

Boreus



Newsletter of the Entomological Society of British Columbia



December 2010
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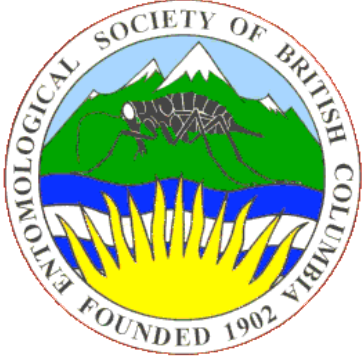


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The Executive



The Entomological Society of British Columbia is a scientific Society founded in 1902 for the advancement of entomological knowledge in the province.

Web Page	http://www.sfu.ca/biology/ESBC/ Rob McGregor
President	Douglas College, New Westminster
President-Elect	Ward Strong, B.C. Ministry of Forests & Range, Vernon
Past-President	Tom Lowery Agriculture and Agri-Food Canada, Agassiz
Secretary	Leo Rankin B.C. Ministry Forests & Range, Williams Lake
Treasurer	Lorraine Maclauchlan B.C. Ministry of Forests & Range, Kamloops
Editorial Committee (Journal)	Hugh Barclay (Editor) Canadian Forest Service, Victoria Robert Cannings, Royal B.C. Museum, Victoria Lorraine Maclauchlan B.C. Ministry Forests & Range, Kamloops Sheila Fitzpatrick Agriculture and Agri-Food Canada, Agassiz
Editors (Boreus)	Jennifer Heron B.C. Ministry of Environment, Vancouver Jeremy deWaard University of British Columbia, Vancouver
Directors	Naomi Delury Agriculture and Agri-Food Canada, Summerland Dezene Huber University of Northern B.C., Prince George Jim Corrigan B.C. Ministry Forests & Range, Vernon Arthur Stock B.C. Forest Service, Nelson Tracy Hueppelsheuser B.C. Ministry of Agriculture and Lands, Abbotsford
Student Representative	Chandra Moffat UBC - Okanagan, Kelowna
Honorary Auditor	Tom Lowery Agriculture and Agri-Food Canada, Agassiz
Regional Director of National Society	Bill Riel Canadian Forest Service, Victoria
Web Page Editor	Bill Riel Canadian Forest Service, Victoria



Publications of ESBC

Journal of the Entomological Society of British Columbia



The Journal of the Entomological Society of B.C. is published annually. Papers for the Journal need not have been presented at meetings of the Society, nor is it mandatory, although preferable, that authors be members of the Society. The chief condition for publication is that the paper has some regional origin, interest or application. Line drawings or photographs as candidates for the cover are also accepted. Contributions should conform to the standards outlined in the Journal and the Website (<http://www.sfu.ca/biology/ESBC/>), and should be sent to the Editor, Dr. Hugh Barclay, Canadian Forest Service, Pacific Forestry Centre, 506 West Burnside Road, Victoria, British Columbia, Canada, V8Z 1M5
Email: HBarclay@pfc.cfs.nrcan.gc.ca

The deadline for submissions to be included in the 2011 issue is September 1, 2011.

Boreus



Boreus, the Newsletter of the Society is published in June and December. It contains entomological news, comments, reports, reviews and notices of meetings and other events. While emphasizing the Society's affairs, Boreus provides members with a forum for their views and news of British Columbia entomology, as well as informal articles, notes regarding research projects, and anything else that may be of interest to entomologists. Please send correspondence concerning Boreus to the co-editors Jennifer Heron and Jeremy deWaard through the new dedicated Boreus email account (editorboreus@gmail.com).

The deadline for submissions to be included in the June issue is May 15, 2011.



Membership

Membership of the Entomological Society of B.C. is available to anyone interested in entomology. Annual dues are Can\$20.00 (regular member) or Can\$10.00 (student member). Members receive the Journal, Boreus and Occasional Papers (the latter published intermittently).

Inquiries concerning membership and back issues should be sent to the Treasurer, Dr. Lorraine Maclauchlan, B.C. Ministry of Forests, 515 Columbia Street, Kamloops, B.C., Canada V2C 2T7; tel 250 828-4179; fax 250 828-4154; e-mail: Lorraine.Maclauchlan@gov.bc.ca

Cover Sketch: *Boreus elegans* (Mecoptera: Boreidae); one of the more conspicuous snow scorpionflies in B.C. Larvae and flightless adults live in, and feed on, moss and clubmoss. Adults appear in the fall and are active on snow on warm winter days. Credit Ward Strong and Robert A. Cannings.

Cover Photographs: Entomologists in the field, photographs by Jennifer Heron.



Spiders analyzed as part of a project constructing a DNA barcoding library for BC's Aranae. Photos Stephanie Kirk.



Editor's Notes

With the closing of each year, many of us pause to reflect on the past year's events and what the New Year may bring. Year 2010 has been significant for me, particularly because of the passing of three fellow entomologists and friends: Rex Kenner, Rob Roughley and Terry Shore. Each of their obituaries has been in *Boreus*, and the legacy each left behind is evident by their publications, photographs, projects, leadership, involvement and social enjoyment within the entomological community. Some of you may not have had the good fortune to know these men, but for those who did, I'm sure you'll agree it is their charisma, laughter, mannerisms, and opinions that are missed most.

When a friend or work colleague passes away, I'm once again immediately struck with my own mortality. Each of these three men held the many qualities that are admired in a friend and work colleague. Most of my interactions with Rob, Rex and Terry were during entomological functions, meetings and random events. So it's the random opportunities to converse and socialize with these three entomologists, that I will miss most.

Rob actually passed away in 2009, but I thought about his passing often this past year. Rob was always supportive, he wanted to see hard-working, honest people succeed, and he didn't hold airs about his credentials or his qualifications. He was also a realist and was honest about how he felt. Rob was one of those people that you could phone at any time, and he always made time for you.

