soon as they are published online to anyone with internet access.
- More content. Elimination of page charges has increased submissions to the journal, with a consequence increase in the number of papers being accepted for publication. In response, *TCE* is expanding its content by 10%. This equates to an annual increase of 72 pages, or approximately 1-2 additional papers per issue.

In addition to the above changes, there are several other items that may be of interest. ‘Instructions to Authors’ were revised in March of this year. Revisions include instructions for the submission of ‘Supplementary Material’ and a link to third-party services that specialize in language editing.

You also may wish to read “Open access, predatory publishers, *The Canadian Entomologist*, and you”. This article appears in the *Bulletin* of the ESC (Sept. 2013, p. 131), and examines issues that should be interest to anyone publishing in scientific journals (http://esc-sec.ca/bulletin/bulletin_sep_2013.pdf).

In closing, we note that Dr Chris Buddle (McGill University, Montreal) will be completing his tenure as Editor-in-Chief this fall. Dr Kevin Floate (Agriculture and Agri-Food Canada, Lethbridge) is the incoming Editor-in-Chief.

We thank you, the authors and readers, for making *TCE* an ongoing success.

Chris Buddle
Kevin Floate

The Canadian Entomologist : **plus de contenu, un meilleur service!**

Le comité éditorial de *The Canadian Entomologist* (*TCE*) reçoit des commentaires des lecteurs et des auteurs. Nous prenons ces commentaires sérieusement et implémentons les changements appropriés lorsque possible. Nous sommes heureux d'annoncer trois changements qui amélioreront la vitesse, la qualité et la flexibilité du service fourni par *TCE*.

- Exigences de soumission simplifiées. Les auteurs devaient auparavant soumettre des articles avec des résumés en français et en anglais. Bien qu'ils le puissent toujours, les auteurs ne doivent maintenant soumettre qu'un résumé dans la langue de l'article soumis, i.e., français ou anglais. Ce changement éliminera les délais associés à la traduction des résumés, ce qui accélérera la publication des manuscrits.
- Nouvelle option de libre accès. Bien que *TCE* n'ait pas de frais de publication, il y a toujours eu des frais d'abonnement pour les lecteurs. Depuis 2014, les auteurs ont maintenant l'option de payer des frais uniques de libre accès. Le paiement des frais de libre accès rend les articles disponibles gratuitement dès leur publication en ligne à n'importe qui ayant accès à Internet.
- Plus de contenu. L'élimination des frais de publication a augmenté le nombre de soumissions à la revue, en augmentant par conséquence le nombre d'articles acceptés pour publication. *TCE* augmentera donc son contenu de 10%. Cela représente une augmentation annuelle de 72 pages, soit environ 1-2 articles de plus par numéro.

En plus des changements mentionnés ci-dessus, plusieurs autres aspects sont d'intérêt. Les instructions aux auteurs ont été révisées en mars de cette année. Les révisions incluent des instructions pour la soumission de matériel supplémentaire et un lien vers des services de tierces parties spécialisées dans la révision linguistique.

Vous voudrez peut-être aussi lire « Open access, predatory publishers, *The Canadian Entomologist*, and you ». Cet article apparaît dans le *Bulletin* de la SEC (sept. 2013, p.131) et présente des sujets qui devraient intéresser quiconque publie dans des revues scientifiques (http://esc-sec.ca/bulletin/bulletin_sep_2013.pdf).

En terminant, mentionnons que Dr Chris Buddle (Université McGill, Montréal) terminera son mandat de rédacteur en chef cet automne. Dr Kevin Floate (Agriculture et agroalimentaire Canada, Lethbridge) sera le nouveau rédacteur en chef.

Merci aux auteurs et aux lecteurs de faire de *TCE* un succès continu.

Chris Buddle
Kevin Floate

Book reviews / Critiques de livres

Beetles of Eastern North America. Evans, Arthur V. 2014. Princeton University Press. 560 pp. Paperback. ISBN 978 0 691 13304 1 \$35.00 US.

