



Société canadienne
d'écologie et d'évolution

Canadian Society of
Ecology and Evolution

NEWSLETTER

Issue no. 8

JULY 2010



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CSEE NEWSLETTER

ISSUE NO. 8

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The Newsletter is published twice a year by the Canadian Society of Ecology and Evolution. Its purpose is to disseminate news and information to members of the Society. All members are invited to submit articles, news, reports and announcements of upcoming events. Short summaries of new research initiatives are also welcomed. Submissions can be in either language. Please submit your contribution by email to the Editor.

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Deadlines for contributions

January issue: December 15th.

July issue: June 15th.

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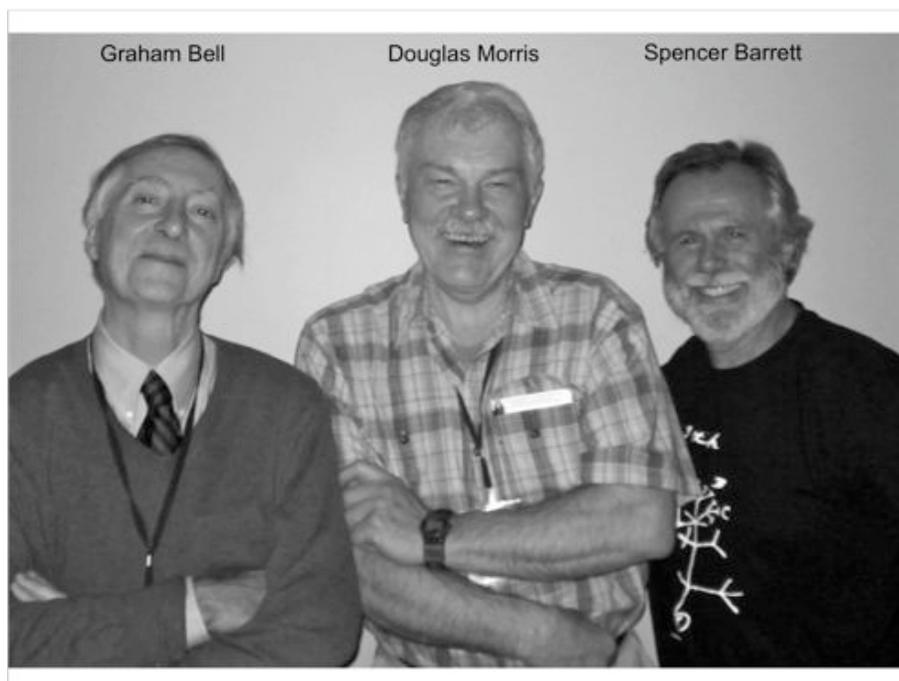
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PRESIDENT'S MESSAGE

INTERNATIONAL YEAR OF BIODIVERSITY

One month has passed since the 5th annual CSEE meeting at Laval (May 9-12th, 2010), giving me time to reflect on the meeting, how the society is fairing, and what challenges lie ahead. There is no doubt that Laval consolidated the earlier successes of previous meetings with 489 attendees, representing just under half the membership, 290 oral presentations and 93 posters. The diverse symposia and sessions of contributed papers showcased the best of Canadian E&E and there was the familiar hum of social interactions that characterize our meetings, as old and new friends exchange ideas at the breaks. New initiatives such as the 1st annual children's workshop *'Ecology and Evolution*

for Kids' diversified the society's reach and promoted public outreach, an important goal of the society. This event featured throngs of kids and their parents having fun with nature exhibits and because of its success will become a regular feature of future CSEE meetings. The evening banquet onboard the cruise boat with stunning views of the St. Lawrence River provided a spectacular evening together to celebrate our successes. As you can see from the image taken on board the 'three Presidents' were well pleased with our progress. Louis Bernatchez and his team of volunteers are to be heartily congratulated for all their efforts in making the meeting such an enjoyable experience.



Three presidents of the CSEE, photographed during the 5th annual society meeting in Quebec City

On the first day of the Laval meeting, Nadia Aubin-Horth gave an informative public lecture titled ‘2010: Year of Biodiversity, Century of Biology’. Her lecture drew attention to the importance of biodiversity for ecologists, evolutionary biologists and human society. It echoed similar themes that are emerging worldwide in this ‘International Year of Biodiversity’ (<http://www.cbd.int/2010/about/>). Although not all members of CSEE are directly involved with biodiversity science (interpreted broadly to include taxonomy, systematics, phylogeny and comparative biology, and species discovery through barcoding), most of us require the field guides, monographs, phylogenies and species lists that are the primary outputs of our colleagues in these areas. However, looking at the current membership list for CSEE and reviewing the talks presented at Laval revealed a disturbing finding – there is a striking lack of representation of biodiversity scientists in our society and at our meetings. This is all the more surprising given that phylogenies and comparative thinking have transformed biology over the past decade (witness the profusion of trees that now regularly appear in *Nature* and *Science*), and environmental genomics and barcoding are providing unprecedented insights into the species diversity of ecological communities.

