



SCAS SCSA

Society of Canadian Aquatic Sciences
Société canadienne des sciences aquatiques

Issue 1 - December 2022

REFLECTIONS

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Photo Credit: Brad Howell

President's Message

Kerri Finlay

With this inaugural newsletter for SCAS/SCSA, we hope to both honour our former societies and celebrate our new coordinated efforts going forward. SCL published “The Current” twice per year since 2012 providing society news, publications, updates on society activities, and celebrations of achievements. We are pleased to introduce you to our new society newsletter, "Reflections," and we will continue this tradition to foster a culture of information sharing, community building, and celebration.

The SCAS Board and committees have been exceptionally busy since our official inception in February 2022! There was a lot of behind-the-scenes work leading up to our launch, followed by the associated dissolution of SCL and CCFR, incorporating SCAS/SCSA, formalizing Terms of Reference, designing a visual identity, developing a new website, planning our annual conference, recognizing our outstanding members, and much, much more.

Some highlights from the past year:

- Thanks to the leadership of Beatrix Beisner and Dylan Fraser as the scientific program leads, and John Lark responsible for local arrangements, the SCAS annual conference in Montreal (Feb 22-25, 2023) is on track to be our largest one ever! We are thrilled with the abstract submission responses: with over 300 talks and 90 posters, we are set to have an engaging week of aquatic science communication.
- Our Communications team (lead by Andrea Kirkwood), including the logo and website sub-committees (with invaluable contributions from Karen Smokorowski, Mike Rennie, Alysa Czenze, and Cale Gushulak) have done a phenomenal job of branding our society and effectivity and efficiently communicating who we are and what we're doing. Make sure you check out our website (www.scas-scsa.ca), and follow our Twitter account (@scas_scsa) for news and updates!

- We are continuing our tradition of awarding the Peters, Rigler, and Stevenson awards for excellence in the Aquatic Sciences. A huge congratulations to Graydon McKee, Bea Beisner, and Stephanie Green!! The awards committee (led by Caleb Hasler) is looking at expanding our award categories in future years to reflect our growing society and recognize individuals for their outstanding work in different areas of the aquatic sciences.
- Thanks to the tireless work of Steve Cooke, VP of SCAS, and Chair of the Fundraising committee, we are receiving donations from more organizations than ever! Thank you also Josh Thienpont (Treasurer) enough for keeping us on track with our finances! While most of our work is undertaken by volunteers, there are substantial costs associated with our operations, so coordinated donations are crucial to maintaining our activities.

I can't thank the SCAS team enough for their tireless work. Our Board of Directors, Committee Chairs, and committee members are a phenomenal group of aquatic scientists whose dedication to the society and desire to make this a rewarding and inclusive environment has made our meetings fun and productive. I also want to recognize the contributions of Jeff Hutchings leading us to the creation of our new society – he left us way too soon and is still profoundly missed.

By the time this newsletter is published, the deadline for nominations to the Board of Directors will have passed, but if you are interested in contributing to advancing our mandate and making this society exciting, welcoming, impactful, and engaging, please consider joining one of our committees!

To wrap up, it's been a busy year, and I am proud of what we have accomplished. I am even more excited about our future and look forward to seeing many of you in Montreal in February!

A New Partnership between SCAS/SCSA and CSP!

The Society of Canadian Aquatic Sciences (SCAS) and Canadian Science Publishing (CSP) are thrilled to announce our new partnership.

CSP is Canada's largest not-for-profit scientific journal publisher, publishing several journals that connect with SCAS members, including: Canadian Journal of Fisheries and Aquatic Sciences (CJFAS), Canadian Journal of Zoology, Environmental Reviews, and FACETS. Our mutual respect for environmental science and its advancement in Canada make this collaboration natural and especially compelling.

We are both organizations that value world-class research and exceptional, peer-reviewed publications as a foundation for science communication. Our shared commitment to the development of a diverse, inclusive, equitable, and just community underlies everything we do and fortifies our passion for evidence-informed decision making.