Evans' "Beetles of Eastern North America", already widely known as "BENA", was one of the most eagerly anticipated books of 2014 and, as expected, it is indeed a beautiful and highly functional volume. In fact, it is so good we can start our review with a very brief executive summary directed at anyone with any interest in insects at all: buy it ... you will like it. After all, what is not to like about an authoritative volume covering over 1400 species with over 1500 mostly mouth-watering images, all attractively bound for the bargain price of 35 bucks? But look beyond the obvious pleasure and utility in the best-yet photographic guide to eastern beetles and you will see a book that is at the vanguard of an exciting trend towards making more and more insect groups accessible to almost everyone. Eastern beetles have now joined birds, dragonflies and butterflies as attractive and available items on the menu for the burgeoning North American naturalist community, and we can only hope that the same fortunate juxtaposition of skill, dedication and unprecedented access to quality images that allowed Evans' thorough treatment of the beetles manifests itself in future works on other groups of insects not currently covered in field guides. Of course, Coleopterists have a bit of an edge over aficionados of most other insect groups because the pursuit of beetles has long been attractive to naturalists, and because the tools for beetle identification are already superior to those available for most insects other than butterflies and moths. For example, the Peterson Field Guide to Beetles (White, 1983) was probably the best field guide ever published at the time of its appearance, the richly illustrated Manual of Common Beetles by Dillon and Dillon (1961) made it easy to recognize many distinctive taxa, the keys to northeastern species in Downie and Arnett (1996) were remarkably comprehensive, and the authoritative classification in American Beetles (Arnett and Thomas 2000, Arnett *et al.* 2002) provided an authoritative systematic overview of the fauna. Evans builds on all that and, most importantly, utilizes the unprecedented resources newly available through digital image collections, especially BugGuide.net, to produce a book that would not have been possible even a few years ago.

BENA is not a field guide in the usual sense of the word, as it is too large (10" x 8") and heavy (about 4 pounds) to be practical in the field, but few people carry paper books into the field anyhow. Most people now use "field" guides to compare to digital images brought back from the field, or to peruse for images of things to be sought on future outings. For this, the book is perfect. It starts with a stunning front cover image of *Phanaeus vindex* and opens to a scale and a quick photographic index to the 10 most commonly encountered insect families. Novices will find this useful, and will soon learn that most routinely encountered beetles are in this short list. The family key that appears a few pages later is also aimed at quickly breaking down the order for novice coleopterists, and contains only 15 couplets. The introductory text includes a colourfully illustrated treatment of beetle anatomy, followed by about a dozen pages summarizing basic natural history and behaviour of beetles and somewhat more space devoted to tips for finding, photographing, and collecting beetles. The instructions for making a beetle collection are thorough, even though it is likely that most users of this book will collect only with a digital

BEETLES of Eastern North America



Arthur V. Evans

camera and will not bother with capturing their finds, especially after reading on page 39 that “transporting any living beetles or other insects across county, state or international borders requires written permission from state or federal agricultural authorities, or both” and then on page 49 that “transporting live beetles may be regulated within counties, states and provinces, and is strictly regulated across state, provincial and international borders”.

Most of the book (440 of its 560 pages) is organized like an insect collection on paper, including all of eastern North America’s beetle families and about 1400 species. While this might only cover 10% of the eastern species, over half (50-60%) of the eastern genera are covered, with the untreated diversity largely belonging to groups that most people are unlikely to encounter, or to large families (Carabidae, Staphylinidae, Chrysomelidae, Curculionidae) that would be impractical to treat more thoroughly in a general book. Each family is introduced with a succinct and interesting paragraph covering general biology, a short technical diagnosis, comments on similar families (an extremely useful feature also used in White’s classic field guide, and one that greatly enhances Evans’ abbreviated key by allowing the user to quickly compare groups), collecting notes, and the number of genera and species found both in all of North America and in the east. Beyond that, each page is usually divided into four images of different species each with a more or less equal-sized text block that includes size range, a very brief and telegraphic diagnosis, information on when and where the species occurs, and the number of species in the genus. The coverage is amazing, including images of many hard to get taxa (Sphaeriusidae, Micromalthidae and Cerophytidae are among the illustrated taxa neither of us has seen alive, let alone photographed). The combination of the updated classification and associated photos is especially useful in putting a “face to the name” for the many beetle taxa that have been recently renamed or reorganized.

