

Bulletin

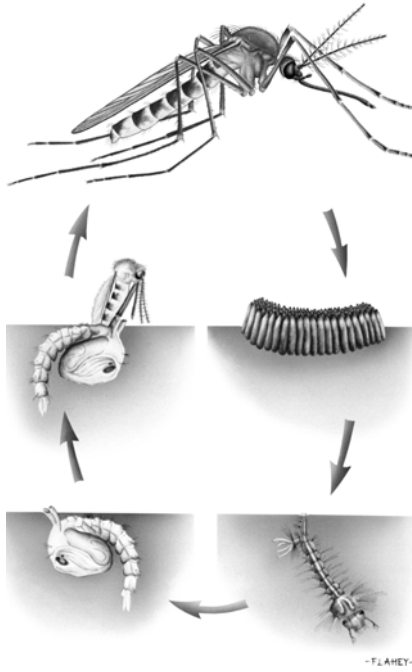
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Le passé, le présent et l'avenir

Le passé

Stuart Walley est un entomologiste qui a atteint l'âge de 100 ans le 24 avril 2004. Il a reçu son BSc du Collège d'agriculture de l'Ontario en 1926 et sa Maîtrise du Iowa State College en 1928. Sa scolarité était complétée dans le cadre d'un PhD mais le Gouvernement ne lui permit pas de terminer ce diplôme. Stuart a publié 70 articles scientifiques, principalement sur les parasites ichneumonides. En mai, l'Université de Guelph célébra ses 40 premières années et a invité tous les gradués de 1964 et ceux ayant gradués avant 1964. Le Président de l'Université de Guelph a écrit à Stuart qu'il y aura probablement peu de gradués ayant plus de 100 ans. Malheureusement, la santé de Stuart ne lui permettra pas de participer à cet événement. Un de ses amis lui a présenté des lettres de la Reine Elizabeth II, du Gouverneur général, du Premier Ministre du Canada, de son Député fédéral et du Maire d'Ottawa. Stuart a également reçu des mots du Président de la Société d'entomologie du Canada et de la Société d'entomologie des Etats-Unis. Meilleurs voeux Stuart Walley !!! Merci à Ed Becker pour sa merveilleuse contribution en ayant souligné cet événement digne de mention. (Note: Stuart est un peu plus âgé que le célèbre évolutionniste Ernst Mayer, qui aura 100 ans en juillet).

Le présent

J'ai participé à la réunion de la Commission biologique du Canada (<http://www.biology.ualberta.ca/bsc/cbchome.htm>) qui s'est tenue à Ottawa le 22 et 23 avril. Ce groupe, qui fête son 25^e anniversaire cette année, travaille réellement bien vers des objectifs à long terme. Si on vous demande de travailler avec la Commission (les postes sont restreints et la représentation géographique est nationale), je suggère que vous joignez ce groupe.

L'exécutif de la SEC s'est rencontré à Ottawa le 24 avril 2004 pour discuter de différents dos-



Benoit Rancourt

Past, present and future

Past

Stuart Walley is an entomologist who turned 100 years old on 24 April 2004. He received his BSc from the old Ontario Agricultural College in 1926 and his MSc from Iowa State College in 1928. He had all the course work done for his PhD, but the government would not give him leave to finish it. Stuart has written over 70 scientific papers, mostly on ichneumonid parasites. In May, the University of Guelph is celebrating its first 40 years and is inviting all graduates of 1964 or earlier to attend. The President of University of Guelph wrote Stuart that there would probably be very few graduates over 100 years in age. Unfortunately, Stuart's health will prevent him from attending. A friend presented Stuart with letters from Queen Elizabeth II, the Governor General, the Prime Minister of Canada, his Member of Parliament, the premier of Ontario, and the Mayor of Ottawa. Stuart also received words from the Presidents of Entomological Society of Canada and the Entomological Society of America. All the best to you Stuart Walley!!! Ed Becker should be commended for his wonderful input related to that noteworthy event. (Note: Stuart is a bit older than the famous evolutionary biologist Ernst Mayer, who will turn 100 years in July).

Present

I attended the Biological Survey (<http://www.biology.ualberta.ca/bsc/bschome.htm>) meeting in Ottawa on 22-23 April. This group, who celebrates its 25th anniversary this year, is really working well towards long term goals.

siers imminents. Plusieurs dossiers relèvent de la livraison électronique de l'information vers et en provenance de nos membres. Notre contrat avec le CNRC doit être renégocié pour la fin de l'année. Présentement, nous devons fournir les informations sur supports papier et électronique: ceci implique du travail supplémentaire pour les volontaires qui oeuvrent pour la Société. Nous ferons face sous peu aux problèmes de l'archivage des documents électroniques. L'optimisation de toutes les opérations relatives au traitement des manuscrits soumis au *The Canadian Entomologist* grâce à un environnement électronique est également à l'ordre du jour, comme cela est observé chez d'autres journaux scientifiques.

N'hésitez pas à communiquer avec Paul Fields (Rédacteur du *Bulletin*) et Barry Lyons (Webmestre) pour maximiser le flux d'informations pour l'intérêt des membres de la SEC.

Des nouvelles bourses seront présentées aux étudiants en Octobre à la réunion de Charlottetown. Nous croyons qu'il faut planter des graines pour le futur.

L'avenir

La publication scientifique est au coeur de la science. Ceux qui voudraient comprendre les changements actuels et qui surviendront vraisemblablement en raison du phénomène de la publication électronique devraient lire "Economic analysis of scientific research publishing", un rapport (commandité par le Wellcome Trust) disponible gratuitement (PDF en anglais) au www.wellcome.ac.uk. Quelques une des conclusions sont stupéfiantes. Par exemple: "1) la structure actuelle du marché ne favorise pas les intérêts de la communauté scientifique à long terme, 2) les maisons d'édition commerciales dominent le marché quoique plusieurs journaux importants soient publiés par des organisations à but non lucratif, 3) le prix (des publications) n'est pas important au niveau de l'utilisateur dans la communauté scientifique". Il y a plusieurs autres commentaires provocateurs et autres faits dans ce rapport.

Comment la SEC est-elle positionnée dans ce

Should you be called to work with the Survey (positions are limited and geographic representation is national), I suggest that you join the group.

The Executive of the ESC met in Ottawa on 24 April 2004 to address the various issues that the ESC will face in the near future. Several issues are related to electronic delivery of information to and from the members. Our contract with NRC concerning electronic delivery of *The Canadian Entomologist* should be re-negotiated by the end of the year. At the present time, we have to provide information in both paper and electronic versions for now: that is more work from the volunteers who dedicate their time to the Society. Archiving electronic documents is also a concern that we will have soon to address. Streamlining all operations of manuscripts processed for *The Canadian Entomologist* through an electronic environment is also in the air, as it is experienced by other scientific journals.

Do not hesitate to send information to Paul Fields (*Bulletin* Editor) and Barry Lyons (Webmaster) to keep information flowing among ESC members.

New scholarships for students will be presented in October at the Charlottetown meeting. We believe in planting seeds for the future.

Future

Scientific publication is a core activity of Science. Those who would like to understand actual changes and changes that will likely occur because of electronic publishing should read "Economic analysis of scientific research publishing", a report commissioned by the Wellcome Trust, available freely as a PDF file at www.wellcome.ac.uk. Some of its conclusions are staggering. For example: "1) the current market structure does not operate in the long-term interests of the research community, 2) commercial publishers are dominant though many top journals are published by not-for-profit organizations, 3) (publication) price is unimportant at point of use for the research community". There are much more thought provoking statements and facts in the report.

système ? *The Canadian Entomologist* est une activité importante de la Société d'entomologie du Canada. Comme la SEC contrôle les coûts du *The Canadian Entomologist*, les frais de publications par page ont été maintenus à des niveaux raisonnables. La version électronique est maintenant disponible via CNRC, qui est un fournisseur majeur de plusieurs journaux scientifiques au Canada. *The Canadian Entomologist* est un engagement à long terme et à but non lucratif de la SEC pour le bien commun.

Donna Giberson et son équipe travaillent à un programme passionnant pour la réunion conjointe avec la Société acadienne d'entomologie à Charlottetown en octobre prochain. Dans l'intérim, les adultes de *Magiccada septendecim* émergeront à l'été 2004. Pour informations supplémentaires, visitez le <http://www.entsoc.org/education/cicada.htm>

Je vous souhaite un bon été.

How is the ESC positioned in the system ? *The Canadian Entomologist* is an important activity of the Entomological Society of Canada. As the ESC exerts cost control of *The Canadian Entomologist*, page charges have been maintained at a reasonable cost. An electronic version is now available through NRC, who is a major Internet-provider of a number of scientific journals in Canada. *The Canadian Entomologist* is a long term non-profit commitment of the ESC for the public good.

In the near future, Donna Giberson and her team are crafting an exciting program for a joint meeting with the Acadian Entomological Society in Charlottetown meeting in October. In the meantime, 2004 is the year of emergence of *Magiccada septendecim* adults. For more information, visit <http://www.entsoc.org/education/cicada.htm>

Have a nice summer.

Meeting announcements / Réunions futures

55th Annual Meeting of the Lepidopterists' Society

College Park, Maryland, USA, 14-18 July 2004

<http://alpha.furman.edu/~snyder/snyder/lep/meet.htm>

22nd International Congress of Entomology

Brisbane, Australia, 15-21 August 2004

<http://www.ccm.com.au/icoe/index.html>

20th Brazilian Congress of Entomology

Gramado, RS, Brazil, 5 - 10 September of 2004

Eduardo Humeres, www.xxebe.com.br, cbe@xxebe.com.br

CIF/IFC & SAF Joint 2004 AGM/ Convention

Edmonton, Alberta, Canada, 2-6 October 2004

One Forest Under Two Flags / Une forêt sous deux drapeaux

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

Charlottetown, PEI, 15-18 October 2004

Donna Giberson, giberson@upe.ca, <http://www.acadianes.org/index.html>

51st Annual Meeting of the Entomological Society of America

Salt Lake City, Utah, USA, 14-17 November 2004

http://www.entsoc.org/annual_meeting/2004/index.html

International Symposium Ecology and Management of *Lygus* Plant Bugs

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

Peter Mason, Lygus_Symposium@hotmail.com, See page 79 for more details.

Moth balls / Boules à Mites

By Andrew Bennett

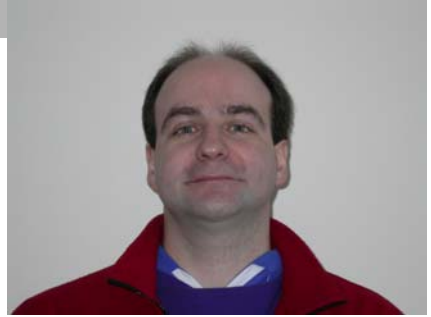
To grind or not to grind? That is the question.

All through the hallowed halls of Entomology Institutions, a sound is growing - the sound of grinding! And this grinding emanates not from one source, but from two. First, it is the sound of insects being ground up by the pestle of molecular techniques. But secondly, and equally as loud, it is the grinding of morphologists' teeth; gnashing at the thought of perfectly good specimens becoming grist for the molecular mill. Unlike other taxa such as bacteria or fungi, most groups of insects are literally bristling with morphological characters, so the question is: must all of us convert our labs for molecular analysis? Here are some rationales supporting both sides of this argument.

Reasons to grind

1) The \$\$ factor. Anybody who has submitted a grant to study morphological taxonomy in the last decade has inevitably been graced with reviews that include the following statement: "this study would be much improved if it contained a molecular component". Loosely translated this means you haven't a grylloblattid's chance in hell of getting funded, because most of the reviewers are molecuroids who think that morphology is something Charles Darwin and his predecessors pretty much covered.

2) The prestige factor. In some ways, entomology (and indeed science in general) is getting more and more like a trip to the optometrist. You might have the best optometrist in the world, but if he or she doesn't have a whole bunch of expensive gizmos to examine your eyes, are



Andrew Bennett

you really going to feel as though you received good service?

Morphologist: pinning block and microscope. Molecuroid: thermal cyler and automated sequencer. 'Nuff said.

3) The annoyance factor. Every department has at least one person who is so staunchly anti-molecular that you really owe it to them to start up a molecular lab, preferably right next door to their office. Make sure to take off all anti-vibrational devices from your stirrers and centrifuges so they can really feel the "grinding" going on, and every couple of weeks, leave them a hastily scribbled note reading: "Didn't think you would mind that I borrowed the holotype of your new species. Don't worry. I glued things mostly back together and you can hardly notice where I extracted the wing musculature".

Reasons not to grind

1) The \$\$ factor. OK. Admittedly, there are few financial reasons anybody would want to become a morphological taxonomist. Of course, if world currency suddenly changed from money to dead insects, a morphological entomologist would be a very useful person to have around (one ichneumonid equals ten mymarids etc), but I wouldn't bet the ant farm on that happening. No, we just have to keep hoping that we get many more plagues of exotic pest insects across the world. (Three cheers for global travel and the greenhouse effect!)

2) The prestige factor. Morphological taxonomists have their names associated with any taxa that they describe. Sure, only five people in the

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

entire world may know that you are the author of a particular species, but within that exclusive club, you are truly appreciated.

3) The annoyance factor. Most departments usually have at least one moleculoid who has only a small inkling of exactly what their taxon of study actually looks like (let alone what they do). These are usually people who learned their molecular techniques first and their organismal biology second (fruit fly... fruit bat - what's the difference)? With the time gained by forgoing molecular training, you can harass your molec-

ular colleagues by walking into their labs and saying in a patronizing tone: "You mean you never studied the epicnemial carina? Clearly it's a great indicator of phylogeny!"

So what's the answer? It appears you can have lots of funding, be well-respected and be really annoying regardless of whether you study molecules or morphology so the choice is really up to you. My suggestion? Try doing both so you can be doubly annoying...

Join us next volume as *Moth balls* continues to expose the soft underbelly of taxonomy.

Initiative taxonomique mondiale (ITM)

L'ITM est reconnue depuis au moins cinq ans comme une initiative importante par la Convention sur la diversité biologique (CDB). Par l'entremise de ses affiliés, la CDB appuie l'ITM et son programme de travail par divers moyens.