Rex is the one I miss most. Because my office is close to the Beaty Biodiversity Museum, I spent a lot of time walking back and forth between the museum, entomology collection and my workplace, and it seemed I would see Rex en route each time. Rex was always available to help with identification of random insects, a quick field trip, a review of a paragraph or paper—a one-stop source for information on (it seemed) anything, including physics or chemistry! This past summer during fieldwork, anytime I encountered a wetland, bog, pond or puddle, I thought of Rex, as he so loved fieldwork in these habitats.

I didn't know Terry as well as I knew Rob or Rex, although Terry also always took the time to smile, crack a dry joke and have a great conversation. I typically saw Terry a few times a year at entomological gatherings, but he was one of the people I sought out for a good conversation. This past entomological conference I found myself doing just that, and missing him for his intelligent musings and conversation.

This next year, take the time to get to know your entomological colleagues a little better. The passing of these three friends reinforces that you should not only follow their lead as great entomologists and people, but also let your colleagues know more about each of you. Publish and write down your entomological achievements; the knowledge you possess is valuable and your contribution, however little it may seem to you, leaves your colleagues knowing about you and your work just a little more. Write articles and anecdotes for *Boreus* (or other entomological newsletters) and send your photographs of fieldwork and entomological musings. Deposit specimens you collect in the museums, such that future entomologists can both cite and benefit from your hard work. Take accurate field notes and make those field notes available, for example, by donating them with your specimens to entomological collections. Mentor everyone, be an advocate for your profession and for entomology and be free with your knowledge, however small it may be. There are many more examples I could cite, but most of all, continue to build good relationships with your entomological friends and colleagues.



Jennifer Heron, Boreus Co-editor

Society Business

Minutes: Annual General Meeting ESBC 2010

Date: Nov 3 2010

Location: Coast Plaza Hotel, 1763 Comox Street, Vancouver, BC

Secretary: Leo Rankin

The 2010 ESBC AGM was held in Vancouver during the Joint Annual Meeting (JAM) of the ESC and ESBC. The JAM was a tremendous success with over 250 attendees and over 100 scientific papers presented during the conference.

1. **Call to order:** The meeting was called to order by chair, Tom Lowery at 12:10 PM.
2. **Motion to approve agenda:** Moved and seconded (Melanie Hart , Ward Strong); Passed
3. **Review minutes of Fall 2009 AGM:** Motion to approve executive meeting minutes Moved and seconded (Naomi Delury/Jeremy deWaard); Passed.

Old Business:

4. **Correspondence - letter to NONC:** Presented by Tom Lowery. The North Okanagan Naturalists Club (NONC) has provided a generous prize annually to a graduate student in entomology. NONC would now prefer to award the prize to the most qualified student based on written submissions to their society. Tom suggested that NONC contact the ESBC Secretary each fall informing us of their intention to award a student prize. An announcement of the award and submission procedure would then be included in Boreus, our society newsletter. Then submissions could be submitted to NONC for judging. Tom urged them, on behalf of the students of entomology, that they continue to provide this award.
5. **Secretary/Treasurer's Report:** Leo Rankin read Treasury report for Lorraine Maclauchlan. Membership stands at 9 life members, 124 Regular and student members, 75 exchange partners (receive JESBC) and 59 subscribers. Membership invoices for 2011 will be mailed out with the December JESBC. See the full report for budget details.



6. **Addendum to Secretary's Report:** The report was given by Leo Rankin. So far the only duty in the new position was the organizing and tallying up of the election results for the new executive members. The results are as follows:

- President Elect - Ward Strong
- Secretary - Leo Rankin
- Graduate Student Representative - Chandra Moffat
- Directors - Tracy Hueppelsheuser, Dezene Huber (re-elected), and Art Stock.

Thanks to all outgoing executive members.

7. **Journal editors' report:** Hugh Barclay's report was read by Tom Lowery. Hugh is resigning in order to go to Japan and therefore there is a need to find a new editor. Allan Carroll has tentatively agreed to cover the editor position with Hugh Barclay if Hugh will stay on as Assistant editor. However this has not been confirmed. Allan Carroll is still considering. Alternatively we may be able to find another assistant editor. Or we might be able to change the deadline for manuscript submission to defer the problem until we can find another option for resolution. It was recommended to move the submission deadline up to August 1st.

Motion: Be it resolved that the submission date of Journal articles be moved to August 1st. Moved and seconded (Ward Strong/ Jeff Scudder); Passed.

8. **Boreus Editor Report:** Report read by Jeremy deWaard. There was a question of how many copies of Boreus were mailed out? Jeremy was not sure. We need to minimize the number of Boreus copies mailed out in order to reduce costs. We should charge more for memberships if we are mailing out the Boreus. We could have a box to check off to select either digital or snail mail paper copy delivery.

9. **Website Editor Report:** Report presented by Bill Riel. There has been considerable work done on the web site since the last executive meeting, primarily for the 2010 ESC-ESBC joint annual meeting. This year was the first time that on line registration and payment system were implemented for the JAM, and it appears to have worked very well. ESBC now has a PayPal account which we can use for on line credit card payment of membership registrations. Now we can sell things from our website. We may possibly be able to register membership on-line. PayPal has a 3% fee for each transaction. However, a "convenience fee" could be added to deal with this cost. It was recommended that the executive work on on-line registration issue during the executive meeting.

Dave Carmean at SFU is hosting our website at no charge which is a great benefit. Bill Riel was to give a verbal thanks for this much appreciated assistance.

We need to create automatic membership reminder. This should be a duty of the Secretary and Treasurer. The e-mail reminder could contain a link to membership registration. There was also discussion about the possibility of multiyear memberships.

