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THECURRENT



Newsletter of the Society of Canadian Limnologists

Genomes to Biomes......6

Right: President of SCL Jules Blais "shoving off" into a lake in Inuvik, NWT to collect sediment cores. Jules will be stepping down as President in the new year, and multiple executive positions will be voted on at the SCL business meeting at CCFFR in Ottawa, Jan. 9-11 2015. Photo credit: Linda Kimpe



SCL on the rise

Jules Blais, President

Now that I am approaching the end of my term as President of SCL, I am compelled to say what a delight it has been to represent and speak on behalf of such a dynamic and important group of scientists. I have long felt that limnology will always be at the forefront of environmental science for the simple reason that the most pressing environmental problems in the world revolve around freshwater. My involvement in SCL has made me even prouder of my chosen profession because of the dedication and passion that is so apparent among our limnology colleagues. The highlights are many, but my proudest moments certainly came from the bold efforts of those who stood up to speak on behalf of environmental science in Canada at a time when it was sorely needed. In particular, the efforts to preserve the Experimental Lake Area (ELA) will go down in Canadian history as a watershed moment for environmental science in Canada. SCL was a strong supporter of the Coalition to Save ELA in their campaign to inform Canadians of the importance of ELA, and SCL members wrote op-ed articles and open letters, and were frequently interviewed by TV, radio and print journalists. We also witnessed scientists from coast to coast to coast

expressing why scientists must be free to speak openly to Canadians about the scientific evidence that is used to form public policy, i.e. evidence generated in the public interest and paid for by Canadians. We suffered some setbacks, and saddest of all we lost some colleagues to layoffs and early retirements, but there were some victories too. First, the ELA was successfully transferred to the International Institute for Sustainable Development (IISD) and is set to be reborn as a new independent research centre with exciting new prospects on the horizon. Second, our collective efforts to improve science communication have become part of the national conversation, and we have never before heard so much talk about the importance of communicating science to the public. I hope the importance of effective science communication is being instilled in the next generation, because the environmental problems of the future will require our effective and informed communication skills.

Not all of our colleagues agreed with our methods over the past three years, which have at times been critical and even confrontational against those who were shutting down research centres, cutting basic science funding, eliminating

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science-based environmental protections, and preventing scientists from communicating to the public. We have maintained that it is precisely the role of societies like ours to defend these pillars when they come under attack. Whether a more conciliatory approach would have been more effective is a question for debate. Certainly it was not my plan to write open letters to elected representatives to criticize their decisions when I accepted this position on behalf of SCL. But I believe these exceptional circumstances required a frank discussion of the fiduciary responsibilities of all democratically-elected governments when it comes to supporting the science needed to protect the public. I am reminded of numerous conversations with IISD representatives who told us that the ELA negotiations with the federal government were made possible by the public scrutiny that occurred by keeping the matter in the news. In other words, those closest to the negotiations told us that had we not spread public awareness the way we did, ELA would no longer exist and we would have lost one of limnology's greatest assets.

On another positive note, we have made much progress as a society in the past three years. A lot of that progress came from our very dedicated SCL Executive and membership, who have shown a tremendous resolve to make things happen. For one, Alison Derry (VP Anglophone) made possible our involvement in the Genomes to Biomes meeting in Montreal by doing all the heavy lifting on SCL's behalf. This conference was our first partnership with the Canadian Society of Ecology and Evolution and the Canadian Society of Zoology, attracting nearly 1,000 participants, probably the largest conference SCL has yet participated in. Our bi-annual newsletter and use of social media has greatly improved communication for limnology in Canada, and kudos are due especially to Michael Rennie for taking the lead on this, and Alexandre Poulain for improving our visibility "en français".