The photography is mostly stunning, showing a level of detail never before seen in this kind of comprehensive photographic guide. Remarkably, many of these images (~70%) are credited to the very naturalists and amateur entomologists for whom this book was written. Inevitably in this sort of multi-source image collection there are a few images that are substandard or clearly staged on inappropriate backgrounds. For example, some of the beetles photographed on leaves are taxa that we have never seen on leaves, but that we often see at lights. We think these would have been better shot on an obviously artificial background such as a white card. But perfect portraits outnumber the flawed images. One of our few criticisms of this wonderful book is the difficulty of finding out who took the really outstanding pictures, as the individual photos are not credited where they appear, and picking through the seven pages of photo credits at the back of the book in search of a particular image is a daunting task.

No book is perfect, and we have a few other minor criticisms to temper our overall conclusions about this magnificent book. For example, the organization of images within families clearly follows subfamily lines, but the subfamilies are not named in the text. To find out the subfamily you need to go to the 22-page appendix “Classification of the beetles covered in this book”. This is inconvenient and also seems like wasted space, since it adds nothing to the text plus index other than the subfamily names. The family diagnoses, in a few cases, do not contain enough to fully differentiate different families, and the ‘Similar Families’ section doesn’t always include groups that might be confused with each other (e.g., Kateretidae and Nitidulidae). The caption titles lead off with common names for a seemingly random selection of species but the rationale and source for these common names isn’t apparent, many are more cumbersome than the corresponding scientific names, some are ambiguous, and several are applied at the species level although the same names have been used in the past at the generic level or above. The standard diagnoses attached to each of the four images per standard page are generally useful, but sometimes fail to clarify what features are unique to the taxon illustrated (for example, see the diagnoses for the two

eastern *Megalodacne* species [Erotylidae]). In a few cases, a brief note on the differences between an illustrated species and one not included in the book are noted (e.g., *Trichiotinus* species), but in general it was beyond the scope of this book to comment on features (e.g., punctuation, colouration, setation, genitalia) to be sought in sorting out species in larger genera. Some natural history is covered in the family write-ups, but this is done in a somewhat patchy fashion and some images seem to call out for a bit more commentary on biology. The *Pseudozonitis longicornis* (Meloidea) (photographed on a sheet) on page 368, for example, looks just like a firefly but there are no comments on why this might be so.

Despite these few nit-picking criticisms, the bottom line remains that this is the best photographic guide to beetles anywhere, ever. It is a thing of beauty, and belongs on every entomologist's and naturalist's shelf.

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Steve Marshall and Steve Paiero

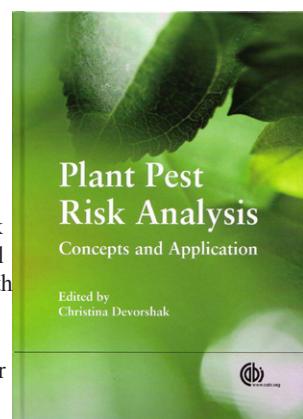
University of Guelph

Plant Pest Risk Analysis: Concepts and Application.

Devorshak, Christina, ed. 2012. CABI, Wallingford, U.K. 312 pp. ISBN-13: 978-1-78064-036-5. U.K. £75.00, hardback. Kindle edition also available.

This book was edited by Christina Devorshak who also wrote roughly half of it along with a team of eight other contributors, all from the USDA APHIS PPQ CPHST Plant Epidemiology and Risk Analysis Laboratory (PERAL) in Raleigh, N.C., U.S.A. The digital version can be read using Adobe Digital Editions (available for both Windows and Mac) which can easily be installed to a computer. The ‘authorizing’ computer can enable transfer of a digital book between up to six computers and mobile devices. Should the reader wish to have a paper version, it can be printed once, but this can only be done in batches of up to 50 pages every 30 days from a downloaded copy. I read this book partly from paper and partly from the computer screen; I will provide my thoughts on both approaches at the end of this review.

The book comprises five main parts, each containing four chapters. Each chapter has an extensive set of references. The book also includes sections for information about contributors, acknowledgements, acronyms, a glossary, and an index. There are 22 colour plates in the middle of the book which amply illustrate the concepts described throughout the book.