So why does our society apparently hold little appeal for our colleagues who provide the essential glue that keeps organismal biology together? To look into this question I recently wrote to 16 practicing systematists throughout Canada who are working on diverse groups of organisms and are at different stages of their academic careers. I asked them why CSEE may not be an appealing home for them. My letters stimulated further surveys of members of the systematics and phytogeography section of the *Canada Botanical Association* and the arthropod group of *The*

Entomological Society of Canada by Tim Dickinson and Heather Proctor, respectively.

The results of this informal exercise have been revealing and have identified several issues that I believe our society should attempt to rectify as we move forward and mature. The vast majority of individuals that I contacted provided helpful recommendations and valuable insights. In many cases the problems they highlighted were also issues that we ourselves face. Common themes included annual meeting fatigue, restricted budgets for travel to conferences, and clashes with the field season. It is clear that many systematists prefer to attend more specialized taxon-based meetings where they can, to quote from one respondent, obtain more ‘bang for their buck’ in terms of hearing papers of interest.

I do not believe CSEE meetings are necessarily the place for symposia or sessions devoted to the taxonomy of a specific group of organisms and clearly more taxon-based meetings play an important role of systematists. However, in the future I believe we should develop symposia that focus on more general issues in biodiversity science that would be of interest for systematists, including the latest developments in phylogeny reconstruction and character state evolution, evolutionary bioinformatics, community phylogenetics, and the value of phylogenetic diversity for conservation, to name just a few current hot topics. In Canada we have world leaders in biodiversity science and their work needs to be highlighted by our own society, not just at international meetings elsewhere.

A disturbing number of the responses I received indicated that individuals have not felt welcome at CSEE meetings and, in general, felt that their work was not valued or appreciated by some ecologists and

evolutionary biologists. This is not an uncommon perception and is regrettable. It has plagued some academic departments and has led to considerable bitterness among systematists over their treatment by NSERC grant selection committees in the past. Clearly, there are broader issues here than simply membership in our society that require action, not the least of which is the frail condition of systematics in Canada. Hopefully, the Expert Panel of Biodiversity Science organized by the Council of Canadian Academies will address these problems in their upcoming report on *'The State and Trends of Biodiversity Science in Canada'*. Several members of CSEE are on the expert panel. Unfortunately, expertise in taxonomy and systematics is declining worldwide at the very time that the public is becoming increasingly aware of the crucial role that biodiversity plays for human existence on the planet. We ignore the problem of capacity building in biodiversity science at our peril.

Our society and the very nature of organismal biology require that we not only appreciate but also understand the significance of biodiversity; what it is and how it is studied. DNA sequencing and genomics are revolutionizing this field, giving us unprecedented opportunities to investigate the evolutionary relationships of organisms and the composition of many ecosystems that until now have defied rigorous study. Also, developments on the web such as the *Global Biodiversity Information Facility* (GBIF) that link together numerous taxonomic resources are enabling fast and efficient access to databases of use in ecology and evolutionary biology. We need to make sure that our members fully appreciate that these are indeed exciting times to be an organismal biologist by broadening the horizons of our society to include the latest developments in biodiversity science.

So what are some of the solutions we might adopt to increase representation of systematists in CSEE? I have already mentioned future symposia on topics of interest to biodiversity scientists. Joint meetings with the Canadian Society of Zoologists (CSZ) and the Canadian Botanical Association might also help to establish useful dialogue and lead to co-sponsored symposia. We are currently discussing plans for holding a joint meeting with CSZ in Montreal in 2014 and this could serve as a vehicle for future synergies. Another mechanism to make sure that biodiversity scientists have a voice in CSEE decision-making is to elect individuals to the Council of the Society who can then serve as strong advocates for their field. I encourage those of you who agree with my concerns to consider nominating individuals for our next election. Finally, please take some time to talk with colleagues in taxonomy and systematics and find out what they do. Ask them about their organisms and if they have ever considered joining CSEE and if not, why not? The answers you receive might surprise you and may help to foster a stronger link between E&E and systematics in Canada. After all, for many funding agencies, academic departments, international meetings and journals, biodiversity science is simply an integral part of the big tent we know today as E&E.

I would be interested in hearing your views on the issues I have raised. And I hope you have a productive summer with plenty of opportunities to get into the field and celebrate this *International Year of Biodiversity!*

Spencer C.H. Barrett
CSEE council - President

CALL FOR NOMINATIONS FOR CSEE COUNCIL

Elections will be held in 2011 for several positions on the CSEE Council:

- 1) Vice President (2012-2013) to become President (2014-2015)
- 2) Secretary (2012-2015)
- 3) Three Regular Council Members (2012-2015)
- 4) One Student/Post-doctoral Council Member (2012-2013)

Please send the names of potential individuals that would be suitably qualified for these important positions to VP Jeff Hutchings (jeff.hutchings@dal.ca) by October 1, 2010.

Any member of the society can be nominated. Students and post-doctoral fellows can also run as Regular Council Members; the Student Councilor must be a student or a post-doctoral fellow and has special responsibility for student affairs. Elections will be held electronically in the spring of 2011; more information and instructions will be made available on the CSEE website (<http://www.ecoevo.ca/en/elections.htm>).