They have been an almost daily Twitter and Facebook presence, and SCL has garnered national attention for our effective use of social media by Canadian Science Publishers, among others. With over 1,500 Twitter and Facebook followers, SCL's reach has never been as vast as it is today. The Current newsletter was introduced three years ago as a new venue for communicating our science to the community at large, and it now attracts a wide readership and regular sponsors, bringing Canadian limnology to the world with feature articles on our recent activities, research programs, international collaborations, publications, and conferences. The new SCL website and domain name just released in October 2014 (http://socanlimnol.ca/) is an exciting new development that will further transform the way we see ourselves, and the way we are seen by the world. This website hosts our new SCL blog, which will provide frequent updates on new research, job opportunities, and other new developments. I also thank Alain Patoine (VP Francophone), Roberto Quinlan (Secretary/Treasurer), and student representatives Erik Szkokan-Emilson and Jorge Octavio Negrin Dastis for their contributions to our newsletters, conference planning, public outreach, and all the frequent interactions that happen when being part of the SCL Executive.

This brings me to my final task as SCL President: renewing the Executive following our three year mandates. Erik Szkokan-Emilson, Jorge Octavio Negrin Dastis, Alison Derry and I will be stepping down after fulfilling our three year commitments as the two student representatives, Vice-President and President of SCL, respectively. We look forward to nominating our colleagues during this renewal phase, and we hope to see more of our membership getting involved in SCL. Our organization is on the rise and the future looks bright.

SCL members among 2014 Victoria Strait Expedition that found HMS Erebus

Joshua Thienpont

SCL members John Smol and Joshua Thienpont spent two weeks in August/September aboard the One Ocean Voyager, one of four vessels taking part in this year's (ultimately successful) search for the wrecks of Sir John Franklin's ill-fated 1845-1848 expedition attempting to be the first to successfully navigate the Northwest Passage. John, last year's winner of the Weston Family Prize for Lifetime Achievement in Northern Research, and Joshua, a current holder of a W. Garfield Weston Postdoctoral Fellowship for Northern Research, embarked on the journey as part of the contingent sent by the W. Garfield Weston Foundation to act as scientific ambassadors to the members, dignitaries and donors who took part in the historic expedition. The discovery of the wreck of HMS Erebus has made international headlines, and ranks among the most important archaeological finds in Canadian history. Full details about the expedition can be found at: http://

www.canadiangeographic.ca/franklin-expedition/



2014 Victoria Strait expedition members (from left to right): Igor Lehnherr (University of Toronto, Mississauga), Geordie Dalglish (W. Garfield Weston Foundation, Northern Committee), Adrienne White (University of Ottawa), Marc-André Bernier (Parks Canada), Emily Choy (University of Manitoba), John Smol (Queen's University), and Joshua Thienpont (Brock University). Photo credit: John Smol.

Research highlight: NSERC CREATE Mine of Knowledge: Promoting a sustainable mining industry

Dana Simon

Mine of Knowledge is an interdisciplinary program designed to train highly qualified individuals capable of fulfilling the demands of the mining sector in the field of technological innovation and environmental management. This sector includes mining industries, but also law firms, environmental consultants, and analytical services. It also includes partners from the social sciences, since the development of mines often results in significant impacts on communities. Funded by the Natural Sciences and Engineering Research Council (NSERC), as part of the collaborative research and training experience (CREATE), the program will receive \$1,650,000 over six years to train over 100 young scientists (undergraduates, graduates and postdoctoral fellows). Initiated in 2013 the program unites six research institutions (University of Montreal, INRS, Laurentian University, University of Ottawa, Queens University and McMaster University), 11 investigators and over 30 collaborators and mining sector key industrial partners. The program will support the development of more sustainable approaches in this sector.

The mining industry products are important to everyday life by their use in the infrastructure (highways), electrical and communication networks, housing, vehicles (hybrid car batteries), consumer electronics and many other items and represents nearly 5% of the national GDP. The mining industry made some progress to become environmentally sustainable such as: (a) reducing the release of some major contaminants by 65% - 95% over the past 20 years, (b) investing in cleaner processes and (c) implementing various sustainable development programs within the companies. Nevertheless, mining has never been environmentally benign¹.



Closed asbestos mine Black Lake (Thetford Mines), Quebec. Photo credit: Dana Simon via Shutterstock.