Part I pertains to the background and history of pest risk analysis. The introductory chapter states that the book was written to fill a gap in educational materials by providing “a solid foundation in the field of pest risk analysis and its application to regulatory plant protection” for upper-level students of agriculture as well as regulatory plant protection professionals. Furthermore, the reader should develop a working knowledge of the framework, language, applications and uncertainty in pest risk analysis, methods of pest risk assessment, and the theory and application of pest risk management. The second chapter explores the meaning of hazard, risk and risk analysis and how, in the steps of performing risk analysis, hazard identification leads to risk assessment which, in tandem with mitigation identification, lead to risk management and decision-making. The next chapter includes a history of the development of plant quarantine regulations and phytosanitary laws at the national level, and how this has led to international cooperation agreements. The author notes that such agreements oblige countries to conduct risk analyses in order to justify their protective measures and recognize that, while there is the need for a country to protect itself from the spread of pests, this must be done without implementing undue restrictions on trade. In the fourth chapter, the international legal and regulatory framework for risk analysis is also examined including the background to the development of the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement). It also describes in depth the International Plant Protection Convention (IPPC), including the types of standards it has produced. Both are intended to provide the international framework for safe and fair trade.

Part II addresses the components and applications of pest risk analysis. The first chapter focuses on the most important terminology used in pest risk analysis (such as ‘a pest’, ‘measures’, ‘areas’ and ‘invasive species’) and their related concepts (such as ‘potential economic importance’). It is apparent that worldwide there is “considerable variation in how terms are used and defined, and how concepts are applied” and that some of these are still under debate or lack international harmonization. In the next chapter the types of information and evidence needed for pest risk analysis, and good practices for its gathering, analysis and use are outlined along with a brief, but excellent, discussion of the use of expert judgment in the event of information gaps. A whole chapter is devoted to the assessment of economic impact that is a critical part of pest risk analysis and is required under both the SPS Agreement and the IPPC. The last chapter discusses the types and different applications of pest risk analysis for organisms, pathways (i.e., “any means that allows entry and spread of a pest”), commodities, supporting new or revised policies, and prioritizing resources.

Part III covers methods of pest risk assessment. The first two chapters discuss qualitative and quantitative methods, and the last two, pest risk assessment, and mapping, climate and geographic information. The author noted that qualitative methods use subjective information and judgements to provide a description of risk, and are transparent in the assumptions made, and about uncertainty. In comparison, quantitative methods use objective information to provide a numerical estimate of risk. In reality most pest risk analyses are a combination of these methods, and where data are limited may be semi-quantitative. A good discussion of the use of deterministic and probabilistic models is also included. The chapter on pest risk assessment focuses ably on initiating a pest risk analysis and describing the likelihood of introduction, and the options for economic consequences, along with examples from two species of insect. The final chapter of Part III, provides what the authors consider to be a “brief” introduction to Geographic Information Systems (GIS), some mapping methodologies and the use of mapping in phytosanitary risk analysis.

Part IV discusses risk communication and uncertainty in pest risk management. It begins with a chapter pertaining to the theory and background of pest risk management. I particularly like the definition provided for pest risk management, being the “evaluation and selection of options to

reduce the risk of introduction and spread of a pest.” The next chapter presents an examination of risk management from a “pathway pest risk analysis perspective” based on common import scenarios to change the risk at one or more points in the series of events that form a pathway. It also includes a good critique of the United States Department of Agriculture’s requirement for probit 9 response to treatments, as well as a thorough discussion of a systems approach to achieving the desired level of phytosanitary security. A chapter on risk communication in pest risk analysis makes the point that this is simply the process of explaining risk. It goes on to explore various types of communication (i.e., crisis, care, consensus) along with best practices. The final chapter in Part IV examines uncertainty in pest risk analysis, ending with the critical message that practitioners of pest risk analysis “need to be faithful to the separation of evidence and uncertainty.”

Part V includes special topics for pest risk analysis, and begins with two chapters pertaining to the applications of pest risk analysis for beneficial organisms and weed risk assessment. The first chapter assesses why a pest risk analysis is needed on beneficial organisms and provides guidance on how this is done. The next chapter on weed risk assessment outlines the terminology relating to invasive plants as well as the procedures for predicting which species will become weeds. A whole chapter discusses the appropriate level of protection, and the precautionary principle, and provides examples of jurisprudence from six relatively recent trade disputes. The final chapter describes key concepts and relevant international agreements pertaining to both invasive species and living modified organisms, and how the Convention on Biological Diversity (CBD) and the Cartagena Protocol on Biosafety (CP) intersect with the IPPC and the SPS Agreement.

This book had a number of features that I liked. For one thing, it is very comprehensive in its treatment of the subject and clearly reflects the authors’ considerable experience in teaching and writing about it. The book is well structured; each chapter ends with a summary of the information provided and, despite being written by nine authors, the chapters flow well from one to the next and are cross-referenced as needed. Figures, tables and colour plates also illustrate concepts well. The book uses lots of acronyms but, whenever one forgets what they stand for, these can be easily referenced from an acronyms listing.