Sally Otto
CSEE council - Secretary

FIFTH ANNUAL CSEE MEETING, QUEBEC CITY

The CSEE 5th annual meeting, which was recently held in Québec on May 9th-12th, 2010, was a tremendous success. Nearly 500 participants, comprising 335 student members, attended the meeting. The scientific content was as dense as it was captivating, with more than 300 talks and 95 posters being presented, not counting the 15 invited and the 3 plenary talks that were delivered as part of three symposia. The breathtaking banquet on the Louis Jolliet Cruise Ship and the

excursion to the Cap Tourmente National Wildlife Area were the crowning jewels at this year's meeting with over 450 and 75 participants attending, respectively. The success of the event was ensured by the leadership of the LOC but perhaps even more so by the efficiency and dedication of the 40 student volunteers. Many thanks to all!

Louis Bernatchez
Université Laval



CSEE Vice-president Jeff Hutchings gives the first prize for the best student oral presentations (ex-aequo) given by Rachel Massicotte and Mathieu Chouteau, both from Bernard Angers's laboratory (Université de Montréal).

CALL FOR SYMPOSIA FOR THE 2011 ANNUAL MEETING IN BANFF, ALBERTA

The sixth annual meeting of the Canadian Society for Ecology and Evolution will be held from May 11 – 15, 2011 in Banff, Alberta and hosted by the University of Calgary. Banff National Park is Canada's oldest National Park and is also a UNESCO World Heritage Site. The theme of the 2011 meeting, **Canada's Biodiversity: Past, Present and Future**, reflects the rich history of biodiversity research and discovery in this region of Canada (e.g., Burgess Shale and Dinosaur Park) as well as the important role of ecology and evolution research ensuring the long term conservation and management of Canada's natural resources.

The Local Organizing Committee invites proposals for up to four symposia to be held in conjunction with the meeting. Symposium proposals should include: (1) a brief synopsis and rationale of the symposium theme; (2) a tentative list of up to 6 speakers, including institutional affiliations and indication of those who have agreed to participate.

The LOC will select proposals whose topics are congruent with the theme of the meeting and distinct from recent CSEE meetings. We are particularly interested in symposia that include a strong emphasis of recent advances in systematics and/or biodiversity research. The Council will consider *half-day* symposia at its meeting in May 2011. All applicants will be notified of the Council's decision in August 2010. The LOC does not provide travel support for organizers and participants in sponsored symposia, but may consider sponsoring registration for organizers and invited participants in selected symposia.

Please email your proposals (preferably as PDF attachment) to Sean Rogers (srogers@ucalgary.ca) by July 15, 2010. Thank you and we look forward to hosting you at what promises to be a fun and productive meeting.

Sean M. Rogers
University of Calgary

CSEE 2012 SEVENTH ANNUAL MEETING, OTTAWA

In 2012, the CSEE will meet jointly in Ottawa, Ontario, with the Society for the Study of Evolution, the Society of American Naturalists, the Society of Systematic Biologists, and the European Society of Evolutionary Biology. The meeting will be held in Ottawa's new, state-of-the-art Convention Center (<http://ottawaconventioncentre.com>) currently under construction on the banks for the historic Rideau Canal (a UNESCO world heritage site) and only steps from Parliament. The meeting will run from Friday July 6 (evening opening reception) until Tuesday

July 10. This is the first time that the European Society has joined the other three for their annual meeting, and only the 3rd time that this meeting has ever come to Canada (Vancouver and Montreal have previously hosted it). The CSEE is excited to participate in this landmark event. The local organizing committee is headed by Howard Rundle (UOttawa) with help from Andrew Simons (Carleton U); both are current CSEE members.

Howard Rundle
University of Ottawa

CSEE 2013 EIGHT ANNUAL MEETING IN OKANAGAN VALLEY

On behalf of the local organizing committee, I am thrilled to announce that the 8th annual CSEE meeting will be held May 13-16, 2013 (tentative date) at the University of British Columbia Okanagan. Located near the city of Kelowna in the beautiful Okanagan Valley – one of Canada’s most ecologically diverse regions – UBC Okanagan provides a

spectacular venue for the meeting. The Valley offers fantastic outing opportunities for naturalists and oenophiles alike. Mark your calendars!

Jason Pither

University of British Columbia Okanagan

CSEE OUTREACH - ACTIVELY PROMOTING ECOLOGY AND EVOLUTION IN CANADA

Who we are

The Outreach Committee was formed in May 2009 to uphold the CSEE’s purpose of “raising public awareness about the importance of ecology and evolution in Canadian society”. The Committee advises the Executive and Council on issues regarding the promotion of public awareness in ecology and evolution in Canada. The Outreach Committee includes Sean Rogers (University of Calgary), Fanie Pelletier (Sherbrooke University), Rowan Barrett (University of British Columbia), Crispin Jordan (University of British Columbia), Erika Crispo (McGill University) and Suzanne Gray (McGill University).