10. **Regional Director Liaison to ESC:** report presented by Bill Riel and Jim Corrigan: Next years' JAM is in Halifax. ESC is looking for a new editor for the Journal of Canadian Entomology since Robb Bennett is resigning. They have approached Cambridge University Press to publish Can Ent and are looking at two year



transition for editor. ESC is also searching for an Assistant Editor for the Bulletin. Remember to join ESC. There is a rumour that in 2017 the JAM will be held in Vancouver with the American Entomological Society. President's prize awards were a problem and there is a feeling they should be open to undergraduates. There was also a suggestion that there be a coordinator for fundraising for JAMs. The JAM was a tremendous success but finances are still a bit murky. At this point it looks like there will be a modest loss. Bill received very good comments from participants regarding the JAM.

11. **Report of Graduate Student Director:** The report was given by Mel Hart. Everything at the JAM went well. The students distinguished themselves as volunteers. The silent auction was very successful and made \$1,200 for graduate student scholarship. . One box of books was late and will be sent to Halifax. The quality of talks and posters was superior. Mel enjoyed her time as director. She made a list of contacts. However there was the issue of the loss of funding from NONC and Contech which is an issue for the undergrad and graduate scholarships.

12. **Education Outreach Report:** Rob McGregor was unable to attend and no report was forthcoming.

13. **President's Report:** Tom Lowery presented the report. It was an eventful year including the huge job of hosting the JAM. See the President's report for details.

Motion to approve Executive reports: Moved and seconded (Mel Hart/Chandra Moffat); Passed.

New Business:

14. **Approval of Constitutional Changes:** The work on these changes was done by Shiela Fitzpatrick. Two main changes were suggested. The first was to split the position of Secretary/Treasurer into the two component parts, which will provide greater flexibility and help distribute the ever increasing workload. The second modification allows director positions to be filled by up to two graduate students. One of the six Directors shall be a graduate student, and the title of that Director position shall be Graduate Student Director. The changes were read out. See the detail of the changes in Appendix 1.

Motion to accept constitutional changes: Moved and seconded (Riella Zilahi-Balogh/Jim Corrigan); Passed. There was a question as to whether there was an adequate quorum to allow for a constitutional change. **Action:** Rob McGregor to check on what the quorum requirements are for a constitutional change and whether our vote on the constitutional changes is valid.

15. **Venue for ESBC Fall Meeting:** A number of meeting venues were suggested for the next AGM including the Summerland Research Station and the University of Fraser Valley. **Action:** Ward Strong to investigate.

16. **Motion to Adjourn the meeting:** Moved and seconded (Bill Riel, Mel Hart); Passed.



Appendix 1: Constitutional Changes:

Original wording:

a. The Officers of the Society shall consist of President, President-Elect, Secretary-Treasurer, Editor of the "Journal", Editor of the Newsletter, immediate Past President, Regional Director to the Parent Society and five Directors. These officers shall comprise the Executive with full powers to act on behalf of the Society within the bounds of the constitution and to appoint committees as necessary. Elections shall be held once a year at the Annual General Meeting. President, President-Elect, Editor of the "Journal", and Editor of the Newsletter shall be elected and remain in office until the next Annual General Meeting or until a successor has been elected. The office of President shall not be held by the same member for more than two consecutive years. Normally, the President-Elect shall take office as President one year after his/her election. The Secretary-Treasurer and five Directors shall be elected for two-year terms of office; election of the Secretary-Treasurer and two Directors shall alternate in years with election of the three remaining Directors. The Executive shall appoint the Regional Director to the Parent Society. Each shall remain in office for two Annual General Meetings or until a successor has been elected. The Officers shall act without remuneration.

Revised wording:

a. The Officers of the Society shall consist of President, President-Elect, Secretary-Treasurer **(one officer) or Secretary and Treasurer (two officers)**, Editor of the "Journal", Editor of the Newsletter, immediate Past President, Regional Director to the Parent Society and **six Directors. One of the six Directors shall be a graduate student, and the title of that Director position shall be Graduate Student Director. Graduate students may occupy one or two of the other five Director positions.** These officers shall comprise the Executive with full powers to act on behalf of the Society within the bounds of the constitution and to appoint committees as necessary. Elections shall be held once a year at the Annual General Meeting. President, President-Elect, Editor of the "Journal", and Editor of the Newsletter shall be elected and remain in office until the next Annual General Meeting or until a successor has been elected. The office of President shall not be held by the same member for more than two consecutive years. Normally, the President-Elect shall take office as President one year after his/her election. The Secretary-Treasurer **or Secretary and Treasurer** and **six** Directors shall be elected for two-year terms of office; election of the Secretary-Treasurer **or Secretary and Treasurer** and **three** Directors shall alternate in years with election of the three remaining Directors. The Executive shall appoint the Regional Director to the Parent Society. Each shall remain in office for two Annual General Meetings or until a successor has been elected. The Officers shall act without remuneration.



Minutes: Fall Executive Meeting ESBC 2010

Date: Nov 3 2010

Location: Coast Plaza Hotel, 1763 Comox Street, Vancouver, BC

Secretary: Leo Rankin

16. **Call to order:** The meeting was called to order by chair, Tom Lowery at 1:15 PM.

Attending: Tom Lowery, Leo Rankin, Bill Riel, Ward Strong, Naomi Delury, Jeremy deWaard, Chandra Moffat, Mel Hart, Dezene Huber, Jim Corrigan, Jennifer Heron

17. **Motion to approve agenda:** Moved and seconded (Bill Riel/Ward Strong); Passed

18. **Review minutes of Spring 2010 executive meeting:** Motion to approve executive meeting minutes Moved and seconded (Naomi Delury/Jeremy deWaard); Passed.