So which is better -- the electronic version or the printed one? The electronic version permits the reader to search more quickly for chapters, keys words, etc., than the print version, and to bookmark text at will. And my high resolution screen permitted me easily to view a large-sized, full page at once. Nevertheless, I found the pages that I printed easier to read and, consequently, I felt that I absorbed this material better. Jabr (2013) attributes this difference to screens generally being more cognitively and physically taxing than paper. But other readers may feel otherwise. In my case, having access to both versions served me well; I found the paper version was best for deep consideration of complex passages, and the electronic version was best for looking up information quickly. You *can* have it both ways.

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C.P. Dufault
Christopher P. Dufault & Associates Inc.
Ottawa, Ontario

Books available for review / Livres disponibles pour critique

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Book reviews should be approximately 800-1200 words in length. They should clearly identify the topic of the book and how well the book meets its stated objective. Weaknesses and strengths of the book should be described.

Formatting of the review should follow that of reviews in recent issues of the Bulletin. A scan of the book cover (jpeg or tiff format, about 500 kb) should be submitted with the review.

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Les critiques de livre doivent compter entre 800 et 1200 mots. Elles doivent clairement identifier le sujet du livre et si le livre rencontre bien les objectifs énoncés. Les forces et faiblesses du livre devraient être décrites.

Le format des textes doit suivre celui des critiques des récents numéros du Bulletin. Une version numérisée de la couverture du livre (en format jpeg ou tiff, environ 500 kb) devra être soumise avec la critique.

Currently available for review / Disponibles pour critique

Rivers, D.B. and G.A. Dahlen. 2014. The Science of Forensic Entomology. 400 pp. Wiley Blackwell. ISBN: 9781119940371 [paperback]

Williams, P., R. Thorp, L. Richardson and S. Colla. 2014. Bumble Bees of North America. 208 pp., 150 colour illus. Princeton University Press. ISBN 9780691152226 [paperback or ebook]

Bug Bingo. 2014. Board game, 64 illus. Laurence King Publishing. ISBN: 9781856699402.

Lemelin, R.H. (Ed.) 2013. Management of Insects in Recreation and Tourism. 365 pp. Cambridge University Press. ISBN: 9781107012882 [hardcover]

Morales-Ramos, J., G. Rojas and D.I. Shapiro-Ilan. 2013. Mass Production of Beneficial Organisms, 1st Edition, Invertebrates and Entomopathogens. 764 pp. Academic Press. ISBN: 9780123914538 [hardcover or ebook]

Abrol, D.P. (Ed.) 2013. Integrated Pest Management, 1st Edition, Current Concepts and Ecological Perspective. 584 pp. Academic Press. ISBN: 9780123985293 [hardcover or ebook]

Onstad , D.W. (Ed.) 2013. Insect Resistance Management, 2nd Edition, Biology, Economics, and Prediction. 560 pp. Academic Press. ISBN: 9780123969552 [hardcover or ebook]

- Sanborn, A.F. 2013. **Catalogue of the Cicadoidea (Hemiptera: Auchenorrhyncha)**, 1st Edition. 1002 pp. Academic Press. ISBN: 9780124166479 [hardcover]
- Lonsdale, O. 2013. **Review of the Families Tanypezidae and Strongylophthalmyiidae, with a Revision of *Neotanypeza* Hendel (Diptera: Schizophora)**. Smithsonian Contributions to Zoology, Number 641. vi + 60 pages, 92 figures, 5 tables. (<http://si-pdr.si.edu/dspace/handle/10088/21132>)
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Bob Lalonde

Digger bee

Bulletin of the Entomological Society of Canada

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Assistant Editor: Donna Giberson

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

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Rédacteur: Cedric Gillott
Rédactrice adjointe: Donna Giberson