Pour en savoir davantage sur l'ITM et les 18 activités visées par les cinq objectifs opérationnels que comporte son programme de travail, veuillez consulter les deux sites Web suivants : <http://www.biodiv.org/programmes/cross-cutting/taxonomy/default.asp> <http://www.nhm.ac.uk/science/biodiversity/gti.html>

Mark Graham, correspondant canadien pour l'ITM, cherche votre avis sur la façon dont le Canada pourrait prendre part à ce programme et à d'autres activités favorisant l'avancement des connaissances en taxonomie.

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Global taxonomy initiative (GTI)

The GTI has been recognized as important initiative by the Convention on Biological Diversity (CBD) for at least 5 years. The CBD through its affiliates have supported the GTI and its work program in various ways.

To read background material about the GTI and the 18 activities within the five operational objectives of the program of work, please see the web sites: <http://www.biodiv.org/programmes/cross-cutting/taxonomy/default.asp>, <http://www.nhm.ac.uk/science/biodiversity/gti.html>

Mark Graham, the Canadian GTI Focal Point, is seeking input on your thoughts about how Canada might be involved in GTI and other activities relating the development of taxonomic expertise.

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Canopy entomology, exploring the high frontier: Single rope techniques and suspended soil exploration.

By Neville Winchester

Scientists and the media have been captivated by the near countless species of animals and plants that inhabit forest canopies. The majority of these organisms are unknown or undescribed, and this phenomenon is not just confined to tropical forests, but also is prevalent in temperate forests. In 1983, Terry Erwin termed the canopy of tropical forests "the last biotic frontier", referring to the myriad of poorly studied arthropods that are resident in the canopy. Since then, a dedicated group of canopy biologists have initiated studies in many of the rainforests throughout the world - the sky is the limit! Summaries of these investigations can be found in Stork et al. (1997) and more recently Bassett et al. (2003). Safely accessing treetops to investigate the ecology of arthropods associated with suspended soils (i.e. canopy debris accumulations) has been an ongoing adventure of scientific discovery for me since 1992. To date,

Neville Winchester is an Adjunct Assistant Professor (research entomologist) and staff member in the Biological Sciences Department at the University of Victoria whose special areas of research and interest includes ancient rainforest ecology and conservation biology. His doctoral work in the Carmanah Valley was instrumental in its eventual protection as a provincial park, and he continues to demonstrate the uniqueness of these areas, with emphasis on the organisms that live in the canopies of British Columbia's ancient rainforests. As well as doing research in temperate ecosystems, he has done high canopy work in the tropics. Contact information: Dept. of Biology, University of Victoria, P.O. Box 3020, Victoria, BC V8W 3N5, Canada, tundrast@uvvm.uvic.ca



Figure 1. Neville Winchester sampling suspended soils the San Lorenzo Forest Panama. This project (IBISCA) is a component of a 16-member international team exploring canopy arthropod distributions in Panama.

this research remains the only program where arthropods of high canopy habitats of ancient rainforests in Canada are being investigated. For information on these exciting projects, refer to our website - <http://web.uvic.ca/~canopy/>

It's difficult to say which registers first when I get ready to climb: the numbing feeling of dangling on a single rope, 50 metres off the ground, or the thrill of scientific discovery as you ascend into "a place of many floors". Not being a fan of extreme heights (anything above ladder height!) I have embraced single rope techniques (SRT) as the access method of choice for my canopy expeditions. Refining this technique has enabled my research team to sample canopies in a number of rainforests throughout the world (Figure 1). Basically, whatever fits into a backpack and can be easily carried to areas with low to no access, is the rule of thumb. The first task is inserting and positioning a climbing line into the tree crown - shooting the tree. For work in

high canopies (35 m) we use a crossbow (Delta Storm model, camouflage color optional!) to which a fishing reel (Diawa, Longcast 4000) is attached. Choice of line that can be fired at high speed is essential and we use a 14-18 kg nylon fire-line (fishing line) which prevents breakage and tangling.

Once a suitable tree has been chosen (e.g. safe to climb), and an arrow has been shot over several branches (redundancy is important!) the arrow with attached fishing line is lowered to the ground. The arrow is removed and a thicker cord (e.g. parachute cord, ca. 5 mm) is then attached. This cord is now "reeled in" to the crossbow where a heavy-duty static climbing line (ca. 9 mm) is attached to the cord and is pulled back over the branches. A dynamic climbing line could be used however; the static line has less of a "bounce" feeling to it when climbing. The "free end" of the line is then attached to a suitable anchor point (e.g. the tree you are climbing in) by using a knot known as a figure of 8 on a bite.

The researcher (in this case a wide-eyed entomologist) is secured to the rope via personal climbing equipment (Figure 2). A variety of climbing seat harnesses are available (e.g. Petzl) and are typical of those used by rock climbers. The harness has loops that allow for attachment of other climbing equipment (e.g. carabiners, slings, decender, figure of 8) needed for entry and movement in the tree. We also use a chest harness which ensures that you stay in an upright position when ascending the tree. Always wear a climbing helmet to minimize the impact of tree branches encountered as you enter the tree crown!

During the climb, we use a set of ascenders to "walk" up the tree (Figure 3). There are a variety of techniques used to ascend the rope - frogging - walking - a combination of both (Figure 3). The take home message is that a comfortable, safe and somewhat fast access technique that allows you to ascend some 50 metres from the ground and work in the arboreal habitat is a method that varies between researchers and is gently "tweaked" for personal preference. My graduate students and I use a modified technique that I learned from my good friend and research



Neville Winchester

Figure 2. Kevin Jordan checking climbing equipment before ascending into the canopy in the San Lorenzo Forest, Panama.

climber, Kevin Jordan. Kevin and I have been climbing together since 1992 and have accessed over 1000 trees (Kevin has likely climbed over 5000 trees) in eight countries.

Now that you are in the tree crown ready to explore the forest canopy you need to get around which usually entails getting off the main climbing line (always a moment of anticipation for me) and attaching yourself (at least twice) to the tree itself. We use a lanyard system which is run back through the seat harness. In essence one end of the lanyard is attached to the harness and the free end is thrown over the desired branch(s) and attached to the harness thus forming a loop and ensuring that you are secure in the tree (Figure 4). You can then adjust the lanyard to walk out on branches or "dangle" in free space while you collect insects.

What can't be emphasized enough is safety - as our research progresses throughout the years I am pleased with our record - we have had no climbing accidents - our techniques work and the bottom-line is that we are all safety conscious,



Kevin Jordan

Figure 3. Neville Winchester checking ascenders before ascending into the canopy at La Selva, Costa Rica.

and I always have a professional climber assisting us with our research.

For detailed information on the techniques and access in the study of forest canopies I suggest reading Mitchell et al. (2002). In particular the articles by Barker and Standridge (2002) and Ellwood and Foster (2002) will provide the details that I've glossed over in this *Tricks of the trade* article.

Good climbing - reaching the rainforest roof - it is another world, one that is worth exploring, doing "good" science and conserving for future generations!

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Neville Winchester

Figure 4. Neville Winchester sampling suspended soils in the Belum Forest, Malaysia.

Sharp (in-focus) insect images

By Henri Goulet

As a young amateur entomologist, I dreamed of illustrating my favourite insects. I used cameras, fine grain black and white films and diffused lighting. No matter what I did (closing the aperture to its minimum, increasing the light source), I met the "depth of field" monster. For a good image, I used large specimens or among the smaller ones those with flatter bodies. I tried again thirty years ago and was still unsuccessful. In the mid nineties, the solution presented itself. A software program, Adobe Photoshop 3.0, allowed one to work with layers and make these layers semi-transparent. Thus, it became possible to align and combine focussed sections. Today, several excellent software programs are available with these features and more. It dawned upon me that I could take many pictures of the same insect with a different focal plan and combine them with the above graphic program. I did so, and the results were impressive. Finally, I could show sharp images of my favourite insects. For years, I did combine focussed portions of images manually, but automated solutions are now available. The professional approach in making such images is very expensive and very good, but there are ways to do them inexpensively with a bit more work.

What do you need to make sharp insect images?

- A dissecting microscope (zoom is ideal).

Henri Goulet is a Research Scientist at Agriculture and Agri-Food Canada's Cereal Research Centre in Ottawa, Ontario. He has been interested in nature since a very young age. In his mid teens, he developed a fondness for ground beetles (a joy he loves to share with others). His research focusses on the taxonomy of sawflies and braconid wasps, and on ecology of ground beetles. Contact information: 360 Carling Avenue, Ottawa, On K1A 0C6, gouleth@agr.gc.ca



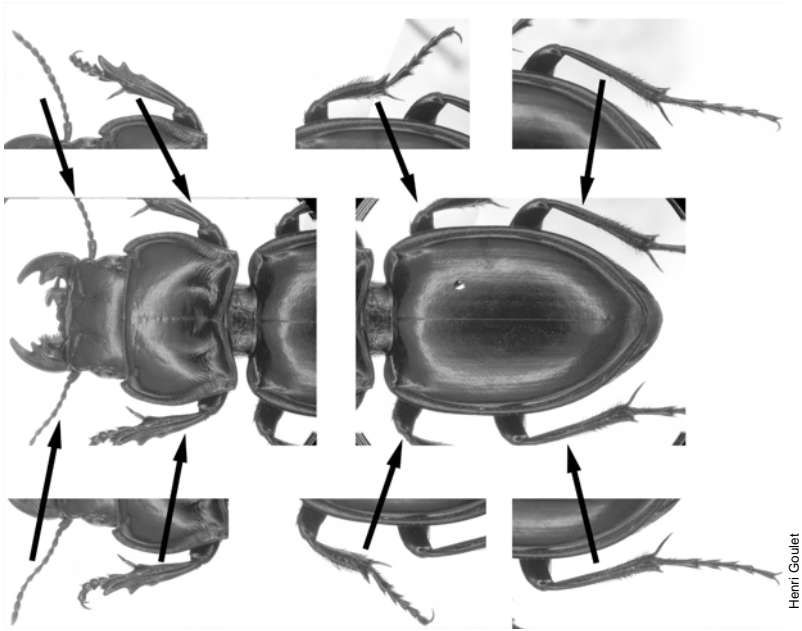
Henri Goulet

Image files involved before combination of the left front leg.

- An adaptor for the camera fitting on an ocular or a special camera tube.
- A camera that can be completely controlled manually (control of white balance, exposure, shutter speed, and focus).
- A high-quality light system.
- A recent computer (clock speed around 2.0 MHz, with 512 Mb of RAM).
- A combining software.
- An excellent graphic program.

How do you do it inexpensively?

- Find access to a dissecting microscope, if you do not own one.
- Buy an adaptor for your camera that would



Combined images needed to build the complete image of *Pasimachus elongatus*.

fit on your microscope ocular or photographic tube, or build one. You could contact your camera dealer, or for an inexpensive one, look at the following web page: <http://www.zarfenterprises.com/>.

- Purchase a digital camera. Digital camera prices vary from \$500 to \$20 000. The more pixels it includes, the more expensive is the camera. However, a Nikon Coolpix 4500 with 4 Mb will do superbly with a special approach described below. This type of camera can be completely controlled manually.

- The best light is diffused to eliminated any type of glare (e.g., white highlights) especially on specimens with smooth or metallic surfaces. Do not use the circular lights found on the main objective of many dissecting microscope. Fibre optic lamps could be used if the specimen is placed within a cylinder of semi-transparent Mylar paper-like plastic of the type used by design artists. Better still, build a lamp consisting of a daylight 8" round fluorescent light fitted within a white plastic bucket for less than \$50.

The latter was designed by my colleague Jim Troubridge to photograph moths. This lamp also turned out to be perfect for even the most metallic-coloured beetles. Moreover, there is no shadow with this type of lamp.

- Most people have a decent computer, or have access to one.

- Image combining software packages range greatly in prices. The following one, Combine Z4, is available for free, if you do not profit from it. At any rate, the author would appreciate a donation to the microscopy society of the United Kingdom. It is available at the following site: www.hadleyweb.pwp.blueyonder.co.uk/combineZ/combinez.htm

This program is extremely easy to use. It accepts several image file formats (e.g., *.jpg and *.bmp), reads the alpha numeric file names generated by the camera upon saving an image, and permits images to be processed in batches. Moreover, in automatic mode, the program will align images files, combine them, and despeculate, sharpen and contrast the combined image. Make



Henri Goulet

The final image, *Pasimachus elongatus* LeConte in sharp focus.

sure that your images are perfectly exposed for best results. To download the program files after reaching the above site, Choose "Combine Z4", then "Installing and Running", then "CombineZ4.exe" to download it, and finally if you have Windows 98, Windows, Millenium or Windows 2000, also download the file "gdiplus.dll". CombineZ4.exe is very small, with only 0.25 Mb and doesn't add any initialization files

For a comparison of similar software programs see the following site: www.crystalcanyons.com/Pages/TechNotes/3DMicroMacro.shtm

- Finish the work by using a good graphic program (e.g., Adobe Photoshop Elements 2.0 or CorelDraw Essentials 2.0) or more advanced professional software programs (e.g., Adobe Photoshop 5.0 and up, Corel Paint 8.0 and up) if available.

How do you make a high resolution image with a low resolution camera?

The camera mentioned above has only 4 Mb per channel. Thus, a RGB image (i.e., Red, Green and Blue channels) is 11 Mb in size. Yet, I have created images up to 60 Mb! How is it done?

Simply photograph portions of the insect body and appendages (e.g., a beetle consists of the elytra, pronotum and head, right antenna and

usually foreleg, right midleg, right hind leg, left antenna and usually foreleg, left midleg, and left hind leg). Then, reassociate the combined portions in one image using a graphic software (professional ones are the best for such work). To avoid losing your work, save often as you construct the image. I associate first the head and pronotum image with the elytra image in a new file (4500 by 2500 pixels in RGB mode at 72 dpi), then I proceed with appendages. I save the image in the graphic software native format. When the image is completed you can save it in any format you like. If space is at a premium, use the *.jpg format. To complete an image as described above with the complication of aligning of the many parts and cleaning up of imperfections take me two to three hours on average, but the result is worth it.