What we do

Our first objective was to focus on the creation and organization of events associated with the annual meeting, namely a kids outreach event and a public lecture. Reaching out to kids is one of the best ways to educate the public about ecology and evolution in Canada. Our goal was to organize events that could be continued in future years and become a regular part of the CSEE. In May two such events were held at the annual meeting in Quebec.

Kids Outreach

Our “ecology and evolution for kids” event was a big success with many parents and children attending. We had several activity stations for local, school-age children. Workstations included face painting, a reading corner, the St- Lawrence River “food web game”, a hands-on fossil station with fossils from the Redpath Museum, a microscope station, a “Let’s Talk Science” insect kit and an information booth for parents. This event was run entirely by volunteer (bilingual) members, including undergraduate students, graduate students and faculty. The Outreach committee would like to extend a sincere thanks for the tremendous efforts of our members, especially Suzanne Gray (main organizer), Nadia Aubin-Horth, Fanie Pelletier, Marie Julie Favé, Julie Faure-Lacroix, Aerin Jacob, Erika Crispo, Caroline Côté, Karine Robert and Françoise Colombani.

Public lecture

Dr. Nadia Aubin-Horth (Laval University) gave a terrific public lecture on the eve of the conference entitled “2010, année de la biodiversité, siècle de la biologie” which translates to 2010: Year of Biodiversity, Century of Biology. Nadia’s lecture focused on integrating the celebration of the United Nations’ International Year of Biodiversity

with examples of research being conducted by Canadian scientists. We anticipate that the public lecture will continue to be an important event for us to focus on in future years.

Social Networking

In 2009 we created a successful Facebook group that currently has over 500 members. Members can use the group as a means to communicate other upcoming events and we encourage you to use the group to discuss or post events. We also maintain a page on the CSEE website to publicize outreach events by CSEE members.

Vignettes highlighting Canadian research

The Outreach committee coordinates the publication of vignettes on our website. These highlight Canadian research being funded by NSERC Discovery grants (www.ecoevo.ca/en/vignettes.htm) We have currently posted vignettes on Invasive Plants, Altered Environments, Sustainable Harvesting, Wildlife Conservation, Extreme Habitats, Heavy Nitrogen and the Salmon Food Web, Interactions between Wild and Farmed Salmon, Reducing the Risk of Invasive Species, and Evolutionary Distinctiveness and Conservation. We highly

encourage all of our members to submit ideas for vignettes or vignettes for review (ideas/vignettes can be submitted to srogers@ucalgary.ca).

Call for Outreach proposals

In efforts to expand outreach initiatives, the CSEE will now consider Outreach Proposals from our members. Applications for funding will be considered for initiatives that promote evolution education, public outreach seminars, public exhibitions, etc. Proposals should include the title, location, a brief description of the activity, expected participation and/or size of audience, proposed date and the names of the main organizers. A brief justification of the funding requested should also be included. Preference will be given for innovative proposals that fulfill a clear need for ecological/evolutionary outreach and have the potential for renewal, or could be reused in other areas of Canada. Please email your proposals as an attached PDF or Word file to Sean Rogers (srogers@ucalgary.ca)

Sean Rogers

CSEE council – regular member & head of outreach committee

NEWS FROM THE STUDENT AND POST-DOCTORAL COUNCIL MEMBER

Presentation & Poster Prizes

Congratulations to our 2010 award winners! The CSEE gave three prizes for best posters and presentations. Poster prize winners were: Mélanie Veilleux-Nolin, Université Laval (1st); Corinne Vézeau, Université Laval (2nd); Anaïs Renaud, University of Manitoba (3rd). For the best student presentation, there was a tie for first between Mathieu Chouteau and Rachel Massicotte, both from the Université de Montréal. Placing in the student presentation competition were: Catherine Plasse, Université Laval (2nd); Caitlin Friesen,

McGill University (3rd). Book vouchers from Springer were offered to the poster and presentation that were ranked fourth in the competition.: David Hunt, University of Guelph (poster). and Jonathan Whiteley, McGill University (presentation). The Annals of botany award for outstanding student contribution to the field of botany was presented to Emily Austen of the University of Toronto. Thanks to all entrants for their excellent contributions, our volunteer judges, and special thanks to Nathalie Brodeur for her hard work.

Third Annual Student and Post-Doctoral Lunch-Workshop: *Talking frogs and silent scientists: A simple survival guide to speaking with the media.*

Thanks again to our guest speaker for 2010, Jim Handman, executive producer of CBC's Quirks and Quarks. For those of you who didn't take notes or were unable to attend, here are some key points from an informative and entertaining presentation:

1. Always use layman's terms. Imagine describing your work to someone who has no experience in your field at all, or even in science.
2. Don't take over the interview. Allow the interviewer to do their job, and answer the question asked.
3. Show enthusiasm. If you are genuinely excited, your audience will be genuinely excited.
4. Describe well, using word pictures. Relate your research to things people are already familiar with, but remember people are interested in the weird and odd, not the normal.
5. It is perfectly acceptable to ask to check quotes before your story is published, but not the story.
6. Be honest.