Mine of Knowledge's mission is to train students and postdoctoral fellows in sustainable development approaches and bring this vision to the industry. With the expansion of mining activities into Northern Canada, the program emphasizes aboriginal representation and connection. To achieve its mission the program engages students and postdoctoral fellows in challenging research projects and provides them with unique training courses, grants (up to \$20 000 per year) and internships.

The program involves a consortium of investigators and collaborators with complementary expertise providing the students with training in analytical and environmental chemistry, mine waste mineralogy, biogeochemistry, ecotoxicology, environmental genomics, mineralogy and molecular microbiology using state-of-the-art instrumentation and modeling approaches. The research conducted by our CREATE trainees is designed to hopefully generate scientific breakthroughs at the interfaces among disciplines.Being part of the CREATE industrial stream, the program includes a mandatory internship program that results from three to ten months of hands-on industry experiences within the premises of our private partners. The trainees will conduct research pertinent to the mining industry and private companies in environmental and social sciences involved in limiting the environmental impacts of mines. The program offers an inspiring interdisciplinary environment; one that encourages and provides a value-added experience to the university training environment to prepare individuals as a new generation of government, industry, university scientists and leaders ready to deal with the often very complex issues related to the sustainable mining.

For more information, please visit our website: http://mine.umontreal.ca/ indexEN.html

References: (1): Facts and Figures of the Canadian Mining Industry, Mining Association of Canada, 2012.

FAST FACTS:

WHO? The Mine Of Knowledge research team.
WHERE? Institutions across Canada.
WHAT? A program designed to train HQP capable of fulfilling the demands of the mining industry
WHY? To bring forward innovative solutions aimed at improving environmental sustainability within the mining industry

WEB: http://mine.umontreal.ca/indexEN.html

Do YOU have a story to share in the next issue of *The Current*? Have an idea for a blog on our website? Send ideas, photos or contributions to:

comms@socanlimnol.ca

Accusations of bias no Smol matter

Editorial by Michael Rennie

This summer, member John Smol was the focus of some surprising and unusual attention. Freedom of Information requests by journalist Tom Korski had unearthed internal government documents (dated Feb 8, 2013) authored by the then Deputy Minister to the Minister of Natural Resources Canada accusing Dr. Smol of "a lack of neutrality" in his communications around a paper he co-authored with a post doc in his lab (Joshua Kurek) and government scientists at Environment Canada, and bemoaned the level of media attention the paper received.

Dr. John Smol is among the most highly decorated and recognized scientists in the country. A past Rigler Award winner for his achievements in Limnology (1995), Dr. Smol is a Fellow of the Royal Society of Canada and an Officer of the Order of Canada, to abridge a long list of accolades and recognition for his outstanding work as a scientist.

The documents disclosing the accusations, while made internally, are telling of how both the government and industry have aligned their messaging on the issue (click here for the briefing and industry response). Both the media speaking points for EC scientists (none of whom I recall being quoted in the media) and the response from the Canadian Association of Petroleum Producers chose to focus on the fact that the levels of PAHs detected were similar to others found elsewhere, and that zooplankton in these lakes were unaffected by PAHs. Neither mention the exponential rate of increase in PAH levels in lake sediments since the development of the region, nor the fact PAHs rise sharply in proximity to development (it is notable that both these observations are made in the briefing to the Minister, but are absent from the media speaking points). Both findings are important facts brought forward by the study, and the omission of a major component of those findings by both a government agency tasked with regulating industrial effects on the environment, and the industry it is meant to regulate, is disturbing.

It is difficult to understand how a fact that is clearly

A fresh face for SCL

Michael Rennie

At long last, the new SCL website has finally launched! After months of development, the site launched a little over a month ago and the feedback so far has been extremely positive. Some of the features we are thrilled about on the new site:

- •A <u>Society blog</u>, for both society information and a venue for guest blogs by our members.
- •<u>A searchable Jobs board</u> where we place all jobs, placements and graduate opportunities sent to us by the membership.