If you dream of showing your favourite insects to friends or to the world, you can give it a try. Insects are marvellously structured and coloured. It is a good way to make others discover and enjoy the world of insects. The images in many instances make learning species much easier than dry insect descriptions, and will generate interest among students, scientists and naturalists; leading to their conservation and the protection of many other living things.

Lab profile / Profil de labo

By Alida Mercado, Elise Bolduc, and Tara Sackett

The Buddle lab

Chris Buddle's Insect ecology laboratory is in McGill's Department of Natural Resource Sciences, on the university's Macdonald campus in Ste-Anne-de-Bellevue, Québec, just west of Montréal. There are a variety of projects in the lab, but we share a common interest in the role of arthropods in community ecology. Current projects address the themes of biodiversity, detritus-based food webs, interactions between decaying wood and arthropods, the effects of urbanization on arthropod communities, and integrated pest management. Our goals are to place our ideas and projects in the broader context of community ecology as well as to see how our work can contribute to conservation and sustainable forestry and agriculture. We work with both six and eight-legged fauna; groups currently vying for attention are spiders, mites, ants and beetles. Students in the lab currently have collaborations with researchers at Agriculture and Agri-Food Canada and UQAM (Université du Québec à Montréal). Field

work takes place across Québec: in the boreal forests of Gaspésie and Abitibi, McGill's research forests (Mont St-Hilaire, the Morgan Arboretum, and the Molson Reserve), and other locations around Montréal. Large mosquito and blackfly populations seem to be a prerequisite for field site selection, as other temperate and boreal forest ecologists will understand.

The laboratory boasts a growing zoo of domesticated arthropods, which encourages constant visits from other departmental scientists whose research subjects can't be kept in terrariums. Our tarantula, famous for never having been observed to eat, is the central attraction for visitors. Our lab is filled with energy, active discussions and vials of spiders, and has a marvellous group of people who are introduced below (in chronological order, beginning with the earliest members of the laboratory).

Hirondelle Varady-Szabo (MSc student, January 2003)

Hirondelle did her undergraduate studies at



The people in the Buddle Laboratory: back row (L to R): Chris Buddle, Annie Hibbert, Hirondelle Varady-Szabo, Tania Motchula, Chris Cloutier (summer research assistant); front row: Michel Saint-Germain, Tara Sackett, Elise Bolduc and Alida Mercado. Missing: Zach Sylvain and J-P. Lessard.

McGill's Macdonald campus, and thus is becoming a fixture here. Fortunately she loves the campus! Her Master's project concerns the ants and spiders associated with downed woody material of Forillon National Park, Gaspésie (another great place!!!). She looks at the effect of different types and decomposition levels of logs on ant and spider communities. She is also interested in knowing the differences between the communities of ants and spiders that use the surface of logs compared to the ones using the forest floor. She had a lot of fun last year doing her fieldwork, with bears eating her cooler and mice disturbing her pitfall traps. She is now involved in the serious task of writing her thesis.

Tara Sackett (PhD student, September 2003)

Tara did her Masters work at UBC and then went south to spend a long time looking at caterpillars in Panama. Tara is now doing her PhD in apple orchard IPM. Her project seems to involve a lot of thinking, arrow diagrams and picnicking in orchards. She is interested in the effects of immediate control methods on natural enemy assemblages in the orchards, as well as what role these natural enemy assemblages have in relation to the dynamics of pest populations. She is investigating the use of a non-chemical particle spray, kaolin, to control the oblique-banded leaf roller, *Choristoneura rosaceana* (Harris), and looking at how kaolin affects natural enemy populations, especially spiders, in the orchard. She is also studying the interactions of spiders with leafrollers, and how the surrounding landscape influences the arthropod communities within the orchard. Tara's also developing quite a fondness for jumping spiders.

Michel Saint-Germain (PhD student, September 2003) stgermainm@sympatico.ca

Michel completed a Master's in biology at UQAM before coming to McGill. His thesis research compared beetle assemblages between recently burned black spruce stands of contrasting age and structure and unburned mature stands. For his PhD, he will focus on describing diversity patterns of saproxylic beetles among the main tree species of the boreal-mixed forest

in northwestern Quebec. Also, he will test relationships between shifts in species composition along the decay gradient and nutritional and physical characteristics of dead wood. He will also explore some behavioral aspects of host selection. Michel is also a simply marvellous natural historian, and is (thankfully) patient with the rest of the lab when we bring back unknown insects from the field!

Jean-Philippe Lessard (BSc student, September 2001)

Jean-Philippe is crazy about ants, and has become one of the finest ant taxonomists around. His undergraduate research project, just recently completed) assessed the effect of urbanization on ant communities at the Molson Reserve (experimental forest near Montréal). He is unfortunately leaving us for the summer to join an ongoing research project (still with ants) with Nathan Sanders at University of Tennessee (in the Great Smoky Mountain).



Alicia Mercado

J-P. Lessard with some important equipment.

Elise Bolduc (BSc student, September 2002) elise_bolduc@hotmail.com

Elise is quickly becoming one of our resident spider experts. Her undergraduate project this past year was a survey of the ground-dwelling spider fauna of southern Quebec vineyards. Although she hasn't graduated yet, she enjoyed that research experience so much that she decided to start on a new project for 2004-2005. So she will

spend her summer sampling spiders in the boreal forest of Abitibi (near her hometown!) to address questions about forest management.

Alida Mercado (MSc student, September 2003)

Directly from Mexico, Alida is here doing a Master's project about the effects of disturbance and productivity on ground beetle diversity community structure at the Morgan arboretum. She will look at carabids from old forests, young forests, old pastures and corn fields and will manipulate the productivity by adding fruit fly media to treatments. She survived her first Canadian winter very well, and is now preparing for the biting flies of Quebec.



Alida Mercado

Notiophilus aeneus Hbst. A ground beetle collected at McGill's Morgan Arboretum

Zachary Sylvain (MSc student, September 2004)

Zach just completed an undergraduate degree at McGill University, and hopes to begin a Master's in September. Zach worked on a project this past winter about soil invertebrates occurring under snow and under fallen logs. He will further this line of study next year, after learning all about mites this summer when he attends the Acarology summer program offered in Ohio. Needless to say, we are delighted to get someone really interested in Arachnids of the non-spider variety!



Chris Buddle

Tara Sackett (left) and Alida Mercado (right) sifting litter for insects and spiders at the Mont St. Hilaire Biosphere Reserve.

Tania Motchula (MSc student, September 2004)

Tania has just finished her undergraduate degree at McGill, and will begin pursuing a Master's on Beech Bark Disease next September. This summer she will begin surveying the severity and distribution of the disease complex on and around the Island of Montréal, and will attempt to understand the predators associated with the introduced beech scale insect (*Cryptococcus fagisuga* Lind.).



Elise Boleuc

Zachary Sylvain sporting the required serious expression while 'winter sampling' leaf-litter for soil invertebrates.

Annie Hibbert (BSc student, January 2003)

Annie is the newest addition to the Buddle lab, and will be investigating the colonization ability of spiders in agroecosystems and old-growth forests. This research will be conducted at the McGill University's Morgan Arboretum and adjoining farm fields.



Tara Sacklett

A female jumping spider *Eris militaris* (Hentz)

Christopher Buddle; chris.buddle@mcgill.ca
<http://www.nrs.mcgill.ca/buddle/>

Chris obtained his BSc from the University of Guelph in 1996, pursuing a PhD at the University of Alberta immediately afterward. After a post-doc in Ohio (Miami University), Chris joined McGill University in September of 2002, and holds the position of Assistant Professor of Forest Insect Ecology. Currently Chris is...well...running around! Submitting papers, applying for grants, teaching and supervising all of us (and wonderfully we would add!). His main research interests are spider ecology, dead wood in forests, forest ecology, testing biodiversity theory, spiders in agroecosystems and long-term biodiversity monitoring. He's also recently developed an interest in pseudoscorpions, and will pursue some ecological studies of these arachnids if he can ever find them in the field. Chris teaches courses in forest entomology, insect ecology and economic entomology. When not doing these things, you will likely find Chris at home with his wife and three kids, or maybe fly-fishing somewhere en route between work and home.



Henri Goulet

The ground beetle *Blethisa julii* LeConte, for details on how this all-in-focus image was produced, see page 53.

The student wing / L'aile étudiante

By Tonya Mousseau



Recently, it has been noticed that the number of student members in the ESC has declined drastically. This may be due to students graduating, a lack of new recruits, or perhaps many of you have forgotten to renew your membership? With regards to new students, perhaps there is something we can do to entice non-member students to join during ESC meetings. One suggestion is to have a student information table set up at the meetings. Other suggestions would be welcome.

Good news for students who are finishing their thesis and want to publish, but have no institutional funding. Currently up to 4% of page charges may be waived for members and amateur entomologists not receiving institutional funding and covered by the C.P. Alexander Fund. The Publications and Finance committees are in charge of reviewing this policy.

The ESC student webpages have been amended and will be updated every year in March. If you do not have a page and would like one, please e-mail me for more information.

Thesis roundup / Un foisonnement de thèses

Bailey, Janisse Catherine; MSc January 2004. *Efficacy of new alternative sweet corn pest control agents and their impact on honey bees*. Supervisor: Cynthia Scott-Dupree, University of Guelph, Department of Environmental Biology.

Bullas, Erin; MSc August 2003. *An investigation of varietal preferences exhibited by the potato leafhopper, Empoasca fabae in edible beans*. Supervisor: Art Schaafsma, University of Guelph, Department of Plant Agriculture, Crop Science.

Questions and answers / Questions et réponses

Maybe because I see the end of my PhD coming (I should defend my thesis this fall), I was thinking that it would be great if there were a section for job search on the ESC web site. It could contain a list of potential employers, positions available (either at the MSc, PhD, PostDoc or employment level), advice on where to look to find job possibilities, etc. I don't know if I am the only one (I suppose not) but I find it hard to know where to look to find this kind of information. If researchers and/or potential employers (in Canada or abroad) were announcing job-related news, I am sure that many students would be interested. **Mireille Marcotte**, Université Laval and Laurentian Forestry Centre, Québec.

This sounds like a reasonable suggestion, but I would imagine that it would require a great effort to compile the relevant information. Who would put together this online job fair? **D. Barry Lyons**, ESC Webmaster

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

Annuel

Bourses pour étudiants post-gradués

La Société d'entomologie du Canada (SEC) offre deux bourses d'une valeur de 2000 \$ chacune pour aider des étudiants qui débudent des études post graduées et des recherches en vue de l'obtention d'un diplôme d'études supérieures en entomologie (habituellement une à un(e) étudiant(e) à la maîtrise et l'autre à un(e) étudiant(e) au doctorat). Les bourses seront accordées aux étudiants ou étudiantes en raison des seuls critères de réussite académique. **Date limite : 16 juin 2004**

Subventions de recherche-voyage au niveau des études supérieures

Deux subventions de recherche-voyage, pouvant atteindre 2000 \$, sont offertes pour aider les étudiants et étudiantes à élargir le champ de leur formation supérieure. Les bourses seront accordées aux étudiants ou étudiantes en raison des seuls critères de réussite académique. **Date limite : 13 février 2004**

Spécial et nouveau cette année!!

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

Une ou plusieurs bourses de 500 \$ chacune seront offertes pour aider les étudiant(e)s, membres de la SEC, à assister à la réunion annuelle 2004. Pour être admissible, les étudiant(e)s doivent faire une présentation ou présenter une affiche lors de la réunion annuelle. Les bourses seront accordées aux étudiants ou étudiantes en raison des seuls critères de réussite académique. **Date limite : 23 juillet 2004** (le même date limite que celle pour soumettre un résumé). Note : Les récipiendaires seront avisés en août 2004, ce qui leur donnera amplement le temps de planifier leur voyage.

Bourse de la Commission biologique du Canada

En reconnaissance de la Commission biologique

du Canada, la SEC offre une bourse d'étude supérieure de 1000 \$ pour aider un(e) étudiant(e) à entreprendre des études supérieures sur le sujet de la biodiversité des insectes ou arthropodes terrestres au Canada. Cette bourse sera accordée aux étudiants ou étudiantes selon des critères de réussite académique et d'excellence en faunistiques, et sera offerte une année sur deux en alternance avec la Bourse Keith Kevan en systématique. **Date limite : 16 juin 2004**

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

Rosemarie De Clerck-Floate

Présidente Comité des prix aux étudiants de la SEC
Agriculture et Agroalimentaire Canada
Case postale 3000, Lethbridge, AB T1J 4B1
Courriel : Floate@agr.gc.ca

Consulter aussi le site Internet de la SEC et la section du *Bulletin* dédiée au congrès annuel conjoint pour les informations au sujet de la Bourse CRSNG du Réseau de Biocontrôle (i.e., pour des présentations étudiantes sur le biocontrôle)

Special

Bourse Keith Kevan en systématique

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

Bourse John Borden

Créée en 2000, cette bourse a été instituée en l'honneur de John Borden, dont l'enseignement et la recherche en écologie chimique ont influencé internationalement la lutte contre les insectes ravageurs et l'entomologie. Cette bourse de 1000 \$, pour souligner une recherche innovatrice en lutte intégrée, sera offerte dès que le fonds atteindra un niveau suffisant pour soutenir une bourse annuelle.

Entomological Society of Canada awards and scholarships

Annual

Postgraduate awards

Two postgraduate awards of \$2000 will be offered to assist students beginning study and research leading to a post-graduate degree in entomology (normally one to a MSc, and one to a PhD student). The postgraduate awards will be made on the basis of high scholastic achievement. **Deadline: 16 June 2004**

Research-travel scholarship

Two research-travel scholarships of a maximum of \$2000 each will be awarded to help students increase the scope of their graduate training. Applications will be judged on scientific merit. **Deadline: 13 February 2004**

Special and new this year!!

Student conference travel awards

One or more awards of \$500 each to be awarded as financial assistance for travel to the 2004 annual meeting by student members of ESC. To be eligible, students must present a paper or poster at the annual meeting. Applications will be judged on academic merit. **Deadline: 23 July 2004** (same as deadline for abstracts to annual meeting). Note: winners will be notified in August 2004, so travel plans can be made.