19. **Fee structure and multi-year membership fees discussion:** Because of the high cost of mailing and printing publications (Journal & Boreus) there is some interest in charging higher fees for people who want paper copies. The cost of printing the Journal is about \$4/copy plus mailing. There was discussion regarding encouraging multi-year memberships in order to reduce paper work and simplify membership coordination.

Motion: To strike a committee to investigate a fee structure to accommodate membership fees for printed publication vs. electronic publications and also to investigate multi-year memberships. Moved and seconded: (Ward Strong/Chandra Moffat); Passed. Chandra Moffat, Leo Rankin, Lorraine Maclauchlan and Art Stock were selected to comprise the committee. **Action:** Committee to meet and investigate options.

20. **Journal editor and publication discussion:** there is some question whether Allen Carroll would indeed act as editor or assistant editor to replace Hugh Barclay. In addition there was a issue whether we need an assistant editor for the Journal. The third point of discussion whether we should move the dealing submission for the Journal articles to August 1st.

Motion: To move up the deadline submission date for Journal articles to August 1st and allow for the appointment of an assistant editor for the Journal. The motion was moved and seconded (Ward Strong/Naomi Delury); Passed.

6. **New Publishing/On-Line Distribution for Journal:** One final question related to the Journal was the option for selecting a new publishing and on-line distribution group for the Journal. Four suggested organizations: NRCan, Cambridge University Press, Taylor and Francis and EBSCO were brought forth and



examined. **Action:** Ward Strong volunteered to follow up on this topic and discuss with Robb Bennett. Robb has done some background research on the best approach for selection a new publishing group.

7. **Graduate Student Scholarship:** We need to send out reminder and notification to students regarding the application for Graduate Student Travel Scholarship. **Action:** Leo Rankin to send out notice.

8. **Discussion of lawsuit:** ESC has resolved the lawsuit issue and it has been dispensed with. However ESBC was linked to the ESC lawsuit and our role has not been resolved. However in all probability the suit has been abandoned toward ESBC. **Action:** Ward Strong agreed to confirm whether it has been abandoned or if it is still and topic of concern.

9. **Update of executive committee e-mail list:** A new list must be created with the new executive committee members included. Congratulations to Ward Strong (President elect), Leo Rankin (Secretary), Chandra Moffat (Grad Student Director), Art Stock, Tracy Hueppelsheuser and Dezene Huber (directors) on their election.

10. **Nominations of New Officers:** A notice should be placed in the winter Boreus requesting names for people interested in stepping up to work on the executive. **Action:** The Nominations committee comprised of Ward Strong, Rob McGregor and Tom Lowery to accept and coordinate nominations.

Other New Business:

11. **Discussion of JAM Souvenirs:** It was suggested the we offer prints, mugs and T-shirts for sale on the ESBC web-site. Lorraine Maclauchlan will remain the keeper of T-shirts, mugs and prints. An advertisement should be placed in Boreus regarding the sale of residual JAM souvenirs and prints.

12. **Rewarding Poster Judges:** It was brought up by Naomi that the poster judges spent a significant amount of time reviewing posters during the judging and that they deserved a reward for going beyond the call of duty.

Motion: Be it resolved that that the three poster judges are each given a T-shirt and a mug in order to thank them for covering the poster sessions. The poster judges were Tammy McMullan, Geneviève Labrie and Jens Roland. Moved and seconded: (Naomi Delury/Ward Strong); Passed. **Action:** Naomi Delury to coordinate the distribution of the souvenir rewards.

13. **Debrief of JAM Problems:** Bill Riel brought up the necessity to compile comments, problems and suggestions which may help avoid issues at the next JAM in Halifax. After the issues are compiled, the list will be forwarded to the Halifax JAM committee as well as to the reviser of ESC JAM Guideline notes.

Action: Dezene volunteered to compile any input directed his way on this issue. Please forward comments to Dezene

14. **Motion to Adjourn the meeting:** Moved and seconded (Ward Strong/Naomi Delury); Passed.



President's Report.

Prepared for the ESBC Executive Meeting, November 3, 2010

It has been an eventful year for our society. I would like to thank the members of the Executive and others for volunteering their time to help with preparations for the Joint Annual Meeting of the Entomological Society of Canada and the Entomological Society of British Columbia. I anticipate that the meeting was a great success and everyone had an enjoyable time in Vancouver. Congratulations everyone! I also need to thank the Executive, and particularly Past President Sheila Fitzpatrick, for their assistance and guidance during my term. The collective memory of this dedicated group was invaluable. Congratulations to Ward Strong, our new President Elect. I look forward to working with Ward and Rob McGregor, our incoming President, over the next year.

A couple of changes to our constitution were approved by the Executive this year. One includes the option to split the position of Secretary/Treasurer into the two component parts, which will provide greater flexibility and help distribute the ever increasing workload as we move more to electronic communication and timely reminders of upcoming events and activities. For continuity, elections for these positions are planned to occur in alternate years. I want to thank Lorraine Maclauchlan for her continuing service as Treasurer and congratulate Leo Rankin for his election as Secretary. We welcome Chandra Moffat to the position of Graduate Student Representative and know that she will help serve the student membership. Thank you and congratulations to our newly elected Directors: Tracy Hueppelsheuser, Dezene Huber (re-elected), and Art Stock. Thanks also to our outgoing Directors Leo Rankin and Alida Janmaat, and to Melanie Hart for her service as Graduate Student Representative.

Several issues relating to the Journal remain to be resolved. Of immediate concern is the need for an Editor to replace Hugh Barclay. We want to thank Hugh for his service and encourage members with editorial experience to consider volunteering for this or other journal-related positions. The Executive will also discuss other possible changes, including the addition of Assistant or Section Editors and greater web-based or electronic access to articles. I have recently been approached by EBSCO Publishing regarding the possibility of listing the JESBC in their database. Inclusion would raise the profile of the journal, but we would need assurances that there would be no hidden costs or potential pitfalls. Jennifer Heron and Jeremy DeWaard continue to do a wonderful job producing Boreus. Providing it electronically has helped reduce publication costs and it is convenient not having to file the hard copies.