Thanks to this partnership, CSP will support SCAS through:

- continued sponsorship of the Frank Rigler Award and Stevenson Lectureship, including CJFAS submission invitations for recipients,
- webinars and other resources for early-career SCAS members interested in understanding the publication process,
- development of special issues and symposium proposals from SCAS members, with a particular interest in those organized by, or featuring, early-career members,
- promotion of SCAS members' works on CSP communication channels, and
- discounted rates for subscriptions to CSP journals.

Dr. Kerri Finlay, President of SCAS-SCSA: "Canadian Aquatic Scientists have had a long history of publishing, editing, reviewing, and reading manuscripts in CSP journals. This formalized partnership further strengthens the relationship between the organizations and affirms our commitment to high-quality aquatic science research and early career support."

Dr. Sherestha Saini, Managing Editor, Environmental Sciences Journals at CSP: "This symbiotic partnership furthers the goals of aquatic research excellence and early-career researcher support that CSP and SCAS are both dedicated to achieving and sustaining. We are excited to continue championing integrity and innovation in environmental science alongside SCAS members that work so diligently to accomplish the same."

About the Society of Canadian Aquatic Sciences

The Society of Canadian Aquatic Sciences (SCAS) was formed in 2022 as an amalgamation of the Society of Canadian Limnologists (SCL) and the Canadian Conference of Fisheries Research (CCFFR). SCAS strives to be the leading scientific society for the excellence, integration, and dissemination of expert knowledge in fisheries, limnology, and aquatic sciences.

About Canadian Science Publishing

Canadian Science Publishing (CSP) is Canada's independent, not-for-profit leader in mobilizing science, making sure it is easy to discover, use, and share. Featuring content from a global community of researchers, CSP is Canada's largest publisher of scientific journals, publishing 22 peer-reviewed journals that cover the natural and physical sciences and engineering.



Canadian
Science
Publishing

Updates from our Members

Dr. Kathryn Hargan, a graduate of PEARL (Queen's University) and currently an Assistant Professor leading the paleoecology group at Memorial University of Newfoundland and Labrador, has been awarded the International Paleolimnology Association (IPA) Early Career Award. Kathryn was presented with the award and gave a keynote address at the International Paleolimnology Symposium November, 2022 in Bariloche, Argentina.

Dr. John Smol (Queen's University) was presented with the International Paleolimnology Association (IPA) Lifetime Achievement Gold Medal at the International Paleolimnology Symposium in November, 2022 in Bariloche, Argentina. For further details please read this press release: <https://www.queensu.ca/artsci/about/in-the-news/john-smol-earns-lifetime-achievement-honours>

Dr. Steven J. Cooke (VP of SCAS and professor at Carleton University) was inducted as a Fellow of the Royal Society of Canada (RSC) in November of 2022 after previously being a Member of the RSC College for seven years. Cooke was recognized for his contributions to aquatic conservation and evidence synthesis. A number of other aquatic science professionals in Canada (that have yet to join SCAS – nudge, nudge) were also recognized including Sapna Sharma (York U) and Aaron MacNeil (Dalhousie) who were inducted as College Members, Villy Christensen (UBC) inducted as a Fellow and Rashid Sumaila (UBC) recognized with the RSC Romanowski Medal in Environmental Science. Also noteworthy is SCAS member John Smol (Queen's U) just completed a 3 year term as President of the Academy of Science for the RSC.

Dr. Jérôme Marty (SCAS Member at Large) This past August, Jérôme left his role as a project director at the Council of Canadian Academies to become the new Executive Director of the International Association for Great Lakes Research (IAGLR). Jérôme continues to work at the interface between science and policy in this new position, and will lead various initiatives for IAGLR including the management of their annual research conference.