As we continue to develop the site, features we will have in place very soon include:

- •An updated and integrated <u>membership renewal form</u>, which dovetails with our website, allowing for a member profile on the site,
 - •Permanent content in both English and French;
 - •An on-line store for ordering SCL merchandise.

outlined in the ministerial briefing is grounds to accuse Dr. Smol for "lacking neutrality". He simply was able to relay the information in the study to the general public, something both EC and industry chose not to do.

It is additionally confounding how a science-based department (NRCan) seems unaware of the communications process that accompanies the publication of articles that journals wish to promote, like the one in question. The complaint by the department that Dr. Smol gave prepublication (but embargoed) interviews to the media that requested them is to complain about how science communication works, and is often journal policy (for example, in this case, the Proceedings of the National Academy of Sciences releases a pre-print of the paper and their press releases, under embargo, five days before publication to the media). I would find it very surprising if the communications department from Environment Canada were left totally out of the loop on this in the development of this work and preparation of authors to speak to the articles findings. Indeed, the preparation of speaking points by the department for its scientists suggests exactly the opposite.

It is already bad enough that our government scientists are faced with policies that so heavily restrict their communication of scientific findings to the public, much more so than our counterparts in the USA (as illustrated in a recent report by Evidence for Democracy and Simon Fraser University). At the same time, government departments are facing growing restrictions on budgets, and are encouraged to find university partners who can help fill gaps in expertise left by these cuts. It is therefore counterproductive for the government to accuse these collaborators of bias when they simply report the findings of the study, or participate in the communication of the study results to the media. These measures will only act to discourage academic partnerships in the future.



We are happy to present a new face to the world through this website, and are particularly thankful to Vincent Design for all their hard work on the site as we apply the finishing touches!

Student poster award winners at Genomes to **Biomes**

Alain Patoine

La Société canadienne de limnologie (SCL) est fière de décerner un prix ex aequo aux trois étudiantes ayant présenté une affiche lors du congrès Génomes aux biomes qui s'est tenu à Montréal du 25 au 29 mai 2014. Il s'agit du premier congrès conjoint entre la SCL, la Société canadienne de zoologie et la Société canadienne pour l'écologie et l'évolution. Les affiches ont été évaluées par des professeurs membres de la SCL selon une suite de critères portant sur le contenu, la structure et l'impact visuel. Les gagnantes sont, par ordre alphabétique:

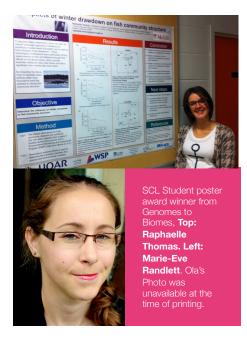
The Society of Canadian Limnologists (SCL) is pleased to give an ex-aequo award to three SCL student members for the posters they have presented during the Genomes to Biomes conference in Montreal, May 25-29. The joint conference saw three Canadian societies meet for the first time: SCL, Canadian Society of Zoologists, Canadian Society for Ecology and Evolution. Posters were evaluated by SCL academic members following a suite of criteria pertaining to content, structure and visual impact. Awardees are (in alphabetic order):

Ola Khawasik (Université Concordia) "Zooplankton as microbial hotspots in fresh water lakes"

Marie-Eve Randlett (Swiss Federal Institute of Aquatic Science and Technology, Department of Surface Waters) "Hydrogen isotopes of n-alkanes as indicator for porewater salinity variations in lake Van (Eastern Anatolia, Turkey)"

Raphaëlle Thomas (McGill University) "Impacts of winter drawdown on fish community structure and littoral fish body condition"

Felicitations, Congratulations!