Career pipeline

As members of one of the largest scientific societies in Canada, the students of the CSEE have a unique opportunity to review the

career pipeline we face and provide our suggestions. As young scientists, we are all concerned with where we'll find our place as our careers progress. At the same time, funding agencies are concerned with adequate production of qualified scientists fulfills Canadian research needs. Recently, the way that Canada encourages and develops young scientists has been changing. For example, these changes include the reduction of master's funding to a single year, the creation of tiered post-doctoral awards, and the taxation of post doctoral candidates. We are creating a task force within CSEE to review the current career pipeline for young scientists and we need volunteers to help out! Have your voice heard, and email me to get involved.

Nominations are now open for the 2011-2012 student and post doctoral candidate. Know someone (or are you someone?) who would be interested in representing students and post-docs on the CSEE council? Not sure what it really entails? Questions or suggestions, please contact me.

Stay in touch!

Got a great idea? Complaints? Questions? Please send me an email about absolutely anything to Kathryn.smith@utoronto.ca

Kathryn (Kes) Morton

CSEE student and post-doctoral council representative

NEWS FROM NSERC AND EG 1503

Conference Model

NSERC has now fully implemented the “conference model” of evaluating Discovery Grants that was pioneered by GSC 18 (Evolution and Ecology) a few years ago. In order to complete the implementation, all former GSCs have been combined thematically to form 12 “Evaluation Groups” (EGs), each of which has a “Group Chair” (currently Doug Morris for EG 1503, Evolution and Ecology). Group Chairs work with the EG Chairs (typically two in Evolution and Ecology) to ensure that evaluations of research applications are fair, objective, and consistent, and also serve an advisory role on NSERC’s Committee on Grants and Scholarships (COGS).

More Competition for Limited Funds

Discovery Grant funds continue to erode through increased demand from the research community. The funds available for Discovery to each EG are determined mainly by the total value of previous awards held by returning applicants. This “cohort component” has a rather large effect on success rates that, in EG 1503, fell from approximately 70% in 2009 to 60% in 2010 (summary statistics are available on the NSERC website). The reduced success rate has dramatic consequences for research in evolution and ecology. Increased funding of the Discovery Grants program, including reallocation of those under NSERC’s direct control, must remain the highest priority for public-funded science research in Canada. The proportion of funds available for Research Tools and Instruments (RTI) depends on the requests for funding from the research community. It is thus rather important for all researchers in evolution and ecology continue applying for RTI funding.

NSERC Funding Increase

The Government of Canada allocated additional funds to the three granting councils in the 2010 Federal Budget. Although the total funding package falls short of Canada’s research needs, it should help to alleviate further reductions in Discovery Grants as Canada’s newly appointed Canada Excellence Research Chairs (CERC) seek their own Discovery-grant funding.

Elitist Science

Canada’s research and training environment is now layered with multiple tiers of public funding (most recently with new initiatives including substantial funding for [some] post-doctoral fellows, and the CERC program). Although no-one should object to the underlying goal of attaining the best possible science to serve Canada and Canadians, the implications of new programs and declining success rates in Discovery Grant competitions will require careful vigilance and input from Canada’s scientific community.

Discovery Accelerator Supplements (DAS)

The DAS “program” is designed to provide immediate additional funds (typically \$120,000 over three years) to mid-career scientists in order to accelerate their progression to the highest standards of international excellence in research. DAS supplements in 2010 were awarded by each Evaluation Group based on recommendations from the EG members (EG 1503 recommended six DAS awards in the 2010 competition).

Site Visits Replaced by Video-conferencing

NSERC plans to replace its annual site visits to Universities with video-conferencing. Although the video-conferences and university research officers will provide all necessary details required to submit NSERC research applications, DG applicants may

wish to seek additional advice from colleagues who have been successful under the new DG system as well as from those who have recently served on Evaluation Groups.

Make Your Views Known

With numerous changes in research support, it is more important than ever for the CSEE/SCEE to represent the interests of ecologists and evolutionary biologists with

NSERC and other government agencies. All members can help by sharing their opinions with Council, by communicating with their research and scholarships officials, and most importantly of all, by writing and visiting their Member of Parliament.

Douglas Morris

UPDATE ON THE CANADIAN INSTITUTE OF ECOLOGY AND EVOLUTION

The CIEE has made significant advances over the past year. Three universities, British Columbia, Carleton, and McGill have joined Toronto in the CIEE consortium. In addition, the CSEE Governing Council has granted the Institute \$8,000 toward 2011 operating costs. The generous financial contributions of the member institutions are crucial for the Institutes continued success.

Last September, the CIEE hosted a symposium at the Koffler Scientific Reserve entitled "Adaptive Movement of Interacting Species." This gathering was organized by Peter Abrams (Toronto) and Yuan Lou (Ohio State), and co-sponsored by the Fields Institute of Mathematical Sciences. It featured an international roster of participants, including both applied mathematicians and some of ecology's heavy hitters--Jim Fryxell (Guelph), Mark Lewis (Alberta), Bob Holt (Florida), Dick Gomulkiewicz (Washington State), Matt Leibold (Texas), Priyanga Amasekare (UCLA), Roger Nisbet (UC-Santat Barbara) and 45 others.