Dr. Josh Thienpont (SCAS Treasurer) In July, Josh started a tenure-track faculty position in the Faculty of Environmental and Urban Change at York University, Toronto, Canada. Josh is part of the Limnology and Paleoenvironmental Research Group at York, where he will continue to build his research program in quaternary environments, landscape disturbance, and permafrost thaw in aquatic ecosystems.



MSc student Natasha Neves adding a mixture of color-coded polymers to a limnocorral in Lake 378 at the IISD-Experimental Lakes Area, as part of the pELASTic Project to study the fate and effects of microplastics in freshwater lakes
Photo credit: Diane Orihel

SCAS/SCSA 2023 Conference Updates

On behalf of the Scientific Organizing Committee, we are looking forward to welcoming you to Montreal in late February (22-25th) for the inaugural SCAS/SCSA conference! This will be the first time since 1979 that the former societies (SCL and CCFR) meet as the Society of Canadian Aquatic Sciences. We are currently finalizing the scientific program based on the over 450 submitted abstracts. There will be a large number of exciting special sessions based on ideas suggested by our organizing committee and several SCAS members. Sessions will focus on diverse topics including large rivers and their regulation, socio-ecological issues in fisheries, northern ecosystems, aquatic browning, species at risk and invasives as well as a biomonitoring, genomics, paleolimnology, and water quality among others. We are also excited to announce that we will have a hybrid session to engage with students and early-career researchers as well as two full-day hybrid sessions partnering with Indigenous communities and researchers. A panel discussion is also planned on inclusive science communication in Canada and we an engaging poster session with ~100 posters. Meeting registration will include an opening mixer, a banquet as well as lunches on the full meeting days.

We hope you will be able to join us in Montreal. We plan to follow local sanitary rules in place regarding COVID-19 but to also request and encourage all participants to wear masks during the meeting to keep everyone as safe as possible even if these are not currently mandated by the province.

Bea Beisner and Dylan Fraser
SCAS/SCSA Scientific Organizing Committee Co-Chairs



Redback salamander perched on a zebra mussel attached to a unionid mussel.
Photo credit: Kennedy Zwarych (MSc student, Ricciardi Lab)



MSc student Jessica Reid using passive integrated transponder telemetry to study fish movements in a restored pond. Photo sent by Jessica Reid.

JEDIIA Sharing Circle

By Christina Semeniuk

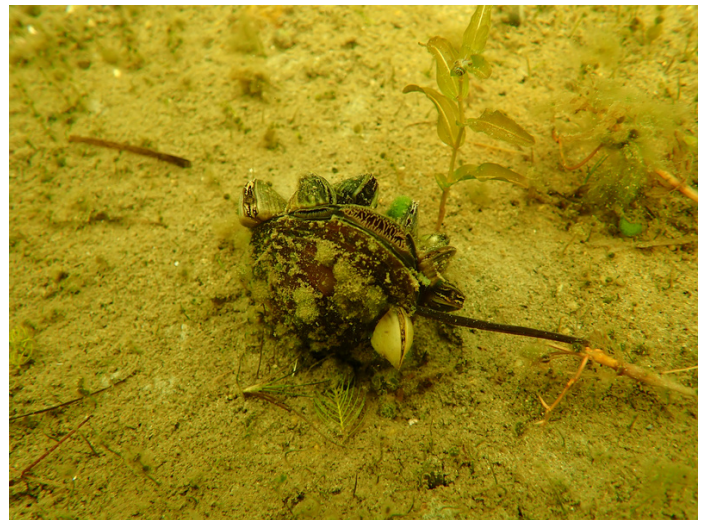
Welcome, Kina weya, Bienvenue to Everyone. In 2021 the Society for Canadian Aquatic Sciences formalized a JEDIIA Committee - Justice, Equity, Diversity, Inclusion, Indigeneity, and Accessibility - to provide guidance and best practices for SCAS governance, activities, and associated conferences. Canadian fisheries and the aquatic sciences, like other scientific disciplines, are and have been dominated by white, able-bodied faces and voices. Racism, harassment, and discrimination remain pervasive, and continue to cause harm. Additionally, members of the 2SLGBTQIA+ and Disabled communities continue to be marginalized and under-represented. This committee has been formed to guide SCAS to actively dismantle and eliminate intolerance experienced by Under-represented colleagues by listening, learning, and using privilege to create inclusive spaces and prioritize a sense of belonging. Promoting JEDIIA principles throughout this Society will and should be disruptive, and with that disruption, will come discomfort and mistakes made by those of us trying to enact change. We pledge to listen to diverse views, learn, and self-correct so that JEDIIA becomes normalized in SCAS, with us no longer needing the committee in due time!