SCL student update

Jorge Negrin Dastis and Erik Szkokan-Emilson

It is hard to believe that our terms are almost up! Two years have gone by fast, and we've really enjoyed our time as SCL Student Representatives. It was an exciting time to be involved in the society, which has grown a lot over the past two years. We now have a strong social media presence, with active and well-received twitter and facebook accounts! And a shiny-and-new website! The society is now involved in a new joint meeting, Genomes to Biomes, and our membership is growing. It will be sad to say goodbye but it will be exciting to welcome some new faces as student reps. We will be looking for Anglophone and Francophone representatives to start a term in January 2015. If you are interested in serving as a student representative please contact us (comms@socanlimnol.ca). And as always don't forget to follow us on twitter (@Can_Limnology), facebook (facebook.com/ SocietyOfCanadianLimnologists), and keep an eye on the student forum (http://

sclforum.wordpress.com/). Jorge and Erik. Il est difficile de croire que

nous arrivons à la fin de nos postes comme représentants d'étudiants pour l'SCL! Deux ans se sont écoulés rapidement, et nous avons vraiment apprécié notre temps comme représentants de étudiants pour l'SCL. C'était très excitant d'être impliqué dans la société qui a connu une forte croissance au cours des deux dernières années. Nous avons maintenant une forte présence dans les médias sociaux, avec les comptes twitter et facebook bien actives et en opération parmis les étudiants! Mais aussi un site Web brillant et nouveau! La société est maintenant très impliquée dans une nouvelle réunion conjointe, Génomes aux Biomes, et nos membres sont de plus en plus nombreux. Ce sera triste de dire au revoir, mais il sera très intéressant d'accueillir de nouveaux visages comme représentants étudiants. Nous serons à la recherche de représentants francophones et anglophones pour commencer un terme en Janvier 2015. Si vous êtes intéressé à servir en tant que représentant des étudiants s'il vous plaît contactez nous (comms@socanlimnol.ca). Et comme toujours, n'oubliez pas de nous suivre sur twitter (Can_Limnology), facebook (facebook.com/ SocietyOfCanadianLimnologists), et garder un œil sur le forum étudiant

(http://sclforum.wordpress.com/).

Jorge et Erik. 😥





Montreal May 25-30, 2014 was the setting for GENOMES TO/AUX BIOMES, the first ever joint meeting between the Society of Canadian Limnologist (SCL), the Canadian Society of Ecology and Evolution (CSEE), and the Canadian Society of Zoologists (CSZ). It became the largestever gathering of Canadian organismal biologists, with 936 attendees (6% SCL which comprised about 50% of our membership) and 792 presentations (599 oral). Students made up 56% percent of the attendees, followed by professors/ scientists (33%) and postdocs (11%). Program highlights included exceptional plenary talks by Daniel Schindler (SCL), Jeff Hutchings (CSEE), and Glen Van Der Kraak (CSZ); excellent symposium by each society and by the local organizing committee; a "young investigator" session that combined all three societies; and three busy poster sessions. The theme of the SCL symposium was "From lakes to coastal zones: Integrating aquatic ecosystems at different scales". Our invited speakers included Jules Blais (University of Ottawa), Karen Kidd (University of New Brunswick Saint John), Roxane Maranger (Université de Montréal), Beatrix Beisner (Université du Ouébec à Montréal). Shelley Arnott (Oueen's University), and Warwick Vincent (Université Laval). Paul del Giorgio (Université du Québec à Montréal) was one of six invited speakers in the LOC-organised symposium entitled 'Genomes to/aux biomes'. Particularly successful events were the public outreach talks by McGill Professor Catherine Potvin and National Geographic Society Photographer Paul Nicklen. Social highlights included a student organized "Strategies to Succeed" mixer and pub night, a pub night (the Canadiens won a barn burner that night!), a Redpath Museum reception, and a rip-roaring banquet at a Sugar Shack with a vigorous and long-lasting dance party.