We do not know the outcome of the 2010 JAM, but the finances of the ESBC remain in good shape. In light of the recent loss of both sponsors of the prizes for graduate student presentations (see attached letter re. NONC), I believe it is important to cover this shortfall (\$600/yr) from other sources. The continued vitality of the ESBC relies not only on our student membership, but also on the involvement of amateur and retired members. I thank all of you for your contributions.

Tom Lowery
President, ESBC



Regional Director’s Report – Fall 2010

ESC JAM in BC in 2010

The organization of the meeting has gone smoothly and looks to be well in hand.

While the final numbers are not in at the time of writing, it appears that we will have over 250 registered delegates and a number of invited speakers and volunteers. The scientific program looks superb, and the catering and room arrangements are all well in hand. The finances of the meeting look to be tight, but current estimates indicate that we should break even.

The meeting finances were impacted by a couple of major items: the current economy severely restricted corporate donations; and, the HST added significantly to our expenses.

The following is an overview of the finances as of October, 26th, 2010:

JAM 2010 Financial Summary		
Source	Income	Expense
Registration	\$57,483.30	
ESC Seed Money	\$4,000.00	
ESBC	\$5,000.00	
ESBC Deposit at hotel	\$2,000.00	
Conviron	\$500.00	
Catering & Room Rental		\$52,591.10
A/V		\$2,144.80
Speakers (Travel, GSS)		\$5,653.86
Mark Hummel		\$1,823.86
Sound		\$700.00
 Subtotal	 \$68,983.30	 \$62,913.62
Balance	\$6,069.68	

A couple of notes: the positive balance is a bit misleading in that it includes \$4000.00 seed money from the ESC and a \$5000.00 emergency transfer from the ESBC coffers (as well as the 2K deposit the ESBC made back in 2009).

However, *this is only a snapshot taken at the time of writing*. I’ve excluded expenses that the ESBC have funded up front (logo development, mugs and T-shirts, prints, etc.) primarily because these items will generally pay for themselves or turn a profit (see the Treasurer’s report for details). I’ve also excluded some other revenue sources, simply because I don’t have any figures for certain items at this point in time. For example, I know that there are more registration dollars coming our way. I also haven’t billed the ESC for their award winners. And,



as mentioned, we don't yet know how much revenue will be generated from T-shirt, mug and print sales. There may be a few minor expenses I've overlooked or not anticipated as well, but, barring any unseen major expenses the meeting should wind up breaking even or optimistically generating a modest profit. Which really is the point: the goal is to host the best meeting you can afford without bankrupting the ESC!

I would especially like to thank the conference organizing committee for all their hard work! This really has been a team effort, and it has been an honour and a pleasure to organize a meeting with such capable and dedicated people.

Bill Riel, Regional Representative to the ESC.

Web Editor's Report - Fall, 2010

There has been considerable work done on the web site since the last executive meeting, primarily for the 2010 ESC-ESBC joint annual meeting. This year was the first time that on line registration and payment system were implemented for the JAM, and outside of a few delays and early glitches, it appears to have worked very well.

One of the net results is that the ESBC now has a PayPal account which we can use for on line credit card payment of membership registrations or anything we wish to sell. One of the costs of doing business this way are the PayPal fees, which amount to roughly 3% of an items price. However, a "convenience fee" could be added to cover this amount.

Due to the increased demands on getting timely information up on the website, Alex Chubaty graciously agreed to help out should something come up that I couldn't deal with. This situation never did arise, but it was very reassuring to have this offer of help and was much appreciated.

Bill Riel
Web Editor



Journal Editor's Report

Journal of the Entomological Society of British Columbia

Prepared for the ESBC Executive Meeting, November 3, 2010

Volume 107, 2010, is on target for publication in December. There were 18 manuscripts submitted by the September 1 deadline, including four left over from last year. Several of them are still under review, although a few of them have been accepted. Two were rejected. I would like to thank subject editors Lorraine Maclauchlan, Sheila Fitzpatrick, and Rob Cannings. I also thank various anonymous reviewers, and typesetter Jen Perry for all their help and assistance so far in getting this volume together. Rob Cannings has also provided a photograph for the front cover.

My term as a visitor here at the Pacific Forestry Centre will terminate at the end of March, 2011. I am still looking for a replacement editor for the journal, as I really do need the amenities that I presently have access to at PFC for the editorial process, and will lose them next spring. Also, I have tentatively accepted a position as a visiting professor at Kyoto University next year, and so will be leaving in August of 2011 for six months in a city that I fell in love with nine years ago, when my wife and I spent one year there.

Respectfully submitted,

Hugh Barclay
Editor, JESBC
October 21, 2010



Secretary / Treasurer's Report

Lorraine Maclauchlan

Prepared October 25th, 2010

Fall 2010 Executive Meeting – Coast Plaza Hotel, Vancouver, B.C.

The membership stands at:

9 Life Members;

124 Regular & Student members (87 paid 2010; 6 paid 2011; 31 still owing 2010 that paid in 2009);

75 exchange partners (receive JESBC); and,

59 Subscribers (subscriptions now coming in for 2011 – JESBC Vol. 107).

Membership invoices for 2011 will be mailed with the December JESBC. Currently membership is about 124 but this fluctuates depending upon Student membership. There have been a few new members in 2010.

Subscription invoices are just being mailed out so 2011 fees will start to come in soon. Students provide most of the variation in annual membership. As noted in my "Spring 2010 Report" I have been trying to update addresses and emails. As a result of this effort (still ongoing) I have attached a list of the most current members. I hope to have this exercise completed following the winter 2010 mail out of JESBC and invoices.