Biological Survey of Canada scholarship

In recognition of the Biological Survey of Canada, the ESC is offering one postgraduate award of \$1000 to assist a student in a postgraduate program who is studying insect or terrestrial arthropod biodiversity in Canada. The award will be made on the basis of high scholastic achievement and excellence in faunistics, and will be offered in alternate years to the Keith Kevan Scholarship. **Deadline: 16 June 2004**

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

Rosemarie De Clerck-Floate
Chair ESC Student Awards Committee
Lethbridge Research Centre
Agriculture and Agri-Food Canada
P.O. Box 3000
Lethbridge, Alberta T1J 4B1
E-mail: Floate@agr.gc.ca

Also watch the ESC website and *Bulletin* closer to the Joint Annual Meeting for information on the NSERC Biocontrol Network Award (i.e., for student presentations on biocontrol)

Special

Keith Kevan scholarship in systematics

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

John Borden scholarship

Created in 2000, this scholarship was established in honour of John Borden, who's teaching and research in chemical ecology is recognized around the world for its impact on pest control and entomology. This scholarship of \$1000 will be offered to students to encourage innovative research in the field of IPM, once sufficient funds have accumulated to sustain an annual scholarship.

We can lick gravity, but sometimes the paperwork is overwhelming.

Werner von Braun (1912-1977)
Developer of the Saturn V rockets

Scholarship fund

Once again the Society would like to thank and acknowledge the very generous donors to the ESC scholarship fund. Donations to the scholarship fund totaled \$10,248 in 2003. These tax-deductible donations are very important to the Society. The scholarship fund generated \$4891 in interest during 2002, but \$9000 in scholarships and travel grants were awarded. In 2004, \$8000 in awards will be granted. It is only because of your generosity that the scholarship fund is self sustaining. Donations can be made at any time and a receipt for income tax purposes in Canada will be issued. Please make cheques payable to the Entomological Society of Canada.

2003 Scholarship donors

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P Fields	B Landry

And those who gave anonymously

Fonds de bourses d'études

La Société tient à remercier, une fois de plus, les généreux donateurs et généreuses donatrices au Fonds de bourses d'études de la SEC. Nous avons reçu un total de \$10 248 en 2002. Ces dons déductibles d'impôt sont très importants pour la Société. Le Fonds de bourses d'études a généré \$4891 d'intérêt en 2002, mais \$9000 en bourses d'étude et de voyage ont été attribués. En 2003, \$8000 seront attribués en bourses. C'est seulement grâce à votre générosité que le fonds peut être autosuffisant. Les dons peuvent être faits pendant toute l'année, et un reçu pour fin d'impôt vous sera envoyé. Veuillez libeller votre chèque à la Société d'entomologie du Canada.

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Et ceux et celles qui ont donné de façon anonyme

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

Dans les champs de l'observation, le hasard ne favorise que les esprits préparés.
Louis Pasteur (1822-1895)

ESC research-travel scholarship recipients

Congratulations to the following students who were successful in the 2004 competition for the ESC research-travel scholarship.



Heather Mattila (above), Department of Environmental Biology, University of Guelph (PhD student), to assist in traveling to Ohio State University to work with bee expert, Dr. Brian H. Smith in conducting a study on the influence of nutrition on learning by honey bees.



Katsky Venter (above), Department of Zoology, University of British Columbia (MSc student), to assist in travel to Ohio State University to take an acarology course taught by taxonomic and mite ecology experts, and which will contribute to her studies of moss microarthropod communities.

Arctic and boreal entomology course: Churchill, Manitoba

General scope of course:

Interactions of the northern entomo-fauna with biotic and abiotic elements (e.g. plant/insect relationship, entomopathogens, insects and wildlife, coastal and freshwater habitats). This course will be of interest to students and individuals interested in the ecology of insect communities across one of the world's most important ecotones.

Particulars:

The course will be held at the Churchill Northern Studies Centre (CNSC) located in Churchill, Manitoba from 31 July to 14 August 2004. The cost is \$1000 US (approximately \$1500 CND). This includes room and board at CNSC, supplies, use of equipment and laboratory space. Cost does **NOT** include travel to and from Churchill. There will be evening lectures and discussions, with field excursions to: tundra, krumolz, seashores, boreal forest at the tree line and glacial moraines.



Instructors:

Rob Roughley, Professor, University of Manitoba and Peter Kevan, Professor, Department of Entomology University of Guelph, Guelph, Ontario Canada N1G 2W1, pkevan@uoguelph.ca Others are expected to join the team.

See the web site for additional details:

<http://www.uoguelph.ca/~pkevan/>

Our heritage / Notre patrimoine

By Rob Roughley

The Criddle/Vane homestead

The Criddle/Vane Homestead, former home of one of Canada's entomological pioneers, was recently designated a Manitoba Provincial Park. Situated near the confluence of the Assiniboine and Souris Rivers, the homestead was established in 1882 by Percy and Alice Criddle and Elise Vane. It was at this location that Norman Criddle began his acquaintance with the natural history of the prairies, and established the first entomological field station in western Canada. It is, of course, the site associated with an enormous number of specimens labelled "Aweme, Man.... Norman Criddle." Here, from 1914 to his death in 1933, Norman served as entomologist for the Canadian government. No family members have lived at the homestead since 1960, but there is a small cemetery on the property where Percy Criddle and many of his family and their descendants, including Norman, are buried.

The homestead was established on a quarter section of virgin prairie. Life was tough for these pioneers. An unpublished biography of Norman Criddle, held in the Archives of the Entomological Society of Manitoba, begins as follows: "Born at Addestone, Surrey, England May 14 1875. Came to Canada (Manitoba) in 1882. Worked and starved on a farm for the next eight years. Continued to work on a farm until 1905. Schooling, such as it was, provided at home; usually in the evenings during winter time. There was no time in summer. No opportunity for higher education was provided." The descriptions of mosquito annoyance and grasshopper abundance are staggering (Reigert 1980). Yet the Criddles and Vanes maintained a proud and independent existence. They made astrological observations, ran a weather station which provided one of the longest continuous records of weather in Canada, played tennis and golf, and made observations and collections of plants and animals including insects. The history of the families has been recorded in various publications (e.g. Criddle 1973, 1975; Criddle 1978).

The homestead and its surroundings are an area where entomological history, involving bad luck, disasters, successes and achievements, is imbedded into the history and culture of the area AND it is recorded. These things make the Park of general, as well as entomological interest. The park facilities are being improved and upgraded. A self-guiding interpretive trail is in place. Much of the work on the property is being done by the Criddle-Vane Homestead Heritage Committee with long range goals of stabilizing the buildings and refurbishing the Entomological Laboratory.

The locality is important because of the broad array of information associated with it (Roughley 2000). The birds, mammals and plants from the Park and the surrounding areas are well known (Bird 1927, 1961, Coupland 1950). It may be that more is known about the natural history of this Park than for any other locality in Canada. It has been the site of important recent ecological work as well. For example, Wilson & Belcher (1989) examined interaction of birds with native and introduced plant communities. Some authors have examined the interaction among fire, fire frequency and competition within the plant communities of the area (Wilson & Shay 1990; Shay et al. 2001). Historical weather data are available. A list and website are being developed of the insects collected at Aweme which presently contains about 2000 species records and could well reach 3000 to 4000 records. Aweme will be the focus site of a bioblitz of insect collecting in 2004 (Arthropods of Canadian Grasslands No. 10). These items make the area a prime research location for all kinds of ecological and taxonomic studies. For example, students in the Agroecology Program in the Faculty of Agricultural and Food Sciences at the University of Manitoba use the area for projects.

Particularly with increases in irrigated potato production, the amount of contiguous natural habitat has dwindled in the area surrounding the homestead. Nevertheless extensive areas of natural habitat are present on the Canada Forces Base Shilo, which is to the north of the home-



Sampling at the Aweme Manitoba, near the Criddle/Vane Homestead as part of a course in Agroecology Program given at the University of Manitoba.

stead. About 2 km south of the homestead is The Yellow Quill Prairie of Nature Conservancy of Canada, (<http://www.natureconservancy.ca>), and beyond that lies the Assiniboine Corridor Wildlife Management Area (<http://www.gov.mb.ca/conservation/wildlife>).

The ecological integrity of the area must be protected and preserved! This should be of utmost concern to Park managers and Park users, including researchers. If this can be achieved, the Criddle/Vane Homestead Provincial Park will itself be a very important heritage "laboratory". We will all have access to one of the rarest phenomena - a functioning grassland ecosystem with all or most of its communities intact.

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Wilson SD, Belcher JW. 1989. Plant and bird communities of native prairie and introduced Eurasian vegetation in Manitoba, Canada. *Conservation Biology* **3**: 39-44

Restoring Norman Criddle's lab

The Criddle Vane Homestead Heritage Committee would like your help. Our committee is an eclectic group, independent of the Entomological Societies of Canada and Manitoba, that came together in 2000 when the historic buildings at the homestead were under threat of demolition. Norman Criddle's first entomology laboratory on the Prairies, his second laboratory and the house that entertained so many visiting scientists were now on Crown Land, and the land managers could see no reason to save the buildings. The committee prevented the demolition - concerned not only for the buildings but that once the buildings were gone the land would soon be sold into potato production.

In four short years, our group has accomplished many things, from shoveling 40 years of porcupine droppings out the Big House to having the site established as a provincial heritage park. But the park status does not mean our work is over. The three buildings remaining on site are our responsibility - they are still viewed by

some as problematic.

In our struggle to protect the buildings we had the Manitoba Provincial Risk Assessment office inspect them. The Big House and the second laboratory were not only given a clean bill of health, they were seen as important to preserving the history of the homestead. The report stated: "The original entomology lab should be protected from the elements. The structural integrity of the building should be assessed and upgraded as required."

Our committee then arranged for a restoration expert from Parks Canada to advise us on how to restore Norman's first laboratory. The building itself is small, about the size of a garden shed. We were advised to use much of the original building, replacing rotting or missing pieces with materials that match the original. With the help of the folks at CFB Shilo we have a materials list and a few carpenters willing to guide us in the restoration. Now we just need \$5000 to purchase the materials.

Over the last four years we have heard from many entomologists how important the homestead is to the history of entomology in Canada.



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

We have been told that most Canadian university and museum collections contain specimens from Aweme. The American Museum of Natural History, Harvard University, U.S. National Museum in Washington and other collections around the world have specimens from Aweme. Entomologists have told us that the homestead continues to be important because of this vast collection, and that the site is still in a natural state, allowing entomologists to continue to do research on the site. One scientist wrote: "The Criddle property represents one of those rare and wonderful resources that will serve ecologists and entomologists in their analysis, literally, for centuries to come." Just last year two entomologists from Zurich, Switzerland visited the homestead.

Because Norman's laboratory is a touchstone of entomological history, we are hoping the entomology community will take figurative ownership of the small building. We have other organizations to approach for the other buildings, but hope the entomologists will take the lead with the first laboratory. We would like to raise \$5000 to purchase the materials to restore the laboratory with any additional monies going to an inter-

pretive display for the laboratory. We are a registered charity and provide tax receipts for donations. Your support would also go a long way in demonstrating to the park managers that the entomology community values the site and laboratory.

There is some urgency to our restoration work because the laboratory will not likely make it through another winter. We need to do the work this summer. It is now or never.

If you would like to make a donation or for more information please contact:

Criddle Vane Homestead Heritage Committee
c/o Sherry Dangerfield
3 - 733 McMillan Avenue
Winnipeg, Manitoba R3M 0S8
Telephone: (204) 452-2949
E-mail: sherryd@mts.net

If you would like to find out more about the homestead and the Criddle Vane family our committee has recently reprinted Criddle-de-Diddle Ensis by Alma Criddle, which provides an intimate look into the life and times of this unusual pioneer family.



The first laboratory today with interpretive sign. The endangered Dakota skipper, illustrated on the corner of the sign, is found on site.

Honorary members and fellows of the ESC

The Entomological Society of Canada honours up to ten entomologists who have made important contributions to entomology by naming them Honorary Members. Up to ten percent of the active membership of the Society may be named Fellows of the Society to acknowledge their contributions to entomology or The Entomological Society of Canada. To better recognize these members, their names are provided below along with the year their contributions were honored, and the year of death (d). The names were compiled from our membership lists with the help of Alexandra Devine, in the Society office, and with advice from Ed Becker. Please report any errors or omissions to the Chair, Achievement Awards Committee.