Du 25 au 20 Mai dernier, Montréal a accueilli la conférence « Génomes aux biomes », la première réunion conjointe entre la Société canadienne de limnologie (SCL), la Société canadienne d'écologie et d'évolution (SCEE) et la Société canadienne de zoologie (ZSC). Ce fut le plus grand rassemblement de biologistes des organismes au Canada, avec 936 participants (dont 50 % de nos membres, représentant 6% du nombre total des délégués) et 792 présentations (dont 599 présentations orales). Les étudiants représentaient 56 % des participants, suivie des professeurs/chercheurs (33%) et postdoctorants (11%). Les points saillants du programme ont inclus d'excellentes conférences plénières par Daniel Schindler (SCL), Jeff Hutchings (SCEE), et Glen Van Der Kraak (ZSC), des colloques spécialisés par chacune des sociétés, une séance « jeunes chercheur/es » ainsi que trois sessions d'affiches. Le thème du colloque SCL était « Des lacs aux zones côtières : Intégration des écosystèmes aquatiques à différentes échelles ». Parmi nos conférenciers invités figuraient Jules Blais (Université d'Ottawa), Karen Kidd (Université du Nouveau Brunswick à Saint John), Roxane Maranger (Université de Montréal), Beatrix Beisner (Université du Ouébec à Montréal), Shellev Arnott (Université Queen's), et Warwick Vincent (Université Laval). Paul del Giorgio (Université du Québec à Montréal) était l'un des six conférenciers du colloque intitulé « génomes to / aux biomes » et organisé par les trois sociétés. Les présentations de sensibilisation destinées au public par Catherine Potvin, Professeure à McGill, et Paul Nicklen, photographe à la National Geographic Society ont remporté un franc succès. Faits saillants parmi les évènements sociaux furent la soirée étudiante « Stratégies pour réussir », une nuit au pub vraiment mémorable (en plus de la victoire des Canadiens!), une réception au Musée Redpath, et un banquet dans une cabane à sucre suivi d'une longue soirée dansante.







Upcoming SCL Meetings



Michael Rennie

Our upcoming annual society meeting in conjunction with the Canadian Conference of Fisheries Research, January 8-11 2015 is coming up fast! The deadline for Abstract submission and the Clemens-Rigler Travel Award is Nov. 3, so get your submissions in soon and encourage your students to apply!. Be sure to check back on our website for all the latest details, including registration.

We have a diverse and interesting program lined up this year, including a plenary talk from the **2015 Rigler**

Award Recipient, Daniel

Schindler (see below), and an exciting list of session titles and organizers that you can view on our website.

On behalf of SCL, we look forward to seeing you in Ottawa in January!

2015 Award Winners

The Rigler Award is the highest honour bestowed by our Society, recognizing major achievements in Limnology by Canadians or those working in Canada. Congratulations to our 2015 Rigler Award Recipient, Daniel Schindler. Daniel, a native Canadian, is a Professor of Aquatic & Fishery Sciences at the University of Washington.

The Rob Peters award is given each year to recognize the best paper written by a student at a Canadian Institution in the preceding Calendar year. Congratulations to Sophie Chiasson-Gould, University of Ottawa for her paper "Dissolved organic matter kinetically controls mercury bioavailability to bacteria.", Published in





recipient Daniel Schindler, Professor, University of Washington.

Left: 2015 Rigler Award

Right: 2015 Peters Award recipient, Sophie Chiasson-Gould, University of Ottawa.

Environmental Science and Technology 48: 3153-3161.

SCL Nominations for Executive Committee

The society is currently seeking nominations for the following positions:

- President
- Vice President (Anglophone)
- SCL student representative (Anglophone)
- SCL student representative (Francophone)

Voting will occur at the SCL business meeting during the meeting in Ottawa, Jan. 8-11. If you are interested, or would like to nominate one of your colleagues for any of these positions, please send your nomination (name and 1-2 sentences of why the candidate should be considered) to comms@socanlimnol.ca.

Member Recognition

Diane Orihel received a University of Alberta Alumni Horizon Award, outstanding achievements of University of Alberta alumni early in their careers for her critical role in helping to save the Experimental Lakes Area. Congratulations, Diane!