In May the CIEE made its presence known on Parliament Hill, when participants from the 2008 CIEE Thematic Program on the Species at Risk Act testified before the parliamentary Standing Committee on the Environment and Sustainable Development. Program organizer

Arne Mooers (Simon Fraser) and participant Jeannette Whitton (UBC) presented their analysis, developed at the CIEE workshop, on the use of scientific information in the implementation of the act. A paper on the workshop's proceedings is in press at BioScience.

A thematic program entitled "Predicting Ecological Change: Multi-scale Analysis of Plankton Diversity and Dynamics" convenes this December. Lead researchers in this working group include Jeremy Fox (Calgary) Andy Gonzales (McGill), John Shurin (UC-San Diego) William Nelson (Queens) and Jim Rusack (Ontario Ministry of the Environment).

During the Laval meeting, members of the CIEE Science Advisory Committee met with Allen Rodrigo, Director of the National Evolutionary Synthesis Centre. They discussed several exciting prospects for collaborative programs. These included Canadian participation in the NESCent postdoctoral exchange program through the CIEE, and potential workshop initiatives that focus on synthesis of biodiversity information at the continental scale.

Looking forward, the CIEE is committed to continually evaluate and improve its structure

to better serve the research community. The Scientific Advisory Committee decided to create the position of Associate Director for Scientific Programs. A committee has been formed to write Terms of Reference and to search for an appropriate person to take on this role. Another committee is being formed to recruit a CIEE Board of Directors.

The current funding environment is less hospitable to CIEE development than would be hoped. Nevertheless the Institute will move forward, doing a few things at a time and doing them well. We will continue to

seek opportunities to advance ecology and evolution in the Canadian context, and to be an information source for policy development. The Scientific Advisory Committee asks that when you receive our call for proposals later this year, that you give it serious thought. And as we develop, we also hope CSEE members will work to add their home institutions to the CIEE consortium.

A.E. Weis

REPORT ON CANADIAN COUNCIL ON ANIMAL CARE MEETING

The Canadian Council on Animal Care (CCAC) is the “national peer review organization responsible for setting and maintaining standards for care and ethical use of animals in research, teaching, and testing in Canada.” Many members of the CSEE use vertebrates in their research, and thus interact with the CCAC and local Animal Care Committees (ACC). Participation by the CSEE in the CCAC is thus of particular importance. The CSEE is a limited-term member, and I am the CSEE representative on Council.

As part of the Assessment Committee, I attended meetings on Feb. 18 and 19, 2010. These meetings were mostly about the processes related to assessing institutions for compliance, and the Assessment Committees role in evaluating the reports produced by the Assessment Sector. There were, however, several issues raised that will be of interest to CSEE members.

1. The CCAC is developing a joint statement with the Tri-Council (NSERC, SSHRC, CIHR) on scientific merit in animal-based research. This statement will outline the need for evaluation of animal-based methods in the

context of ethical merit. Typically, scientific merit of research funded by the Tri-council is deemed to have scientific merit because of peer-review processes in place with the granting agencies. Because the details of methodologies are rarely outlined in research proposals, the CCAC is emphasizing the need for local Animal Care Committees to evaluate the ethical merit of any animal-based procedures. Whether this will have any impact on the timeline for approval of Animal Use Protocols by ACCs is unclear.

2. There a number of training modules that will be available at the CCAC website (www.ccac.ca). My understanding is that these modules can be used as the required training for all animal users. The training modules are quite specific including modules for wild birds and fish. Other modules focused on other animals are being developed.

3. There were discussions regarding the “universality” of the Assessment program within the CCAC. There is a general growth in the number of academic institutions asking to have their animal research certified by the CCAC, but they are now being approached by

government agencies to do the same. For example, the National Research Council has signed a Memorandum Of Understanding with the CCAC to have the NRC as part of the CCAC program. Agencies, both federal and provincial, where wildlife is being used for research may also be considering this.

The formal Council meeting (held on Feb. 20) held little of interest in terms of wildlife research, but there was mention of that the CCAC will be hosting the 8th World Congress on Alternative and Animal Use in the Life Sciences on August 21-25, 2011 in Montréal. A wildlife component may be part of this Congress.

In general, I was pleased that wildlife issues were often discussed (even without me raising them!), and so I am interested to see how the CCAC continues to address wildlife issues in the future. At the very least, they seem to be aware of some of the special challenges that wildlife researchers (and I include any researcher studying natural populations of vertebrates in this category) have.

If any members of CSEE council or individual members of CSEE have any questions about CCAC issues, please contact me at aschulte@hostedde@laurentian.ca

Albrecht Schulte-Hostedde

COMMITTEE ON THE STATUS OF ENDANGERED WILDLIFE IN CANADA

Introduction

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is an independent advisory body to the federal Minister of the Environment. Established in 1977, it was not until the passage of the Species at Risk Act, or SARA, in June 2003 that COSEWIC was established by legislation as the advisory body responsible for the assessment of Canadian species at risk. Receipt of COSEWIC's species status assessments by the Minister of the Environment triggers a series of actions (some of which have specific timelines, some of which do not) that culminate in a decision by the federal government to: (a) accept the assessment and add the species to the legal list; (b) decide not to add the species to the list; or (c) refer the assessment back to COSEWIC for further information or consideration.