Fellows

Adams, JB	Fredericton, N.B.	1976	1994 d	Harris, P	Regina, Sask.	1984	
Angus, TA	Sault Ste Marie, Ont.	1977		Holland, GP	Ottawa, Ont.	1977	1985 d
Arnason, JT	Ottawa, Ont.	2003		House, HL	Trenton, Ont.	1978	
Atwood, CE	Toronto, Ont.	1976	1993 d	Howden, HF	Ottawa, Ont.	1985	
Auclair, JL	Montreal, Que.	1976	1992 d	Jay, SC	Winnipeg, Man.	1985	
Balch, RE	Fredericton, N.B.	1977	1994 d	Kelleher, JS	Dorval, Que.	1980	
Ball, GE	Edmonton, Alta.		1975	Kevan, DKM	Ste Anne, Que.	1977	1991 d
Becker, EC	Ottawa, Ont.	1975		Laing, JE	Guelph, Ont.	2001	
Beirne, BP	Burnaby, B.C.	1975	1998 d	LeRoux, EJ	Ottawa, Ont.	1977	
Bird, FT	Sault Ste Marie, Ont.	1975	1998 d	Lindquist, EE	Ottawa, Ont.	1984	
Blais, JR	Sainte-Foy, Que.	1975		Loschiavo, SR	Winnipeg, Man.	1981	
Boivin, G	St Jean-sur-Richelieu, Que.		1998	MacCarthy, HR	Vancouver, B.C.	1979	2004 d
Borden, JH	Burnaby, B.C.	1981		MacGillivray, E	Fredericton, N.B.	1978	
Brust, RA	Winnipeg, Man.	1975		Mackauer, M	Burnaby, B.C.	1978	
Bucher, GE	Winnipeg, Man.	1979	1982 d	MacPhee, AW	Kentville, N.S.	1979	
Burrage, RH	Saskatoon, Sask.	1975		Madsen, HF	Summerland, B.C.	1975	1987 d
Byers, RJ	Lethbridge, Alta.	1994		Martineau, R	Ste Foy, Que.	1978	1998 d
Carde, R	Riverside, CA	1992		Matthews, JV	Hubley, N.S.	1985	
Cartier, JJ	Ottawa, Ont.	1978		McEwen, FL	Guelph, Ont.	1975	
Chant, DA	Toronto, Ont.	1975		McFarlane, JE	Ste Anne Que.	1983	1995 d
Cooper, GS	Toronto, Ont.	1977	d	McGinnis, AJ	Ottawa, Ont.	1978	
Corbet, PS	St. Buryan, UK	1977		McIver, SB	Penticton, B.C.	1981	
Danks, HV	Ottawa, Ont.	1982		McLintock, JJR	Saskatoon, Sask.	1977	1982 d
Davey, KG	Toronto, Ont.	1977		McMullen, RD	Summerland, B.C.	1983	
Davies, DM	Hamilton, Ont.	1981		McNeil, JN	Quebec, Que.	1981	
Dethier, VG	Princeton, NJ	1975	d	Miller, CA	Edmonton, Alta.	1975	
Downe, AER	Kingston, Ont.	1983	2002 d	Morris, RF	Fredericton, N.B.	1977	1996 d
Downes, JA	Ottawa, Ont.	1975	2003 d	Morris, RF	St John's, Nfld.	1981	2004 d
Duporte, EM	Ste Anne, Que.	1977	1981 d	Munroe, EG	Ottawa, Ont.	1977	
Eidt, DC	Fredericton, N.B.	1980		Nesbitt, HHG	Ottawa, Ont.	1975	2002 d
Finlayson, T	Burnaby, B.C.	1993		Paradis, RO	St Jean, Que	1975	2000 d
Forbes, AR	Vancouver, B.C.	1982		Peterson, DG	Ottawa, Ont.	1975	2004 d
Friend, WG	Burnaby, B.C.	1979		Philogène, BJR	Ottawa, Ont.	1980	
Gerber, G	Winnipeg, Man.	1996		Pickett, AD	Deep Brook, N.S.	1977	1991 d
Glen, R	Victoria, B.C.	1977	1991 d	Pielou, DP	Halifax, N.S.	1979	2000 d
Hagen, KS	Albany, CA	1980	1997 d	Pimentel, D	Ithaca, NY	1977	
Harcourt, DG	Ottawa, Ont.	1984		Prebble, ML	Manotick, Ont.	1977	2002 d
Harris, CR	London, Ont.	1977		Prentice, RM	Ottawa, Ont.	1980	1991 d

Proverbs, MD	Summerland, B.C.	1975	
Riegert, PW	Regina, Sask.	1980	2002 d
Ring, RA	Victoria, B.C.	2000	
Robinson, AG	Winnipeg, Man.	1980	1992 d
Ross, HH	Athens, GA	1977	1978 d
Sabrosky, CW	Washington, DC	1975	1997 d
Safranyik, L	Victoria, B.C.	1986	
Scudder, GGE	Vancouver, B.C.	1975	
Seabrook, WD	Fredericton, N.B.	1984	
Shemanchuk, JA	Lethbridge, Alta.	1982	
Shewell, G	Ottawa, Ont.	1995	1996 d
Shorthouse, J	Sudbury, Ont.	2002	
Sippell, WL	Sault Ste Marie, Ont.	1980	
Smirnoff, WA	Ste-Foy, Que.	1975	2000 d
Smith, RF	Berkeley, CA	1975	d
Stark, RW	Portland, OR	1978	2002 d
Struble, DL	Lethbridge, Alta.	1986	
Tauber, MJ	Ithaca, NY	1983	
Townes, HK	Ann Arbor, MI	1983	1990 d
Turnock, WJ	Winnipeg, Man.	1982	
Urquhart, FA	Scarborough, Ont.	1981	2002 d
Varley, GC	Oxford, Ont.	1975	d
Varty, IW	Fredericton, N.B.	1984	
Vickery, VR	Kentville, N.S.	1985	
Walley, GS	Ottawa, Ont.	1975	
Wellington, WG	Vancouver, B.C.	1977	
West, AS	Kingston, Ont.	1977	1996 d
West, RJ	Portugal Cove, Nfld.	2002	
Wiggins, GB	Toronto, Ont.	1982	
Wood, D	Berkeley, CA	1985	

Honorary members

Balch, RE	Fredericton, N.B.	1969	1994 d
Ball, GE	Edmonton, Alta.	1994	
Becker, EC	Ottawa, Ont.	1995	
Eidt, DC	Fredericton, N.B.	1999	
Finlayson, T	Burnaby, B.C.	1990	
Loschiavo, SR	Winnipeg, Man.	1988	
Munroe, EG	Ottawa, Ont.	1988	
Proverbs, MD	Summerland, B.C.	1982	
Scudder, GGE	Vancouver, B.C.	2000	
Shemanchuk, JA	Lethbridge, Alta.	1995	



Ed Becker, Fellow and Honorary member of the ESC and his wife Martha Becker at the ESC meetings in Winnipeg, MB, October 2002.



Joe Shorthouse

Fellows of the Entomological Society of Canada at the Biological Survey of Canada meetings in Kelowna B.C., November 2003. Left to right: Joe Shorthouse, Hugh Danks, George Ball and Geoff Scudder. George Ball and Geoff Scudder have the added distinction of also being Honorary members.

Joint annual meeting of The Entomological Society of Canada and The Acadian Entomological Society



Insects in the landscape Rodd Charlottetown Hotel Charlottetown, P.E.I., 15-18 October 2004

On behalf of the Acadian Entomological Society and the Entomological Society of Canada, we are pleased to invite you to the 2004 Joint Annual Meeting which will be held in the Rodd Charlottetown Hotel, Charlottetown, P.E.I. The theme for the meeting is "Insects in the Landscape", and we are confident that the symposia, workshops, and submitted papers will lead to an interesting and informative meeting.

The 2004 meeting will depart from tradition a bit, and begin on Friday evening, running through the weekend. The meeting will wind up with submitted papers on Monday afternoon. This should allow members who have teaching or other commitments through the week to attend, and also allow members to take advantage of "Saturday stay-over" seat sales to attend the meeting. Please ensure that you take this into account when you make your travel plans.

The Rodd Charlottetown Hotel was built as a CN hotel in 1931 and has been extensively renovated and decorated with replicas of period furnishings. It is a modern hotel though, complete with pool and fitness centre. Parking is complementary for those that wish to drive, and downtown Charlottetown is located only minutes from the Charlottetown airport. For more information on the hotel, check out: <http://www.rodd-hotels.ca/ourhotels/charlottetown.html>. The Rodd Hotel is offering us a special conference rate for the hotel of \$99.00 per night (for up to two people in a room, plus taxes), and suites are also available. Be sure to mention the Entomological Society of Canada Conference when booking to get the conference rate.

The Rodd Hotel is located in historic downtown Charlottetown (<http://www.visitcharlottetown.com>), only a few minutes walk from Province House (where Confederation was born), the Confederation Centre Art Gallery, and numerous fine shops and restaurants. The hotel is also located near several wonderful old Victorian homes that are now Bed and Breakfast establishments. For information about how to get to P.E.I., options for alternate accommodation, and information on what to do while here, go to the P.E.I. Government Tourism guide, at <http://www.gov.pe.ca/visitorsguide/index.php3>. Air Canada and Jetsgo fly directly to Charlottetown; alternatively you can fly to Moncton (2 hours drive, over the Confederation Bridge) or Halifax (3.5 hours drive), and rent a car to see some wonderful Atlantic Canadian scenery on your way here.

In addition to the JAM, there are several additional meetings and workshops scheduled to enable entomologists to get the best bang for their travel dollar. Contact the programme committee if you have any other suggestions for activities at the meeting. We are also going to try to put together a "down home kitchen party" following the banquet entertainment, so bring your voices or your instruments and be prepared for some fun. Please visit our webpage for more information and all the news as it develops about the meeting: <http://www.acadianes.org/>

For more information contact:

Donna Giberson, giberson@upe.ca

Chair of the Organizing Committee

or

Jon Sweeney, jsweeney@nrca.gc.ca

Program Chair

REGISTRATION FORM

Name: _____

Title First Name Last Name

Preferred Name for name tag (if different from above) _____

Affiliation: _____

Address: _____

Phone: _____ Fax: _____ E-mail: _____

(Note: registrations will be acknowledged by e-mail if a current and legible e-mail address is provided)

Accompanying Person: _____

Fees:	Before August 1st	After August 1st	Total
Regular ESC or AES member	\$210	\$275	\$ _____
Regular Non-member	\$260	\$325	\$ _____
Student or retired member	\$120	\$150	\$ _____
Accompanying person	\$120	\$150	\$ _____

Banquet dinner preference: indicate meat/seafood entree or vegetarian

Registration includes: Program (with abstracts) and admittance to meetings, mixer and banquet. Accompanying person registration does not include the technical sessions. Extra banquet tickets may be purchased at the registration desk. No refunds on registration after 15 September 2004.

Payment Details:

Cheque for total (make payable to AES/ESC 2004) or Credit card:

Name on Credit Card (please print) _____

Credit card type: VISA or Mastercard Credit card Number: _____

Signature: _____ Expiry Date: _____

Accommodation: Everyone is encouraged to stay at the Rodd Charlottetown Hotel (rate: \$99.00 for up to two people and \$149.00 for a suite, if reserved before 13 September 2004). Please indicate when registering that you are with the Entomological Society of Canada conference to get the conference rate, and please reserve as early as you can to allow us to plan for the various events.

Please return this form with fees to:
 ESC/AES registration
 c/o Dr. Donna Giberson
 Dept. of Biology, University of P.E.I.
 550 University Ave., Charlottetown PE C1A 4P3
 Phone: (902) 566-0797, Fax: (902) 566-0740
 e-mail: giberson@upe.ca
 AES Website: <http://www.acadianes.org/>

Hotel Reservations are available from:
 Rodd Charlottetown Hotel, 75 Kent Street
 PO Box 159, Charlottetown, PE, Canada C1A 7K4
 Phone: (902) 894-7371, Fax: (902) 368-2178
 Toll Free: 1-800-565-RODD
 e-mail: rodds@rodd-hotels.ca
 Website: <http://www.rodd-hotels.ca/ourhotels/charlottetown.html>

CALL FOR SUBMITTED PAPERS AND POSTERS

This and additional information is available on: : <http://www.acadianes.org/index.html>

DEADLINE: Postmarked 23 July 2004

Categories of presentation:

Oral presentation - Regular, President's Prize*

Poster presentation - Regular, President's Prize*

*Students are eligible for the President's Prize (1 per session) if:

- Currently enrolled in a degree program or have graduated from a degree program since the last annual meeting (November, 2003)
- Registered at the meeting and have indicated the wish to participate in this category at the time the title and abstract were submitted
- The principal investigator and presenter of the paper or poster

Language: Presentations may be in French or English

Oral presentation: 12 min + 3 min questions and discussion

Presentations in PowerPoint are encouraged. To minimize potential incompatibilities between the software versions you use to develop and we use to display these presentations, we recommend limited use of animation, use of common Windows fonts for text and symbol fonts for equations. **Do not mail your presentation**, but bring to meeting on diskette or CD after testing this copy on a different machine. If using 35 mm slides, please provide your own carousel. Please note method of presentation when submitting your abstract.

Poster presentation:

Posters can be set up on Saturday morning (October 16) and left in place for the duration of the meeting. Presenters are requested to attend their posters in particular during the designated poster session on Sunday, October 17, from 14:45 - 16:00.

Information required:

1) Author(s) name(s), 2) name of presenter, 3) address, 4) title, 5) abstract, 6) category, 7) language of presentation, and 8) method of presentation (PowerPoint or 35 mm slide). Submit this information by e-mail, on diskette or CD (Word or WP format). Abstracts should be 70 words or less. If longer than 70 words, the editors reserve the right to reduce accordingly. **If possible, please provide your information in both French and English. All abstracts will be placed on the website.**

Please submit to:

Jon Sweeney
Chair of Scientific Program
Canadian Forest Service
PO Box 4000
Fredericton, NB E3B 5P7
Tel: (506) 452-3499, Fax: (506) 452-3525
E-mail: jsweeney@nrcan.gc.ca

**Meeting theme:
Insects in our landscape**

Tentative Symposia

Insects in the landscape

Organizer: Gilles Boiteau

Insect vectors and human health

Organizer: Chris Lucarotti

Insect population dynamics

Organizer: Dan Quiring

**Insects of the Canadian Arctic central
barrens**

Organizers: Doug Currie and
Donna Giberson

Graduate student symposium

Organizer: Heather Proctor

**Thème de la réunion:
Les insectes et le paysage**

Liste préliminaire des Symposia

Les insectes et le paysage

Organisateur: Gilles Boiteau

Les insectes vecteurs et la santé humaine

Organisateur: Chris Lucarotti

La dynamique des populations d'insectes

Organisateur: Dan Quiring

**Les insectes des zones arides de l'arctique
centrale canadien**

Organisateurs: Doug Currie et
Donna Giberson

Le symposium des étudiants gradués

Organisatrice: Heather Proctor

Graduate student symposium

The main goal of this symposium is to give a profile to graduating students as they move to the next stage in their careers and allow them a longer time slot to talk about their research. To be eligible, students must have either defended their thesis in the past 3 years or be planning to defend within 1 year of the meeting. Ideally, the topic of the presentation should be related to the theme of the meeting: *Insects in our landscape*.

Help is needed to identify the most promising speakers for the symposium. If you are a student who is interested in participating in this symposium or know of someone that would be suitable, please contact Heather Proctor hproctor@ualberta.ca, telephone: (780) 492-5704. Submissions will be accepted until **23 June 2004**. Full details will be available at the ESC web site in the student section. <http://esc-sec.org/students.htm>

Le symposium des étudiants gradués

Le but principal de ce symposium est de mettre en valeur les étudiants au moment où ils entament la prochaine étape de leur carrière, en leur donnant plus de temps pour présenter les résultats de leur recherche. Les étudiants admissibles auront défendu leur thèse dans les trois dernières années ou ont l'intention de défendre leur thèse avant octobre 2005. On souhaite que la présentation soit reliée avec le thème du congrès : *Les insectes et le paysage*.