On-line Limnology

Warwick Vincent

Two SCL members have recently followed in John Smol's footsteps and have contributed to the open access, online L&O e-Lecture series, in which John produced the inaugural lecture. As described on the ASLO e-Lecture website (www.aslo.org/lectures/):

"L&O e-Lectures are prepared by experts on various topics in aquatic

sciences. They are peer-reviewed and fully citable (i.e. with ISSN [DOI] numbers). L&O e-Lectures are intended as a practical resource for educators and researchers for use at the postsecondary level or for the public at large. Each L&O e-Lecture includes presentation slides, detailed lecture notes to facilitate lecture usage and recommended reading lists for lecture users and targeted audiences. Presentation slides are available in PowerPoint and PDF formats and are both PC and Mac compatible."

The two new SCL contributions are:

Gregory-Eaves, Irene and Isabelle Domaizon. 2014. Analysis of DNA archived in lake sediments.

Limnol. Oceanogr. e-Lectures, <u>doi:</u> 10.4319/lol.2014.igregoryeaves_idomaizon.7

Vincent, Warwick F. and Carinne Bertola. 2014. Lake Physics to Ecosystem Services: Forel and the Origins of Limnology.

Limnol. Oceanogr. e-Lectures, <u>doi:</u> 10.4319/lol.2014.wvincent cbertola.8

Given Canada's obvious strengths in Limnology, this is a great venue for other SCL members to contribute lectures, and makes an excellent resource for slides and ideas for teaching and outreach purposes

Upcoming meetings

(meeting websites hyperlinked where available)

SCL meetings

• 2015 with CCFFR, Ottawa ON (Jan 8-11)

Other meetings

 2014 Society for Environmental Toxicology And Chemistry North America 35th Annual Meeting, November 9-13, Vancouver BC

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- 2014 AGU Fall Meeting, Dec. 15-19 San Francisco, CA.
- 2015 Aquatic Sciences Meeting (ASLO), Feb. 22-27, Grenada Spain
- 2015 Canadian Society for Ecology and Evolution May 22-24, Saskatoon, SK
- 2015 International Association for Great Lakes Research, May 25-29, Burlington, Vermont
- 2015 Canadian Society of Zoologists May 25-29, Calgary, AB
- 2015 American Society of Ichthyologists and Herpetologists July 15-19, Reno Nevada
- Ecological Society of America, 9-14 August, Baltimore, Maryland
- American Fisheries Society, Aug 15-20, Portland, Oregon
- 2015 International Interdisciplinary Conference on Land Use and Water Quality Sept. 21-24, Vienna, Austria

Recent citings

Have a recent publication (past 6–12 months) in the peer-reviewed literature that you'd like highlighted in the next issue? Send it to comms@socanlimnol.ca.

Berggren, M, SE Ziegler, N Fortin-St. Gelais, BE Beisner, PA del Giorgio. 2014. **Diverging patterns of allocthony in three major groups of crustacean zooplankton in Boreal lakes.** Ecology 95:1947-1959.

Bouchard F, Francus P, Pienitz R, Lauron I, Feyte S. 2014. Subarctic thermokarst ponds: investigating recent landscape evolution and sediment dynamics in thawed permafrost of northern Québec (Canada). Arctic, Antarctic, and Alpine Research 40(1): 259-280.

Deshpande B, Tremblay R, Pienitz R, Vincent WF. 2014. **Sedimentary pigments as indicators of cyanobacterial dynamics in a hypereutrophic lake.** Journal of Paleolimnology, (published online first). DOI: 10.1007/s10933-014-9785-3.

Gauthier, J, YT Prairie, BE Beisner. 2014. **Thermocline** deepening and mixing alter zooplankton phenology, biomass and body size in a whole-lake experiment. Freshwater Biology, 59:998-1011.

Gibson, L, R Lavoie, LM Campbell & V Langlois. 2014. **Blood** mercury concentrations induce oxidative stress-related gene expression in female *Phalacrocorax* auritus (Double-crested cormorants). Ecotoxicology. 23 (6):1004-14.

Guyard H, St-Onge G, Francus P, Pienitz R, Haussmann S. 2014. Microfacies and microstructures of subglacial and deglacial sediments from the Pingualuit Crater Lake (Ungava Peninsula, Canada). Canadian Journal of Earth Sciences. DOI: 10.1139/cjes-2014-0041.