In the international context, COSEWIC is unique in terms of its breadth of mandated responsibilities, extent of membership in and

outside of government, and capability to assess the status of species at heightened risk of extinction. COSEWIC has two primary functions. The first pertains to species status assessment. Based on status reports, COSEWIC assesses the status of, and identifies threats to, species considered to be at heightened risk of extinction. The second key function pertains to communication. COSEWIC communicates its assessments to all Canadians at the same time that it communicates its assessments to federal, provincial and territorial levels of government and to Wildlife Management Boards established under land claims agreements. These communications are made immediately after each of COSEWIC's biannual species assessment meetings.

COSEWIC is an independent national advisory body. It is not a federal agency, a conservation organization, a management agency, or a government department. Opinions, duties, and votes are not based on jurisdictional or any other affiliation. Each

member of COSEWIC is appointed by the federal Minister of the Environment. These are ministerial appointments, not political appointments. If COSEWIC's appointments were perceived to be political, the independence of COSEWIC and the apolitical nature of its assessments would be under question, undermining both the Act and the confidence that decision-makers and society have in receiving assessments that are not biased by their potential consequences.

COSEWIC status assessments are based on reports that detail the best available biological information, including western science, Aboriginal Traditional Knowledge (ATK), and community knowledge, that pertains to the status of a wildlife species. These reports are subjected to extensive open and transparent external review by: jurisdictions and their scientists; independent experts and university biologists; and industry-based scientists. The status report review period typically lasts 1.5 to 2.0 years. The status assigned to each species is based on consensus, ensured by requiring a two-thirds majority of the votes cast at a COSEWIC species assessment meeting. At present, a maximum of 31 votes can be cast: (i) one for each of 4 federal government agencies (Canadian Wildlife Service, on behalf of Environment Canada; Fisheries and Oceans Canada; Parks Canada; Canadian Museum of Nature); (ii) one for each of the 10 provinces and 3 territories; (iii) one for each of COSEWIC's 10 Species Specialist Subcommittees; (iv) one for the ATK Subcommittee; and (v) one for each of 3 Non-Government Science members.

As of June 2010, COSEWIC had assessed 827 wildlife species, finding 615 of them to either be Extinct or Species At Risk (Extirpated, Endangered, Threatened, Special Concern); there has been insufficient information to assess the status of an additional 46 species and 166 others have

been deemed Not At Risk. Plants and fishes are the taxonomic groups with the greatest number of species at risk in Canada.

Parliamentary review of SARA

The Species at Risk Act required that parliament undertake a review of the Act five years after its proclamation. The House of Commons Standing Committee on Environment and Sustainable Development began review of SARA in March 2009. Hearings took place infrequently between March and June 2009 and then again in the late winter/early spring of 2010. In early May 2009, COSEWIC presented a Brief to the Committee during a hearing in which the Chair of COSEWIC responded to questions from the Standing Committee for almost 2 hours (the Brief can be obtained from the author upon request). For those interested in the recommendations that COSEWIC contributed to the parliamentary review (and for a more complete description of two deficiencies of SARA identified by COSEWIC, please consult the transcripts at the following web address (<http://www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=3930308&Language=E&Mode=1&Parl=40&Ses=2>))

COSEWIC and CSEE

Since the passage of SARA, there have been 21 academics who have been appointed to terms of varying length to COSEWIC. Of these, 8 have been from universities west of Ontario, 7 from Ontario and Québec, and 6 from universities in the Maritimes and Newfoundland and Labrador. All Chairs of COSEWIC under SARA are currently members of CSEE: Marco Festa-Bianchet, Université de Sherbrooke (2002-2006); Jeff Hutchings, Dalhousie University (2006-2010); Marty Leonard, Dalhousie University (2010-present). Opportunities for involvement in COSEWIC by members of CSEE include membership on one of the committee's 10 species specialist subcommittees, membership

on COSEWIC, and observer status at one of COSEWIC's biannual species assessment meetings (the spring meeting is usually held during the last week of April at various locations across the country; the autumn meeting is usually held during the third week of November in Ottawa). More information on COSEWIC can be obtained from www.cosewic.gc.ca. All of COSEWIC's

assessments, and explanations of how the Government of Canada has responded to these assessments, can be obtained from the SARA Public Registry (www.sararegistry.gc.ca).