The company "Sidelines Promotional Products Inc." produced the mugs, t-shirts and totes for the ESC-ESBC JAM. I will make payment upon pick-up October 28, 2010. The cost estimates and selling prices are listed below:

Trinkets & Totes for ESC-ESBC JAM

Items & description	Cost + HST	Unit cost	Selling Price	Projected Income	Profit
Mugs - 15 oz (72 ordered)	\$677.13	\$9.40	\$12	\$864	\$187
Angle Convention Tote (250 ordered)	\$1,920.80	\$7.68			
T-shirts (72 ordered)	\$580.16	\$8.06	\$15	\$1,080	\$500
Michael Blackstock prints (100 prints for sale)	\$2,594.80	\$25.95	\$80	\$8,000	\$5,405
	\$5,772.89			\$9,944	\$4,171



ESBC Treasurer Report for November 3rd, 2010, Fall Executive Meeting

Coast Plaza Hotel, Vancouver, B.C.

Interior Savings Credit Union - account as stated April 15, 2010

March 31, 2010, Statement	\$7,311.07
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Income: Jan - Oct 2010

Description	Date	Deposit
Subscriptions		\$1,034
Memberships		\$980
Donations (including Educ. Fund from ESC)		\$810
Page charges to date		\$390.24
From PayPal for transfer	Sep. 2010	\$22,000
From PayPal for transfer	Oct. 2010	\$20,000
From PayPal for transfer	Oct. 2010	\$6,000
From PayPal for transfer	Oct. 2011	\$2,000
From PayPal for transfer	Oct. 2012	\$740
From PayPal to pay back ESBC funds	Oct. 2013	\$577.72
		\$54,532

Expenditures: Jan - Oct 2010

#	Payable to / Description	Date	Debits (\$\$)
24	Jen Perry - typesetting Vol. 106 JESBC	22-Mar-10	\$550
25	Michael Blackstock - JAM logo design	25-Mar-10	\$850
26	Pacific Editions Ltd - JAM logo prints deposit	9-Apr-10	\$724.80
27	Pacific Editions Ltd - JAM logo prints & shipping	14-Apr-10	\$1,020
28	Hugh Barclay - shipping charges (JESBC to Kam)	2-Jul-10	\$70
29	JAM funds transfer to CIBC account	21-Sep-10	\$22,000



30	JAM funds transfer to CIBC	12-Oct-10	\$20,000
31	JAM funds transfer to CIBC	15-Oct-10	\$8,000
32	Loan for 2010 JAM from ESBC	20-Oct-10	\$5,000
			\$58,215

Interior Savings Credit Union

Member Rewards	\$48.18
Member Equity Shares	\$5.79
Interest	\$2.82
Service charges	\$72
September 30, 2010, Statement	\$6,229.60
Balance October 25, 2010	\$2,408.01

OTHER ASSETS:

Island Savings Credit Union	(March 31, 2010, statement)
Term deposit @ 3.35% (matures 17-Jan-2013)	\$21,627.69
Interior Savings Credit Union	
Term deposit @ 2.5% (matures 31-Mar-2011)	\$19,475
Total Other Assets	\$41,102.69

Total Cash + Assets	\$43,510.70
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The ESBC facilitated some transfers and “loans” for the ESC-ESBC JAM. The following table summarizes the activity in the ESBC account to facilitate the planning of this meeting:

Chq #	Payable to / from	Description	Debits (\$\$)	Deposits
14	The Coast Plaza	deposit for joint meeting venue	\$2,000.00	
25	Michael Blackstock	ESC/ESBS logo design	\$850.00	
26	Pacific Editions Ltd	ESC/ESBC logo prints	\$724.80	
27	Pacific Editions Ltd	ESC/ESBC logo prints & shipping	\$1,020.00	
440	Valent BioSciences Canada Ltd.	Contribution to ESBC Student Awards		\$500.00
	ESBC	From PayPal for transfer		\$22,000.00
	ESBC	From PayPal for transfer		\$20,000.00
	ESBC	From PayPal for transfer		\$6,000.00
	ESBC	From PayPal for transfer		\$2,000.00
	ESBC	From PayPal for transfer		\$740.00
	ESBC	From PayPal to pay back ESBC funds		\$577.72
29	Transfer to CIBC acct	JAM funds transfer to CIBC	\$22,000.00	
30	Transfer to CIBC acct	JAM funds transfer to CIBC	\$20,000.00	
31	Transfer to CIBC acct	JAM funds transfer to CIBC	\$8,000.00	
32	Transfer to CIBC acct	Loan for 2010 JAM from ESBC	\$5,000.00	
101	D. Thomas Lowery	Contribution for Presidents prize		\$100.00
			\$59,594.80	\$51,917.72

The deposit details and members list can be found in the attachment with this email.

Lorraine Maclauchlan, Treasurer ESBC



Student Affairs

Chandra Moffat
Graduate Student Director, ESBC

Hello! I am honoured to serve as the Graduate Student Director for the ESBC for the next two years. I plan to keep a Student Affairs section active in Boreus during my time of service, so please let me know what you would like to see here! I want to thank Melanie Hart for all her hard work and service as the Graduate Student Representative to the ESBC before me. Mel did an amazing job of serving the student members of the ESBC over the last two years, and I am very excited to carry on where she left off!

If you don't know me already, I am a MSc Candidate at the University of British Columbia, Okanagan Campus, in Kelowna. My thesis investigates host selection of a cynipid gall wasp, proposed as a biological control agent for hawkweeds invasive in North America. My work is conducted in the European native range of these species, based at CABI Europe-Switzerland. I am also the Chair of the Student Affairs Committee for the Entomological Society of Canada until 2012. I am a BC native and did my BSc at UVic.