Hodson, PV, K Norris, Michelle Berquist, LM Campbell & JJ Ridal. 2014. **Mercury concentrations in amphipods and**

fish of the Saint Lawrence River (Canada) are unrelated to concentrations of legacy mercury in sediments. Science of the Total Environment 494-495:218-228.

Kidd, K.A, Paterson, M.J, Rennie, M.D., Podemski, C.L., Findlay, D.L., Blanchfield, P.J. and Liber, K. **Responses of a freshwater food web to a potent synthetic oestrogen.** Philosophical Transactions of the Royal Society Series B. 369: 20130578.

Molot, LA, SB Watson, IF Creed, CG Trick, SK McCabe,MJ Verschoor, RJ Sorichetti, C Powe, JJ Venkiteswaran and SL Schiff. 2014. A novel model for cyanobacteria bloom formation: The critical role of anoxia and ferrous iron. Freshwater Biology. 59(6):1323-1340.

Ouellet Jobin, V, BE Beisner. 2014. **Deep chlorophyll** maxima, spatial overlap and diversity in phytoplankton exposed to experimentally altered thermal stratification. Journal of Plankton Research 36: 933-942.

Perron, T, J Chételat, J Gunn, BE Beisner, M Amyot. 2014. **Effect of experimental deepening of the thermocline and oxycline on methylmercury accumulation in a Canadian Shield Lake.** Environmental Science and Technology 48:2626-2634.

Razavi, NR, MT Arts, M Qu, B Jin, W Ren, Y Wang & LM Campbell. 2014. Effect of eutrophication on mercury, selenium, and essential fatty acids in Bighead Carp (*Hypophthalmichthys nobilis*) from reservoirs of eastern China. Science of The Total Environment. 499(15): 36–46.

Tremblay R, Pienitz R, Legendre P. 2014. **Reconstructing** phosphorus levels using models based on the modern diatom assemblages of 55 lakes in southern Québec. Canadian Journal of Fisheries and Aquatic Sciences, (71): 887–914.

Vasseur, DA, JW Fox, A Gonzalez, R Adrian, BE Beisner, MR Helmus, C Johnson, P Kratina, C Kremer, C deMazancourt, E Miller, WA Nelson, M Paterson, JA Rusak, J Shurin and CF Steiner. 2014. Synchronous dynamics of zooplankton competitors prevail in temperate lake ecosystems. Proc. R. Soc. Lond. B 281: 20140633.

Vincent, J. and Kirkwood, AE. 2014. Variability of water quality, metals and phytoplankton community structure in urban stormwater ponds along a vegetation gradient. <u>Urban Ecosystems Volume 17 (3):</u> 839-853.

EXO Advanced Water Quality Multi-Parameter Monitoring Platform



- Wireless Bluetooth communication
- Smart Sensors
- Wet-Mateable sensor/cable connectors

Water quality monitoring that's field-ready

- Built in GPS
- Large Memory (>1,000,000 readings)
- Extended Battery Life (90 Days)
- New Parameters include fDOM & Total Algae
- Antifouling Protection



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Hoskin Scientific Ltd.

Vancouver | Burlington | Montreal

Onset HOBO DO & Conductivity Loggers

Dissolved Oxygen and Conductivity Loggers for fresh water and salt water measurements

Optical Dissolved Oxygen Logger

- Optical DO sensor technology
 - Long-lasting calibration
 - Less maintenance
 - DO concentration and percent saturation
 - 0.2 mg/L accuracy
 - Easy-to-replace sensor cap (lasts six months)

Conductivity Loggers

- Two models to choose from for fresh and salt water deployments
 - Provides easy access to sensor for cleaning and shedding air bubbles
 - HOBOware Pro software enables start/end-point calibration to compensate for any fouling and provides easy conversion to specific conductance and salinity





more info: myhoskin.com/u26

more info: myhoskin.com/u24

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