Jeff Hutchings
CSEE council - Vice-President

WORKSHOP ON THE FUTURE OF BIOLOGICAL FIELD STATIONS

The 2010 Laval meeting had a workshop held on the future of biological field stations, moderated by Mark Forbes. There were ~ 50 people in attendance, including the directors and/or managers (or their designates) of 10 university-based field stations in Canada. After a brief overview of the recent funding landscape in Canada for biological field stations and the history and importance of field station research, the floor was opened to questions and comments. Participants noted that the issue was really one for scientific field research stations, not simply facilities where the focus was on research in ecology and evolution. It was also noted that Canada lagged behind other nations in funding networks of ecological observatories, despite recent inroads into forming a world-class arctic field station. Work is also underway to

develop a network of arctic field stations. It was agreed that a "white paper" was needed with input from well-defined stakeholders that would highlight the importance of scientific field research stations to various government agencies and that would contain recommendations toward sustainable funding of other regional facilities or networks of such facilities. It was further agreed that an application to hold a workshop at the Canadian Institute for Ecology and Evolution be prepared. The function of this second workshop would be to pen the white paper. Abrecht Schulte-Hostedde (Director, Wildlife Research Station) and Frank Phelan (General Manager, Queens University Biology Station) volunteered to prepare the application.

Mark R. Forbes

IAN McTAGGART-COWAN 1910-2010

Ian McTaggart-Cowan was one of the foremost Canadian wildlife biologists of the last 100 years. He died in Victoria on April 18th, 2010, two months shy of his 100th birthday. A former professor and head of the Department of Zoology at the University of British Columbia, he was also Dean of Graduate Studies there from 1964 to his retirement in 1975.

Dr. McTaggart-Cowan was born in Scotland in 1910, and immigrated to Canada with his family when he was 3. Encouraged by his mother, as a boy he became interested in natural history, particularly of birds and small mammals. He completed an undergraduate degree at UBC, spending his summers conducting fieldwork in the Rocky Mountains. In 1931 he worked with Kenneth Racey, a well-known naturalist, in the process finding the Pacific pallid bat in the southern Okanagan, and rediscovering the Vancouver Island marmot. This was a fruitful collaboration for other reasons too: Dr. McTaggart-Cowan later married Racey's daughter Joyce, with whom he had two children, Gary and Ann.

McTaggart-Cowan completed his PhD at the University of California, Berkeley with the pioneering ecologist Joseph Grinnell. After his graduate work, he returned to British Columbia where he became the biologist at the Royal British Columbia Museum. In 1940 he moved from Victoria to Vancouver to take up his professorship at UBC. It would prove to be a key hire for UBC: his scientific, teaching, mentoring, and conservation work is legendary. Dr. McTaggart-Cowan produced hundreds of publications, technical papers, and books, particularly on systematics and scientific methods in wildlife management. Always interested in vertebrates, he conducted research ranging from gigantism in island population of *Peromyscus* to

population studies of sheep and birds. He supervised more than 100 graduate students, including well-known scientists such as Ian Stirling, Valerius Geist, and Buzz Holling. He promoted wildlife and conservation in Canada, providing testimony against bounty programs, and hosting over 100 episodes of television programs such as 'Fur & Feathers', 'The Living Sea', and the 'Web of Life'. These early science and nature shows paved the way for contemporary television science programs like David Suzuki's 'The Nature of Things'.

His long list of service includes work as a founding member of the National Research Council of Canada, as a chair with the B.C. Habitat Conservation Trust Fund, a 30-year stint as a board member of the Nature Trust of British Columbia, work as a key part of the beautiful and comprehensive 'Birds of British Columbia' 4-volume set, and as chancellor of the University of Victoria. He was a recipient of the Order of Canada and the Order of British Columbia, as well as numerous honorary degrees.

In 2009 the Dr. Ian McTaggart-Cowan Professorship in Biodiversity Conservation and Ecological Restoration was awarded for the first time at the University of Victoria after \$1 million was raised from the provincial government, the Habitat Conservation Trust, BC Hydro, and a number of private donors. In addition, a UVic residence and two scholarships have been named in his honour. He is the originator of the Cowan Vertebrate Museum at UBC, which contains more than 30,000 mammal and bird specimens.

Up until his death at 99, he maintained a fantastic garden at his home in Victoria, and told stories of his research and fieldwork, including a tale of spending days boiling the

last of the tissue off of a grey whale's bones. 'Joyce and I set up a big barrel downtown behind the legislature and boiled seawater for days. It was a terrible smell.' He was still talking ideas and science until just before his death: as he was fond of saying, "Evolution is never finished and this applies equally to ideas and to organisms."

*Brian Starzomski
Ian McTaggart-Cowan Professor of
Biodiversity Conservation & Ecological
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EDITOR'S NOTE

You might have noticed that something has changed in your CSEE newsletter. Marco Festa-Bianchet has been the editor of the Newsletter since its first issue in January 2007, a few months after our Society became a reality. Seven newsletters and tens of hours of work later, he asked me to take over as the editor. It took me only a few seconds to decide to accept the task. My goal is to follow in his steps and use the Newsletter to create and reinforce connections between all

members of the Society, keep them informed about issues of importance to us all and announce upcoming events of interest. So please keep your contributions coming! Thank you Marco for all your great work!

*Nadia Aubin-Horth
CSEE council – regular council member and
Editor of the CSEE bulletin*

CSEE COUNCIL

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Stephen Heard (University of New Brunswick, Council
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OUTREACH ACTIVITY, CSEE MEETING IN QUEBEC CITY



Pictures by Caroline Côté and Christian Landry