Chandra (right; as a minute pirate bug) and Acadican Ent. Soc. student Susan Horton (as a butterfly) at the Hallowe'en reception of JAM 2010.

Student Affairs at JAM 2010

For all of you who were there, it was four jam-packed days of interesting and informative talks, great networking and social events. Special thanks go to all of the students who assisted with the organizing and delivery of this great meeting, and of course to the rest of the JAM 2010 Organizing Committee! BC students presented an amazing diversity of research in both paper and poster sessions and truly added to the success of the meeting.

On the social side of things, the General Mixer and Halloween Costume Party was a great time (as you can see in my photo)! Aynsley Theilman and the ESC Student Affairs Committee led the Student Mixer and Insect Trivia Contest and it was a great success too! Congrats go to the "Traumatic Inseminators" team who were awarded insect-related prizes, kindly donated by Dr. Fiona Hunter and the JAM 2010 Local Organizing Committee, including t-shirts, mugs and puppets, at the Awards Banquet.



Students of the ESC and ESBC hosted a Silent Auction which raised over \$1200 towards the ESC Student Scholarships and Awards fund. Thanks to all the BC students who helped out at the Silent Auction table, including Melaine Hart and Tamara Richardson. Our thanks and appreciation also go out to all those who generously donated and purchased Silent Auction items. We couldn't have done it without you!

Congrats also go to two BC students who were selected to present in the Graduate Student Symposium (GSS), David Jack from UBC and Mike Wogin from SFU – great work and presentations you two! The Graduate Student Symposium (GSS) is dedicated to showcasing the highest calibre, thesis defending students at the annual meeting. The GSS is presented by the ESC Student Affairs Committee and organized by a sub-committee (this year myself, Leah Flaherty, and Tamara Richardson). This year's GSS was a great success! I received many comments on the quality of the speakers, and that attendees really enjoyed the extra time allotted to presenters, as it allows a unique perspective on their thesis research as a whole, instead of a condensed version of one aspect of the study. If you think you will be defending your thesis within 6 months of the next JAM and plan on attending the 2011 JAM in Halifax, look out for the call for abstracts for the GSS, which will come out in the June 2011 ESC Bulletin, or contact me for more info.

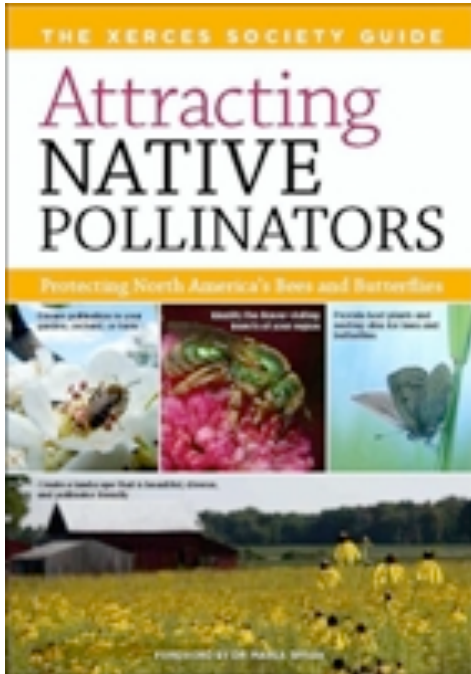
That's all I have for now – please feel free to contact me anytime!

~ Chandra



Announcements

New book:



Attracting Native Pollinators: Protecting North America's Bees and Butterflies.

The work of bees and other pollinators is something that touches us all through the food we eat, the clothes we wear, and the landscapes we enjoy. Attracting Native Pollinators offers a window onto the fascinating lives of these insects and provides detailed information about how you can care for these vital animals wherever you live. Whether you are an urban gardener, a suburban park manager, a working farmer, or caring for a nature reserve Attracting Native Pollinators has something for you.

More than 380 pages long, Attracting Native Pollinators is illustrated throughout with hundreds of color photographs and dozens of custom-drawn illustrations. It is published by Storey Publishing of North Adams, Mass. Pre-order your book from www.xerces.org.

Photography competition:



Veolia Environnement Wildlife Photographer of the Year is one of the most prestigious competitions of its kind, attracting entries from professional and amateur photographers of all ages worldwide. Top prize is £10,000 awarded at a gala awards ceremony at London's Natural History Museum winning images will be published in a special feature of BBC Wildlife Magazine Visit <http://www.nhm.ac.uk/visit-us/whats-on/temporary-exhibitions/wpy/competition/about/> for details. The closing date: Friday 18 March 2011.



Sweep of the Net

A miscellany of recent entomological media caught on the Internet.

Article on Canadian entomologists collecting in the arctic as part of the Northern Biodiversity Program:

<http://www.cbc.ca/canada/north/story/2010/07/06/north-insects-study.html>

Audio podcast on the unmatched ability of silkworms and spiders to produce smooth, slippery, and strong silk:

<http://www.sciencefriday.com/program/archives/201007302>

Video podcast on how researchers extract venom from spiders such as the brown recluse (*Loxosceles reclusa*):

<http://www.sciencefriday.com/videos/watch/10011>

Article on the release of genetically modified mosquitoes to combat dengue fever:

<http://www.cbc.ca/technology/story/2010/11/11/mutant-mosquitos-release-denguefever.html>

Audio podcast about using honeybees for beefing up airport and cargo shipping security:

<http://www.cbc.ca/thecurrent/episode/2010/11/11/nov-1110---pt-3-letters/>

Article on the discovery that the tuberous bushcricket possesses the largest testicles of any animal species (relative to its body mass):

<http://www.cbc.ca/technology/story/2010/11/10/big-testicles-bushcricket.html>

Audio podcast on the fascinating way Australian assassin bugs (*Stenolemus bituberus*) hunt web-building spiders:

<http://www.scientificamerican.com/podcast/episode.cfm?id=assassin-bug-hunts-spiders-with-pre-10-11-02>

Several great entomology videos, such as the 'Age of Insects', on BBC's Wildlife Finder:

<http://www.bbc.co.uk/nature/life/Insect>

Audio podcast on exotic species, such as the European Gazelle beetle (*Nebria brevicollis*), invading North American ecosystems:

<http://education.eol.org/podcast/beetles-and-moths>

Audio podcast on the invasion of the brown marmorated stink bug in eastern United States:

<http://www.sciencefriday.com/program/archives/201010014>



Two great audio podcasts on the smell of bed bug sex and the tobacco hornworm's fatal attraction to its host:

<http://www.cbc.ca/quirks/episode/2010/09/25/september-25-2010/>

Audio podcast discussing the threats posed to bees with Laurence Packer of York University:

<http://www.cbc.ca/quirks/episode/2010/06/26/australopithecine-big-man-pigeons-make-a-deal-confused-parasitic-ducks-bringing-up-baby-keeping-the/>

Facebook page for the Entomological Society of Canada student group:

<http://www.facebook.com/group.php?gid=13552445022>

Commentary by David Suzuki on monarch butterflies:

<http://www.straight.com/article-356036/vancouver/david-suzuki-day-dead-time-celebrate-life-and-monarch-butterflies>

Audio podcast describing recent research investigating insects preserved in amber that provide a new look at ancient India:

<http://www.sciencefriday.com/program/archives/201010292>

Article on the case of the vanishing taxonomists:

<http://www.theglobeandmail.com/news/national/the-case-of-the-vanishing-taxonomists/article1696020/>

Blog of an ongoing insect survey in Madagascar:

<http://scientistatwork.blogs.nytimes.com/2010/11/24/up-close-madagascars-invisible-majority/>



Ophion wasp and robberfly analyzed for DNA barcoding projects at the Beaty Biodiversity museum. Photos Stephanie Kirk.



Calendar of Events

DECEMBER 2010

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
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Dec 12 to 15 – Entomology 2010 – the Entomological Society of America’s 58th annual meeting (San Diego, CA)

Dec 31 – Xerces Society DeWind award application submission deadline

JANUARY 2011

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Jan 9 – final day of the ‘Moths at Large’ exhibition at the Canadian Museum of Nature (Ottawa)

Jan 11-14 – The 22nd USDA Interagency Forum on Invasive Species (Annapolis, MD)

FEBRUARY 2011

S	M	T	W	T	F	S
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27	28					

Feb 16 – ESC Keith Kevan Scholarship application submission deadline



Mar 5 to 9 – Global Conference on Entomology (Chiang Mai, Thailand)

Mar 27 to 30 – The 95th Annual Meeting of the ESA Pacific Branch with the theme of "Invasive Species of the Pacific Region" (Waikoloa, HI)

May 12 to 15 – The Meadowlark Festival (Okanagan Valley, BC)

May 15 – Submissions for the June edition of Boreus due

May 23 to 27 – The 2nd International Forum for Surveillance and Control of Mosquitoes and Mosquito-borne Diseases (Beijing, China)

MARCH 2011						
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MAY 2011						
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29	30	31				



Articles

Calopteryx aequabilis (River Jewelwing) in Northeastern British Columbia

Written Rob Cannings, Royal British Columbia Museum, Victoria

The large and strikingly coloured damselfly, *Calopteryx aequabilis* (River Jewelwing), was first recorded in British Columbia in 1998 at Christina Creek, the outlet of Christina Lake, in the southern Interior, about 18 km east of Grand Forks (Cannings 2002, Cannings *et al.* 2005). Christina Creek has remained the only known B C locality for the species since its discovery there.

The River Jewelwing at Christina Creek is vulnerable to the negative effects of introduced fish and aquatic plants as well as stream bank erosion caused by boats and jetskis. Since its discovery, the small damselfly population has been designated S1 (red list) by the BC Conservation Data Centre (BCCDC 2011).



Male *Calopteryx aequabilis* (River Jewelwing). Photo: Netta Smith.

Until recently, the known range of *Calopteryx aequabilis* extended from Newfoundland south to West Virginia and Indiana and west in the northern forests to northern Alberta (Acorn 2004, Paulson 2009). In the West, there are additional scattered populations, especially concentrated in the central Great Plains (Colorado, Wyoming, South Dakota and Nebraska) and one in the Pacific Northwest and parts of the Great Basin (Washington, Oregon, northern California, Idaho, Montana, northern Utah and Nevada). Several old subspecies, mainly described from the West, are not considered distinct by most workers (Walker 1953, Paulson 2009) but, nevertheless, indicate variation in the extent of dark pigment in the wings.

On 25 July 2009, Pat Marklevitz and Tanya Debroux saw two male River Jewelwings on the banks of the Hay River east of Fort Nelson, BC (10V 649049E 6504599N). The river here flowed deeply and slowly and the banks were covered with *Carex* and other emergent vegetation. The damselflies perched on the sedges and moved with their typical, dancing, fluttering flight.



Given the occurrence of *Calopteryx aequabilis* in the boreal forests of northern Alberta (Acorn 2004), its presence in northeastern BC has long been suspected. The species is now known from two populations and two localities in the province, almost 1200 km apart. Although the southern population still must be considered endangered, the addition of the northern population to the provincial fauna requires a modest reduction in the species' conservation rank, but probably maintaining its presence on the provincial red list.

Paul Catling (pers. comm.) recorded the River Jewelwing in the southwestern Northwest Territories in 2010.

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- Walker, E.M. 1953. The Odonata of Canada and Alaska. Volume 1, Part I: General. Part II: The Zygoptera - Damselflies. University of Toronto Press, Toronto, ON. 292 pp.



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