Nous cherchons des présentateurs prometteurs pour le symposium. Si vous êtes un étudiant qui aimerait présenter ou vous connaissez quelqu'un qui serait un présentateur convenable, SVP contacter Heather Proctor, hproctor@ualberta.ca, téléphone : (780) 492-5704. Nous acceptons les soumissions jusqu'au **23 juin 2004**. Pour de plus amples renseignements, voir les pages Web de la SEC, section affaires étudiantes <http://esc-sec.org/studentf.htm>

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



Les insectes et le paysage
L'hôtel Rodd Charlottetown
Charlottetown (Î.-P.-É.)
15 au 18 octobre 2004

Au nom de la Société acadienne d'entomologie et de la Société d'entomologie du Canada, nous sommes heureux de vous inviter à la réunion conjointe annuelle de 2004, qui se tiendra à l'hôtel Rodd Charlottetown, à Charlottetown, à l'Î.-P.-É. La réunion aura pour thème « Les insectes et le paysage ». Nous sommes convaincus que le colloque, les ateliers et les communications donneront lieu à une réunion intéressante et informative.

La réunion de 2004 se distinguera quelque peu des réunions précédentes en ce sens qu'elle débutera vendredi soir et qu'elle se poursuivra toute la fin de semaine. La réunion se terminera lundi après-midi par les communications. Cette formule permettra aux membres qui doivent enseigner ou qui ont d'autres engagements dans la semaine d'assister à la réunion. Certaines personnes pourront également ainsi profiter des billets d'avion à prix réduit vendus moyennant un séjour d'un samedi soir obligatoire. N'oubliez pas de tenir compte de cela lorsque vous planifierez votre voyage.

L'hôtel Rodd Charlottetown a été bâti en 1931 pour la Compagnie des chemins de fer nationaux du Canada (CN). Il a depuis été entièrement rénové et orné de répliques de mobiliers d'époque. Il s'agit tout de même d'un hôtel moderne et l'on y trouve notamment une piscine et un centre d'entraînement. Le stationnement est gratuit, et le centre-ville de Charlottetown n'est situé qu'à quelques minutes de l'aéroport de Charlottetown. Pour obtenir de plus amples renseignements sur l'hôtel, consultez son site Web, à l'adresse : <http://www.rodd-hotels.ca/ourhotels/charlottetown.html>. L'hôtel Rodd nous offre un tarif spécial pour la conférence à 99 \$ par nuit (pour deux personnes au plus par chambre, taxes en sus). Vous pouvez également choisir de louer une suite. Pour bénéficier du tarif spécial, n'oubliez pas de mentionner que vous participez à la Conférence de la Société d'entomologie du Canada au moment de réserver.

L'hôtel Rodd est situé dans le centre-ville historique de Charlottetown (<http://www.visitcharlottetown.com>), à quelques minutes de marche de la Province House (lieu de naissance de la Confédération), du Confederation Centre Art Gallery et de nombreuses boutiques et restaurants haut de gamme. L'hôtel est également situé près de plusieurs magnifiques maisons victoriennes qui ont été transformées en gîtes du passant. Pour savoir comment vous rendre à l'Î.-P.-É., pour connaître d'autres possibilités d'hébergement et pour obtenir des renseignements sur les activités à faire pendant votre séjour, consultez le Guide touristique de l'Î.-P.-É., à l'adresse : http://www.gov.pe.ca/visitorsguide/f_index.php3?. Air Canada et Jetsgo offrent des vols directs vers Charlottetown. Vous pouvez également prendre l'avion jusqu'à Moncton (deux heures de route) ou jusqu'à Halifax (3,5 heures de route), louer une auto, traverser le pont de la Confédération et admirer le magnifique paysage de la région de l'Atlantique.

Plusieurs autres réunions et ateliers sont prévus en marge de la réunion annuelle conjointe pour offrir aux entomologistes le meilleur rapport qualité-prix. Si vous avez d'autres suggestions d'activités pour la réunion, transmettez-les au comité du programme. Nous aimerions également organiser une « soirée musicale » après le banquet. Alors, apportez vos instruments de musique et soyez prêts à chanter et à vous amuser! Consultez notre page Web pour obtenir tous les renseignements de dernière heure sur la réunion : <http://www.acadianes.org/>

Pour obtenir des détails, veuillez communiquer avec la présidente du comité organisateur, Donna Giberson (giberson@upej.ca), ou avec le président du programme, Jon Sweeney (jsweeney@nrcan.gc.ca).

FORMULAIRE D'INSCRIPTION

Nom : _____

Titre Prénom Nom

Nom à inscrire sur le porte nom (si différent du nom susmentionné)

Affiliation : _____

Adresse : _____

Téléphone : _____ Fax : _____ Courriel : _____

(Nota : L'inscription sera confirmée par courriel si une adresse électronique valide et lisible est fournie.)

Personne accompagnatrice : _____

Coût :	<u>Avant le 1^{er} août</u>	<u>Après le 1^{er} août</u>	<u>Total</u>
Membre régulier			
de la SEC ou de la AES	210 \$	275 \$	_____ \$
Non-membre	260 \$	325 \$	_____ \$
Étudiant ou membre retraité	120 \$	150 \$	_____ \$
Personne accompagnatrice	120 \$	150 \$	_____ \$

Préférence pour le banquet : viande/fruits de mer ou plat végétarien

Compris dans les frais d'inscription : Programme (avec les résumés) et participation aux réunions, à la réception et au banquet. La personne accompagnatrice ne peut pas assister aux séances techniques. Des billets supplémentaires pour le banquet seront en vente au bureau d'inscription. Aucun remboursement après le 15 septembre 2004.

Mode de paiement

Chèque : (payable à l'ordre de la RAC SEC/SEA 2004) Carte de crédit :

Nom inscrit sur la carte de crédit (lettres moulées) : _____

Carte de crédit : VISA ou Mastercard, Numéro de la carte de crédit : _____

Signature : _____ Date d'expiration : _____

Hébergement : Vous êtes encouragés à loger à l'hôtel Rodd Charlottetown (tarif : 99 \$ pour deux personnes au plus, et 149 \$ pour une suite, si les réservations sont faites avant le 13 septembre 2004). Pour bénéficier du tarif spécial, au moment de faire votre réservation, veuillez mentionner que vous participez à la Conférence de la Société d'entomologie du Canada. Réservez le plus tôt possible pour nous permettre de planifier les diverses activités.

Retournez le formulaire et votre paiement à :

Inscription SEC/SEA

À l'attention de Donna Giberson

Département de biologie, Université de l'Île du Prince Édouard

550, av. Université, Charlottetown (Î. P. É.) C1A 4P3

Téléphone : (902) 566 0797, Fax : (902) 566-0740

Courriel : giberson@upe.ca

Site Web de la SEA : <http://www.acadianes.org/>

INVITATION À SOUMETTRE DES COMMUNICATIONS ET DES AFFICHES

Cette information est aussi disponible à : <http://www.acadianes.org/index.html>

DATE LIMITE : Le 23 juillet 2004 (le cachet de la poste faisant foi)

Catégories de présentation :

Présentation orale – Ordinaire, Prix du président*

Présentation par affiches - Ordinaire, Prix du président*

*Pour être admissible au Prix du président (1 par séance), vous devez satisfaire aux conditions suivantes:

- Être inscrit à un programme de deuxième ou troisième cycle ou avoir terminé un tel programme après de dernier congrès (novembre 2003)
- Être inscrit à la conférence et indiquer le désir de participer dans cette catégorie lors de la soumission de votre communication
- Être le chercheur principal et le présentateur de l'exposé ou de l'affiche

Langue : Les présentations doivent être en français ou en anglais.

Présentation orale : 12 min + 3 min de questions et discussion

Nous vous encourageons à créer des présentations PowerPoint. Afin de minimiser les chances d'incompatibilités entre la version de programme que vous utiliserez pour créer votre présentation et celle qui sera utilisée pour la présenter, nous vous conseillons de restreindre l'utilisation des animations, d'utiliser des caractères communs d'édition de Windows pour les textes et les caractères symboles pour les équations. **Ne postez pas votre présentation**, apportez-la au congrès sur une disquette ou un CD après avoir testé votre document à l'aide d'un autre ordinateur. Si vous utilisez des diapositives 35 mm, veuillez les placer dans un magasin circulaire. Veuillez indiquer la méthode de présentation lors de la soumission de la communication.

Présentation d'affiches :

Les affiches peuvent être placées le samedi le 16 octobre, et exposées pour toute la durée du congrès. Nous demandons aux présentateurs d'être présents pour répondre aux questions particulièrement pendant la séance prévue à cet effet le dimanche 17 octobre de 14:45 – 16:00.

Informations requises :

1) Nom(s) de(s) auteur(s), 2) nom du présentateur, 3) adresse, 4) titre, 5) résumé, 6) catégorie, 7) langue de la présentation, et 8) méthode de présentation (PowerPoint ou diapositives 35 mm). Soumettez ces informations par courriel, sur disquette ou CD en format Word ou WP. Les résumés ne doivent pas dépasser 70 mots. Si votre résumé dépasse la limite de mots acceptée, les éditeurs se réservent le droit de le couper. Si possible, envoyez ces informations en français et en anglais. Tous les résumés seront publiés sur le site Internet.

Veuillez soumettre au :

Jon Sweeney

Président du programme scientifique

Service canadien des forêts

Case postale 4000, Fredericton, NB E3B 5P7

Téléphone: (506) 452-3499, Fac: (506) 452-3525, Courriel: jsweeney@nrcan.gc.ca

International symposium ecology and management of *Lygus* plant bugs

30 January - 3 February 2005
Ottawa, Canada

Chair Scientific Committee: P.G. Mason (Ottawa, Canada)

Scientific Committee: B. Broadbent (London, Canada); P. Ellsworth (Tuscon, USA); D. Gillespie (Agassiz, Canada); P.B. Goodell (Parlier, USA); K. Hoelmer (Montpellier, France); B. Footitt (Ottawa, Canada); U. Kuhlmann (Delémont, Switzerland); O. Olfert (Saskatoon, Canada); L. Williams (Stoneville, USA).

Please submit the title of your oral or poster presentation including an abstract describing the research of the presentation to Lygus_Symposium@hotmail.com. Depending on the number of papers submitted for each scientific session, the scientific committee might accept your paper for presentation in a different format.

The goal of the meeting is to stimulate ideas by presenting new information and therefore all talks and posters should present original data from specific projects. Submissions should be as specific as possible and avoid presenting overviews, summaries, or material that is already widely known (with the exception of the kick-off session).

Sessions:

Economic Importance of *Lygus* in Crop Commodities

Lygus Community Ecology

Chemical and Behavioral Ecology of *Lygus* Plant Bugs

Cultural Controls for *Lygus* Management

Host Plant Resistance

Insecticide Efficacy on *Lygus* Plant Bug Populations

Insecticide Resistance and Insecticide Non-target Impact

Systematics/Taxonomy of *Lygus* and Biological Control Agents

Biological Control Products and Commercialization

Host Specificity of Biological Control Agents

Post-release Evaluation of Classical Biological Control / Conservation of Biological Control Agents

Biology and Ecology of Biological Control Agents

Is IPM feasible to control *Lygus* in all crop commodities?

Lygus lineolaris adult, composite photo, see page 53 for more details.



Henri Goulet



Bob Lamb

Lygus elisus Van Duzee, plant bug adult on canola.

Guide d'identification des araignées (Araneae) du Québec. Paquin P, Dupérré N. 2003. Fabre-ries, Supplément 11 (Association des entomologistes amateurs du Québec inc. (www.aaq.ca)) 251 pp. ISBN 2-9802609-5-9 CAN\$ 45.00 (spiral bound).

Those requiring a general North American spider identification manual have long relied upon the monumental compilation *Spiders of Connecticut* (Kaston B.J. 1947. *State Geological and natural history survey of Connecticut*. Bulletin 70. 874 pp.) and a widely circulated, privately published handbook (Roth V.D. 1993. *Spider genera of North America*. 3rd ed. 203 p.). Since the 1970s, interest in spiders has grown immensely and modern replacements for Kaston's and Roth's works are needed. Fortunately, the recent publication of Paquin and Dupérré's *Araignées du Québec* and the upcoming publication of the American Arachnological Society's completely rewritten and updated edition of Roth's guide (with Dupérré as illustrator and Paquin as a major contributor) satisfy the need.

The French-challenged should not recoil from purchasing and using *Araignées du Québec*. Of great value to amateurs and professionals alike, this book is a useful and timely guide for anyone (regardless of linguistic background) needing to identify North American spiders. 218 of its 251 pages are mostly devoted to excellent monochrome diagnostic illustrations of 670 species of spiders known or believed to occur in Quebec. Most drawings are easily interpreted and likely no one will misunderstand figure legends such as "Palpe du mâle, tibia et patella, vue dorsale" or "Abdomen de la femelle, vue latérale." Using the keys is slightly more problematic as the French is more complex. But abundant references to well-labelled figures largely solve this minor problem. Additionally, because a large number of the genera (and a significant number of species) included in *Araignées du Québec* are widespread, the book is useful for "ballpark" identification of specimens from elsewhere in North America - for instance, I will check

Araignées du Québec for help with an unfamiliar West Coast beast prior to wallowing about in the primary taxonomic literature.

Fifteen introductory pages provide information (primarily of interest to novices) on nomenclature and classification, spider morphology, where and how to collect spiders, basic curation of specimens, and how to use taxonomic keys in general and *Araignées du Québec* in particular. The simple morphology figures will ease usage of the volume for the French-challenged. A 40 couplet key to the 30 families of spiders found in Quebec follows. All but two couplets are backed up with one or more simple, clear figures which, again, render knowledge of French optional. The remaining 30 chapters address the families in alphabetical order from Agelenidae to Uloboridae. The volume concludes with a 116 entry glossary (useful for novices) and references for the selected set of spider publications mentioned in the text.