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



Jamming in Saskatoon

This is my unashamed plug for the upcoming Joint Annual Meeting soon to be held in Saskatoon, aimed at any last minute ditherers still undecided about attending. While we cannot promise a conference on the scale of last year's sesquicentennial celebration in Guelph, we guarantee a meeting with some terrific science and some interesting 'asides', not least being the local Saskatoon Soaps (<http://www.saskatoonsoaps.com/>) as our post-banquet entertainment. We believe we have lined up two excellent plenary speakers in Bernie Roitberg (Simon Fraser University, the Society's 2008 Gold Medallist) and Barry Pittendrigh (holder of the C.W. Kearns, C.L. Metcalf and W.P. Flint Endowed Chair in Insect Toxicology at the University of Illinois - Urbana-Champaign). As well, some top students will be presenting their work in the Graduate Student Showcase, and there will be five symposia covering biological control, molecular biology, biodiversity, and urban forest entomology. All of this, plus the usual President's Prize and contributed oral presentations, posters (including those submitted for a President's Prize), mixers, and the pleasure of seeing colleagues and friends from across the country, make the JAM a 'must attend' event.

If you haven't yet done so, get off your backside, submit your registration and arrange your accommodation and transport! Don't get left on the outside looking in. Be one of those who can say "Do you remember that fantastic meeting in Saskatoon in 2014?"

Réunion à Saskatoon

Voici ma pub avouée pour la prochaine réunion conjointe annuelle qui se tiendra à Saskatoon, s'adressant à toute personne hésitante ne sachant toujours pas si elle viendra. Bien que nous ne puissions pas promettre une conférence du niveau de la célébration sesquicentenaire de l'an dernier à Guelph, nous pouvons par contre garantir une réunion avec de la bonne science et des « à-côtés » intéressants, parmi ceux-ci les Saskatoon Soaps (<http://www.saskatoonsoaps.com/>) comme divertissement après le banquet. Nous croyons avoir réuni deux excellents orateurs avec Bernie Roitberg (Université Simon Fraser, le Médailleur d'or 2008 de la Société) et Barry Pittendrigh (détenteur de la chaire C.W. Kearns, C.L. Metcalf et W.P. Flint à l'Université de l'Illinois – Urbana-Champaign). Quelques bons étudiants présenteront également leurs travaux lors de la vitrine aux étudiants gradués, et il y aura cinq symposiums couvrant la lutte biologique, la biologie moléculaire, la biodiversité et l'entomologie forestière urbaine. Tout cela, en plus des habituelles présentations et affiches pour le prix du président et régulières, les cocktails, et le plaisir de voir des collègues et amis de tout le pays, font de la réunion conjointe annuelle un événement à ne pas manquer.

Si vous ne l'avez pas encore fait, inscrivez-vous et réservez votre transport et hébergement! Ne restez pas à l'écart. Soyez un de ceux qui pourront dire « Vous souvenez-vous de cette réunion fantastique à Saskatoon en 2014? ».

Entomological Society of Canada, 2013-2014

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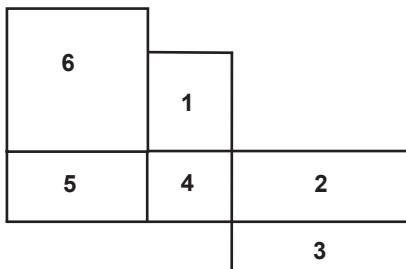
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Images

Beneath the title: *Cucullia lychnitis* caterpillar on a stem of Verbascum (Escalona, Aragon, Spain) 1 July 2011. Photo: Francois Lieutier

- 1 Young Entomologist Aya Hoover in action inspecting a frame of honey bees (*Apis mellifera*) (Beaverlodge Research Farm, Alberta, Canada). Photo: Shelley Hoover
- 2 One of Canada's rare stag beetles, *Sinodendron rugosum*, walks across the moss (Burnaby Mountain, British Columbia, Canada); 31 July 2013. Photo: Sean McCann
- 3 Female *Phidippus regius* (Lake Placid, Florida, United States of America). Photo: Guillame Dury
- 4 Cabbage seedpod weevil (*Ceutorhynchus obstrictus*), an invasive pest of canola (Delémont, Switzerland). Photo: Tim Haye
- 5 Treehoppers (Membracidae) found along a small tree in Guyana being tended by ants (not shown). Photo: Steven Paiero
- 6 Cicada, *Platypedia areolata*, emerged from its chrysalis (Idaho, United States of America). Photo: Malcolm Furniss

Back cover: An undetermined Orthoptera (too many tarsomeres for a shorthorned grasshopper) moving its biomass up the food chain. Say's phoebe is doing the honours...
Photo: Bob Lalonde

Français à l'intérieur de la couverture avant.

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