Each family chapter commences with taxonomic background and natural history information and a habitus drawing. An illustrated dichotomous key to genera (except for linyphiids) found in Quebec follows. Species diagnostic illustrations, arranged alphabetically by and within genus comprise the bulk of these chapters. Various views of genitalic characters are presented for each species with additional figures of other features as necessary (e.g. significant abdominal patterns, erigonine cephalothoraxes). Classification and nomenclature follow Platnick N.I. 2004. *The World Spider Catalog*. Version 4.5. The American Museum of Natural History (<http://research.amnh.org/entomology/spiders/catalog/index.html>); only one deviation caught my eye (Cryphoeca in Dictynidae rather than Hahnidae). No taxonomic novelties are hidden in this volume, thankfully.

The value of *Araignées du Québec* is its collection under one cover of a large number of fine, useful and original (Dupérré) illustrations. (The drawings of linyphiids alone are more than worth the price of the volume and those of arctic and high boreal spiders are a significant bonus.) Non-original exceptions are the species figures for

clubionids, lycosoids, and philodromids - reproduced with permission from the Dondale and Redner handbooks (Dondale, C. D. and J. H. Redner. 1978, 1982, 1990. *The insects and arachnids of Canada and Alaska*. Parts 5, 9, 17. Agriculture Canada, Ottawa. Publications 1663, 1724, 1856.). New diagnostic illustrations are usually preferable in any guide but here the lycosoid figures (lycosids, pisaurids, and oxyopids) are significant improvements over their poorly reproduced versions in the "Insects and Arachnids" series.

Unfortunately some figures have been used without acknowledgement. For instance, earlier versions of figures 105, 249, 250, 1400, and 2515 appear in Kaston B.J. 1978. *How to know the spiders*. 3rd ed. W. C. Brown Co.; figures 187 and 191 are from Bennett, R. G. 1987. Systematics and natural history of Wadotes (Araneae, Agelenidae). *The Journal of Arachnology* 15:91-128. Presumably this lack of acknowledgement was an oversight.

Otherwise, I noted few errors in *Araignées du Québec* and most are matters of opinion (e.g. *Tegenaria atrica* is not likely established in Quebec (or anywhere else in North America), some *Coras* species identities are debatable) rather than error (e.g. the authors perpetuate *Tegenaria agrestis* (a spider not found in Quebec) medical mythology, North America is home to vastly more than "trois espèces" of cybaeids, and figure 742 is of a femur not a tibia).

The errors and oversights are insignificant. *Araignées du Québec* is a spider taxonomy classic. With a print run of only 1000 and a bargain basement price, apparently only the perceived stigma of French language publication is holding back a sell-out. No one with an interest in spider natural history, ecology, or basic taxonomy will regret owning a copy (I have three, one well thumbed already).

Robb Bennett
BC Ministry of Forests
Saanichton, BC

Mating systems and strategies. Shuster SM, Wade MJ. 2003. Princeton University Press, Princeton, USA. x + 533 pp. ISBN 0-691-04931-9, US\$ 35.00 (paper).

From the title of this book, one might expect an organized look at the natural history of mating systems and an abundance of interesting life history anecdotes. One would be disappointed, however, because *Mating systems and strategies* contains next to nothing on organisms and what they do. Rather, it is one long and well-developed theory about sexual selection and its implications for mating systems evolution, rooted in population genetics models. The authors' goal is a revamping of current ideas on mating system evolution. And they mean business - at all stages, the discussion is focused on outlining a research program to test the ideas, full of practical tips for gathering the relevant data.

Shuster and Wade's central idea is that it is necessary to quantify current selection pressures on males and females to understand the evolution of mating systems, and to give an objective estimate of selection pressures. This view is in opposition to the behavioural ecology tradition (which they exert some energy in criticizing), which holds that natural and sexual selection are historical processes and, therefore, that quantification of current selection is pointless. A major theme in the book is the divergence between these population/quantitative genetic and behavioural ecology perspectives.

The first three chapters outline a mathematical approach to evaluating sexual selection by the spatial and temporal distribution of receptive females. The authors develop (in an interesting and easy to follow fashion) equations to describe the strength of sexual selection in males and females. They then consider how multiple mating by females, sperm competition, and cryptic female choice affect the theory's predictions. Chapter 5 deals with the effect of female life history on sexual selection pressures, and again, the focus is on practical tips for creating a research program in this area.

The section I found most controversial - and

most interesting - was Chapter 7: "Conceptual difficulties in mating systems research." The chapter is a critical commentary on current mating system research, which, the authors believe, is misguidedly focused on interactions between individual males and females. Their goal in the chapter is to contrast this usual approach with an evolutionary biology/quantitative genetics approach. To do this, they examine recent studies of a variety of contemporary topics, including female mate choice and good genes hypotheses, sexual conflict and paternal care. Anyone who has an interest in mating systems research will find this chapter stimulating, and either exasperating or illuminating depending on one's background.

Chapter 9, an exhaustive classification of mating systems, is the longest - almost a quarter of the book! Mating systems are classified by the spatial and temporal crowding of receptive females, female mating behaviours and female life history. The classification is used to predict other aspects of the mating system, such as sperm competition, female copying, sexual dimorphism, paternal care and sexual conflict. Chapters 11 and 12 deal with theory and evidence for alternative male mating strategies. The authors discuss whether variation in male phenotypes is part of a conditional strategy or the outcome of genetic polymorphism; constraints of genetic architecture are introduced.

Because insect study organisms have been extensively used in mating systems research - with examples like forced copulation in scorpionflies, sexual conflict arms races in water striders, or male mate choice in katydids - many entomologists will be interested in this book. It is a challenging proposal for a new approach to the study of mating systems and a critique of current thinking and experimental practices. It is worth reading to hear a fresh perspective on this active research area, and Stephen Shuster (Professor of Invertebrate Zoology at Northern Arizona University) and Michael Wade (Professor of Biology at Indiana University) are certainly well-qualified for the job. Even if the reader cannot accept everything Shuster and Wade

put forth - and behavioural ecologists, in particular, will find their hackles raised in every chapter - *Mating systems and strategies* is a worthwhile investment of time.

Jen Perry,
Department of Biological Sciences
Simon Fraser University,
Burnaby, BC

Mariposa Azul (Le papillon bleu) Francine Allaire: productrice chez Galafilm. Léa Pool, réalisatrice, Comédiens: Pascale Bussièrès, William Hurt et Marc Donato, D'après un article de Judith Lachapelle publié en p. C1-2 du journal *La Presse*, samedi 13 avril 2002 et un article publié dans *Métro* (Montréal), mercredi 10 mars 2004, p. 11.

En 1990, lors de l'inauguration de l'Insectarium de Montréal, David, un garçon gravement affligé d'un cancer au cerveau et qui était en chaise roulante, n'avait pas été invité à la conférence de presse, mais est allé voir Georges Brossard pour lui dire son rêve: "attraper un papillon bleu". Grâce à l'organisme Enfants de Rêves, David et sa mère se sont envolés au Mexique avec Georges Brossard pour capturer le Mariposa Azul, qui, selon la croyance, porte sur ses ailes un rêve que l'on lui a confié.

Cette histoire vraie a été tournée au Costa Rica et est à l'affiche au Canada depuis le 21 février 2004. De sa sortie en salle jusqu'au 11 mars 2004, le film a fait des recettes de 1 millions de dollars.

Le film sera projeté lors du festival Tribeca de New York, puis sera présenté au Japon et en Italie en Juin 2004. Une vingtaine de pays ont acheté les droits de projection.

Mariposa Azul (The Blue Butterfly), Francine Allaire: Producer at Galafilm. Léa Pool, Art director, Actors: Pascale Bussièrès, William Hurt et Marc Donato, After an article by Judith Lachapelle published in the newspaper *La Presse*, Saturday 13 April 2002 (p. C1-2) and an article published in *Métro* (Montreal), mercredi 10 March 2004, p. 11

In 1990, during a press conference for the opening of the Insectarium de Montréal, David, a boy severely afflicted by a brain cancer and in a wheelchair, had not been invited to the event. He told his dream to Georges Brossard: "to catch a blue butterfly". Thanks to "Enfants de rêves", David, his mother and Georges Brossard flew to Mexico to catch a Mariposa Azul, which, it is believe, bear on its wings a dream confided to him.

This true story was filmed in Costa Rica is presently screening in Canada since 21 February 2004. Since its debut until 11 March 2004, the film grossed 1 million dollars. It will be screened at the Tribeca festival in New York City, then in Japan and Italy in June 2004. Twenty countries have bought the rights to screen the film.

Adaptation
Charles Vincent
St-Jean-sur-Richelieu



Margaret Pickles

Overwintering monarchs, Sierra Chincua Reserve, Mexico

Books to be reviewed

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

Basset Y, Novotny V, Miller CE, Kitching RL (Editors). *Arthropods of tropical forests: Spatiotemporal dynamics and resource use in the canopy*. New York NY: Cambridge University Press

Held LI Jr. *Imaginal discs: The genetic and cellular logic of pattern formation*. New York NY: Cambridge University Press

Eisner T. *For Love of Insects*. Cambridge MA: Harvard University Press

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

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

Zhang Z-Q. *Mites of greenhouses: Identification, biology and control*. Cary, NC: Oxford University Press

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

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

Beside the noble art of getting things done, there is the art of leaving things undone. The wisdom of late consists in the elimination of the non-essentials.

Lin Yutnag

I am looking for photos of insects to publish in the Bulletin. Please contact the Editor for details.

Raymond Ford Morris 1919 - 2004

It is with regret that we report the death of Raymond F. Morris on 26 February 2004. Ray was born in March 1919 in the small community of St. George's, Newfoundland, the son of the late Harold and Christiana Morris. He was predeceased by his beloved wife Daisy and is survived by two sons, Wayne and Keith, grandchildren Jeffrey, Tara, Tina, Dawn and Sara, and great-grandchildren Ashley and Amber.

Ray received a Diploma in Agriculture from the Newfoundland Government Demonstration Farm in 1944, followed by five years with the Royal Newfoundland Regiment. In 1950, he graduated from the University of Toronto (Ontario Agricultural College) with a Bachelor of Science Degree in Agriculture, and in 1955 he received a Master of Science degree in Entomology from the University of Maine. During 37 years with Agriculture Canada in St. John's, Newfoundland, Ray made a major contribution to entomological and agricultural research, not only in Newfoundland, but across Canada. In recognition, he was awarded a Canadian Silver Jubilee Medal in 1977, and inducted into the Atlantic Agriculture Hall of Fame in 1985.

He was President of the Entomological Society of Canada (ESC) in 1983-84 and was elected a Fellow of the ESC. He was also a Fellow of the Acadian Entomological Society. Ray successfully lobbied for the issuance of a series of Canada Post butterfly stamps to commemorate the XVIII International Congress of Entomology (see *ESC Bulletin* 20 (4): 34). An excellent communicator, Ray enjoyed annual cross-island trips visiting farms and holding meetings/ short courses to discuss insect control and a host of other problems, with growers. From 1970 to 1980 he was an Honorary Lecturer at Memorial University of Newfoundland. Ray loved to collect insects - the insect reference collection at Agriculture and Agri-Food Canada (AAFC) in St. John's exists largely due to Ray Morris, and boasts over 60,000 specimens from Newfoundland and Labrador.



At the time of his retirement in 1984, Ray had published a large number of scientific and extension papers on such diverse topics as vegetable and berry insects, microbial degradation of soil insecticides, golden nematode, blowflies in sheep and blowflies infesting light-salted codfish. He also authored a now out-of-print, but still much sought after book *Butterflies and moths of Newfoundland and Labrador: The microlepidoptera*. Although he completed a draft manuscript on the Microlepidoptera of Newfoundland and Labrador, it is unfortunate that this was never published. *The Encyclopedia of Newfoundland and Labrador*, edited by former premier Joseph R. Smallwood, contains a section authored by Ray on "Agricultural Insects of Newfoundland". Ray also has a chapter on "Introduced Terrestrial Insects" in the book *Biogeography and ecology of the island of Newfoundland*, edited by G.R. South.

Ray had a fine voice and liked to sing - he was an active member of Wesley United Church through the men's club, the senior choir and the men's choir. For many years he was a board member and a volunteer with Wesley United Church-VOWR radio station in St. John's, and produced a weekly home gardening show. He was also an avid horticulturist and a passionate gardener. His house was across the road from the AAFC Research Centre and was built with

wood from trees cut so the Centre could be constructed. Until recently, most days when going to and from the Centre we would see him in his garden, digging, planting or impressively cutting grass with a scythe!

On a personal level, I have known Ray since he assisted with my Honours-BSc project on the cabbage maggot, *Delia radicum*, in 1978. When I was fortunate enough to be offered the position of AAFC entomologist at St. John's in 1992, I knew I had very big shoes to fill. Ray Morris was ever encouraging, ready to answer questions and offer advice. One of my most treasured possessions is a copy of his book, *Butterflies and moths of Newfoundland and Labrador*, autographed and presented to me on the first day of my new job! We will miss him very much.....

Peggy Dixon

St. John's, Newfoundland and Labrador



(C) Christian Aulotte

Christian Aulotte

A swallowtail butterfly on grass.

Special birthday on 10 April 2004

Stuart Walley was 100 years old on 23 April 2004. If anyone wishes to send him congratulations via e-mail you may do so using my address, ec.becker@sympatico.ca, and I will deliver the messages to him. The retirement home has a "party" every Thursday, and since this is just one day short of his birthday, they included a birthday cake.

Recently deceased

Compiled by Ed Becker

Glenn Gilkinson, #203, 2101 Preston Ave., Saskatoon SK, S7J 4S5, died on 2 February 2004, at the age of 80.

Hubert (Mac) MacCarthy, 4026 W. 38 Ave., Vancouver BC V6N 2Y9, (604) 263-5825, died on 7 April 2003 at age 92. He started his research career at the Field Crops Insect Laboratory in Kamloops about 1953. In 1955, he was transferred to Vancouver to open a new Field Crop Insect Laboratory, which became the Entomology Section of the new Research Station in 1959. Here Mac was principally involved in studies of the transmission of potato leaf roll and its control. He was an Adjunct Professor in 1974 and after retirement (1976) until 1988 he was associated with the M. P. M. program at Simon Fraser University. Mac served as President of the Entomological Society of British Columbia (1960) and as Editor of the Journal (1953-1988). He was appointed a Fellow of the Entomology Society of Canada in 1979.

Terence Laverly, husband of Andrea, was a Professor at the University of Western Ontario, London. He suffered a severe heart attack and died on 12 April 2004. He was in his 50's. Andrea works at the Department of Psychology, University of Western Ontario, London Ont. From all reports, he was a well-liked teacher.

Ronald J. Prokopy, Department of Entomology, University of Massachusetts, Amherst MA 01002, U. S. A. died on 13 May 2004. He was a member of the Entomological Societies of Canada and America. He was known for his innovative work on insect behaviour.

Margaret McBride, c/o Leona Gray (her niece), 480 Brennan Ave., Kanata ON K1Z 6J8, (613) 761-6161, died 18 May 2004. Margaret had not been well for several years. She was the managing editor for *The Canadian Entomologist* and *Memoirs* for more than a decade.

Action items from the mid-term executive council meeting

By Rick West, Secretary

Treasurer / Finance committee

Patrice Bouchard was recommended by an *ad hoc* search committee to replace Gary Gibson as Treasurer after the 2004 AGM. A ballot to approve this recommendation will be sent to the Board. New procedures will be developed for invoicing US dollar subscriptions as a safeguard against variable and volatile exchange rates. Lapsed subscribers will be contacted to determine the reasons for non-renewal. The 2003 financial statements will be published in the September *Bulletin*. Subscription rates for multi-site access are under review.

Scientific Editor / Bulletin / Publications

Heather Proctor was appointed as Associate Editor (Mites). Efforts are being made to efficiently use an electronic review process. The journal will have to be redesigned to meet NRC standards. The NRC contract to publish the journal and archive past issues will be renegotiated in 2004.

The Executive was very pleased with the quality of the *Bulletin* and reduction in printing costs. Lucie Royer was appointed as an Assistant Editor of the *Bulletin*.

The Publications Committee in consultation with the Scientific Editor and Finance Committee will re-examine the format for *The Canadian Entomologist* and recommend changes. A document, outlining conditions of use for downloading documents and photos from the web site, will be prepared. A *Bulletin* article regarding the maintenance of entomological information and databases by Members on the web site will be prepared.

Awards committee

Judith Myers was approved as the 2004 Gold Medal Recipient. There will be no C. Gordon Hewitt Award winner for 2004. The guidelines for the Hewitt Award are under review.

Bilingualism committee

Quotes are being obtained to translate societal documents. H  l  ne Chiasson will review the French content on the web site.

Insect common names

An update of the common names list is underway and will be uploaded to the web site.

Membership committee

The President will contact presidents of other Canadian scientific societies to support membership in scientific societies as a benefit to federal employees negotiated in contract talks with Treasury Board. Standing Rule 3.1 will be amended to allow proposed benefits for honorary members. The Membership Committee was asked to recommend a minimum period that a person must be a regular member to qualify for *emeritus* status.

Student awards committee

Brian Van Hezewijk will be appointed as Interim Chair of the committee while the current chair (Rose De Clerck-Floate) is on sabbatical.

Science Policy committee

The committee will review whether the Awards Committee should nominate members for awards other than those offered by the Society; and whether the *Bulletin* should publish solicitations for funds from external agencies.

Student affairs

The Committee recommended publication of President's Prize winning abstracts in the *Bulletin*. The Executive recommended that student members receive the same percentage discount as regular members registering for future annual meetings.

Marketing committee

Efforts will be made to obtain federal funding to print additional copies of the French version of the *Diseases and Pests of Vegetable Crops in Canada* book.

Fundraising committee

About \$4000 has been raised since the last AGM for the scholarship fund, and the drive for additional sponsors continues.

Biological Survey of Canada (Terrestrial Arthropods)

A BSC Scholarship will be awarded in 2004 and will be described in the *Bulletin*. Details are also posted on the web site. The Science Policy Committee will contact members of the Biological Survey to discuss ways in which to ensure the long-term health of the Survey.

Student conference travel award

The Student Conference Travel Award will be awarded in 2004. Details are posted on the web site.

54th Annual general meeting and governing board meeting

The Annual General Meeting of the Entomological Society of Canada will be held at the Rodd Charlottetown Hotel, Charlottetown P.E.I. on Sunday, 17 October 2004 at 16:00. The Governing Board Meeting will be held at the same location on Friday, 15 October from 8:30 to 17:00. Matters for consideration at either of the above meetings should be sent to Rick West, Secretary of the ESC.

54^e L'assemblée générale annuelle et la réunion du comité directeur

L'Assemblée générale annuelle de la Société d'entomologie du Canada aura lieu au Rodd Charlottetown Hotel, Charlottetown Î.-P.-É., le dimanche, 17 octobre 2004 à 16 h 00. La Réunion du comité directeur de la SEC aura lieu au même endroit le vendredi 15 octobre 2004 de 8 h 30 à 17 h 00. Veuillez faire part au secrétaire, Rick West, de tout sujet pouvant faire l'objet de discussion à ces réunions.

ESC membership questionnaire

By Jon Sweeney, Membership Chair

A questionnaire was sent via e-mail to ESC members in 2003 to solicit their opinion on how the ESC may serve them better. Eighty-four members (17%) responded but three files failed to open so the following is a summary of 81 respondents. Some members did not receive the survey, likely due to server/e-mail problems and I apologize for that. A brief summary of results follows.

Most respondents were involved in research, teaching or both. Students made up 11% of respondents and amateur entomologists only 6%. A quarter of respondents said their interests were better served by societies that were either more specialized in their area of research (12%) or for various other reasons (14%). Most respondents said they were members of the ESC because they saw the value in supporting and promoting entomology in Canada (85%) and for the subscription to *The Canadian Entomologist* (60%); other reasons given for membership were to keep informed and to interact with colleagues. Some members were not aware they did not have to be ESC members to publish in *The Canadian Entomologist*. Only 25% of respondents suggested moving the dates for the Annual Meeting from the traditional early-mid fall meeting date and only 12% indicated a preference for holding it over a weekend (too late for the 2004 meeting!). About 23% indicated they would like a reduced membership rate without *The Canadian Entomologist*, and 20% would like to have discounted admission fees to scientific museums. There were many other suggestions made for improving the value of ESC membership, too numerous to list here. Most respondents had visited the ESC website (65%) and had read the Bulletin (95%) and most found them useful and informative. Results were presented to the ESC Board at the Annual Meeting in Kelowna in November 2003. In 2004, the questionnaire will be sent to non-ESC members of regional entomological societies, to stimulate interest in the ESC and learn how we might attract new members.

Tabulated responses and comments

Response to question #2, which applied only to non-ESC members is omitted. Please note that percentages do not sum to 100 because respondents were asked to check all responses that applied.

1. Please indicate your involvement with insects and entomology (please check all appropriate boxes)

	# (%)
researcher	61 (75)
teacher	28 (35)
amateur	5 (6.2)
student	9 (11)
industry	1 (1.2)

3. If your interests are better served by membership in other societies, please indicate why (provide additional explanatory comments if you wish):

	# (%)
less applied/ more theoretical	1 (1.2)
less regional/ more international	4 (4.9)
less general/ more specific to my research area	10 (12)
other	11 (14)

4. If you are a member of the ESC, why? (please check all appropriate boxes)

	# (%)
see the value in supporting and promoting entomology in Canada	69 (85)
subscription to <i>The Canadian Entomologist</i>	48 (60)
discounted registration fees at ESC Annual Meetings	14 (17)
eligibility for ESC Scholarships	9 (11)

other (please explain briefly): Other reasons why people were members of the ESC were for professional interaction with colleagues, to keep informed about current developments in entomology, and to publish in *The Canadian Entomologist* (note: non-members of ESC can publish in *The Canadian Entomologist*)

5. What would make membership in the ESC more attractive to you? (please check all appropriate boxes and provide additional explanatory comments if you wish)

	# (%)
move Annual Meetings from October to (pick one):	
early September	11 (14)
early January	3 (3.7)
early May	6 (7.4)

75% of responders ticked none of alternate dates which was taken as acceptance of the traditional early-mid fall meeting date.

	# (%)
hold Annual Meetings from Friday afternoon to Monday noon	10 (12)

Most respondents were not in favour of holding the meeting over a weekend

amateur membership category at reduced rate	8 (10)
membership without <i>The Canadian Entomologist</i> at reduced rate	19 (23)
discounts for admission to scientific and entomological museums, etc.	16 (20)
other (please explain briefly)	

There were many other suggestions including reduced costs for Emeritus members, family memberships, reductions in *The Canadian Entomologist* page charges for ESC members, and more joint annual meetings with other societies, e.g., C.S.Z. and E.S.A.

6. Have you ever visited the ESC website? <http://esc-sec.org/> yes no

If so, how useful did you find it? Do you have any suggestions for improvement?

Fifty three people (65%) said they had visited the website and most found it useful (see a sample of comments below); 20 people (25%) had not visited the website and 8 people (10%) ticked neither box.

7. Do you read the ESC Bulletin? yes no

If so, how useful do you find it? Do you have any suggestions for improvement?

Only four people (5%) said they did not read the Bulletin. There were many comments on the Bulletin, mostly positive.

Finally people were asked to provide any general comments regarding the ESC. A small sample are listed below:

Greater attempt to include French in our meetings, publications and so on might interest our Quebec colleagues, many of whom belong to the SEQ, but not the ESC.

The value of student memberships needs to be better publicized, and the rate for student membership must be VERY minimal to keep it within their grasp.

Entomological meetings rarely involve field trips to places of local ecological interest in contrast to the many interesting botanical meetings that I have attended. Trips meant for accompanying spouses which conflict with scheduled talks are not the same. I would like to see that organizing committees consider offering a trip or two at cost of transportation etc., to habitats of interest to visitors from other parts of the country or the world. Possibly local field naturalists clubs could be called upon to help guide these trips.

BON TRAVAIL. Je vois que, de plus en plus, la SEC s'intéresse à faire avancer les choses. Continuer à favoriser les échanges entre étudiants et chercheurs à travers le Canada serait une excellente affaire. J'apprécierai beaucoup voir des échanges possibles à faire entre différentes universités canadiennes, agences gouvernementales et/ou le secteur privé. Il me semble que ce type de stage est enrichissant pour tous le monde!

The Society needs to identify as many features as possible that can attract and retain members from the entomological community. We need to do all we can, in cooperation with industry, universities and governments, to identify entomology an attractive career option. If the state of entomology is healthy in Canada, then the ESC should do well.



Donna Giberson

A male damselfly, *Enallagma ebrium* (Odonata: Coenagrionidae)

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

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The Buzz / Bourdonnements

Lucie Royer, Assitant Editor /
Rédactrice adjointe



J'aimerais saisir l'occasion qui m'est offerte pour me présenter. J'ai obtenu mon Doctorat à l'Université Laval. Il portait sur l'impact des facteurs biotiques et abiotiques sur la reproduction et la communication inter-sexuelle au moyen de phéromone chez la pyrale du maïs. J'ai ensuite eu l'opportunité d'étudier la dynamique des populations de mouche du chou, ainsi que celles de ses ennemis naturels, au Collège MacDonald de l'Université McGill. Après un court passage en compagnie privée où j'ai contribué à l'amélioration du dépistage, de la surveillance et de la répression de divers insectes ravageurs des cultures légumières, je travaille depuis cinq ans au Service canadien des forêts à Corner Brook, en tant que chercheuse scientifique en dynamiques des populations d'insectes. Je m'intéresse à la reproduction, aux relations plantes-insectes et herbivores-ennemis naturels, afin de mieux comprendre et prévoir les infestations de ravageurs forestiers. Mes études visent à développer de nouvelles méthodes de dépistage et de surveillance à diverses échelles spatiales et/ou d'améliorer celles déjà existantes, ainsi qu'à proposer de nouvelle stratégie de lutte.

Ces cinq dernières années, j'ai présidé le Comité du bilinguisme de la Société qui, je crois, a répondu avec célérité aux différentes demandes de traduction. Je tiens à remercier sincèrement les membres de ce comité qui m'ont si bien secondée dans cette tâche (Hélène Chiasson, François Fournier and Michèle Roy). Comme il est bon que tout comité se renouvelle, après cette période, il était temps de passer la main. Je souhaite donc la bienvenue à mon successeur au sein du Comité du bilinguisme : Michèle Roy.

Pour ma part, c'est avec joie que j'ai accepté le poste d'assistante rédactrice du Bulletin, qui me permettra de continuer à œuvrer activement au sein de la Société. Paul Fields a récemment remanié l'apparence et le contenu du Bulletin. Il fait un excellent travail et c'est avec enthousiasme que je joins l'équipe de rédaction du Bulletin. N'hésitez pas à me contacter pour nous proposer des sujets, idées ou, mieux encore, vos textes.

I would like to take this opportunity to introduce myself. I did my PhD at Laval University on the reproduction and the inter-sexual communication with pheromone of the European corn borer. Thereafter, I had the opportunity to study the population dynamics of the cabbage maggot, as well as those of its natural enemies, at MacDonald College of McGill University. After a short period in a private company where I contributed to improve monitoring system and control of various insect pests in vegetable crops, I have worked in Corner Brook for the last 5 years for the Canadian Forest Service (CFS), as research scientist in population dynamics. My research interests lie in the area of insect reproduction, plant-insect interactions and herbivores-natural enemies relationships, in order to better understand and predict forest insect pest. My studies aim to develop new monitoring methods at different spatial scales and/or to improve the existing ones, and to propose new control strategy.

During the last five years, I chaired the Bilingualism Committee of the Society, which responded as quickly as possible to all the requests for translation. I would like to sincerely thank the members of this Committee, whom helped me so well in this task (Hélène Chiasson, François Fournier and Michèle Roy). My departure will allow the renewal of the Committee, and I wish all the best to my successor as Chair of the Bilingualism Committee: Michèle Roy.

I accepted with pleasure the chance to serve as Assistant Editor of the Bulletin, which is a great opportunity to continue playing an active role in the Society. Recently, Paul Fields has revamped the Bulletin. He is doing an excellent job, and I join with enthusiasm the Editorial team of the Bulletin. Do not hesitate to contact me to suggest subjects, ideas or, even better, material for publication in the Bulletin.

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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.

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

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

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