During the committee's tenure, we commit to identifying and implementing actions that will help to achieve this goal. In specific, JEDIIA best practices will be used when: recruiting participants for i) SCAS membership and the Board of Directors and ii) selecting award winners and keynote speakers iii) when organizing SCAS conferences, and conference sessions and symposia. Our Committee is a work in progress, but we are so fortunate to have amazing SCAS members already on board:

Christina Semeniuk (Chair)
Robert Hechler
Shreya Jain
Andrea Kirkwood
Charles Ramcharan
Jessica Reid
Gadfly Stratton

We are still actively seeking membership to the SCAS JEDIIA Committee, and especially encourage participation of members from privileged groups to share the emotional and work toll.

We're looking forward to a promising and exciting new year ahead with you all! See you in Montréal (virtually and in person). Until next time, Baamaapii, À la prochaine.



**Unionid mussel fouled by zebra mussels, Lake Memphremagog, Quebec.
Photo credit: Brielle Comartin (MSc student, Ricciardi Lab)**



Evening sampling of riparian spiders and emergence on the Grand River in southern Ontario to look at the transfer of pharmaceuticals, wastewater-derived bacteria and microplastics from aquatic to riparian habitats. Photo credit: Colleen Wardlaw.

Our 2023 Award Winners!

Caleb Hasler, Awards Committee Chair

Here are the 2023 awardees for the Rigler, Peters, and Stevenson Awards, which will be conferred at the 2023 SCAS/SCSA Meeting in Montreal, February 22, 2023. For more information on past awardees and the nomination process, please visit our website:

<https://www.scas-scsa.ca/AWARDS>

Rigler Award

Winner: Dr. Beatrix Beisner



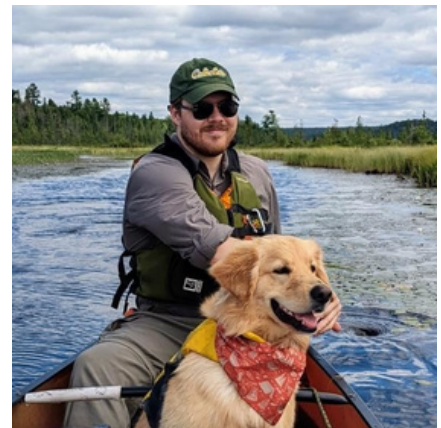
The Frank H. Rigler Award recognizes and honours major achievements in the field of limnology by Canadians or those working in Canada. The 2023 Rigler awardee is Dr. Beatrix Beisner, professor at the University of Quebec at Montreal. Her research focuses on plankton community ecology, with research themes encompassing biodiversity and invasion ecology. Over her research career so far, Dr. Beisner has trained 14 postdoctoral fellows, 24 PhD students, and 28 MSc students, and has published over 100 peer-reviewed articles that have had lasting impact on the field. Some of Dr. Beisner's most significant contributions include work on aquatic community dynamics as they relate to climate change and the application of functional ecology in planktonic communities. Her paper on alternative stable states in ecology (Beisner et al. 2003) has been particularly well cited across disciplines.

Dr. Beisner is an established leader in Canadian limnology and is currently the co-director of the Groupe de Recherche Interuniversitaire en Limnologie et Environnement Aquatique (GRIL) and has been instrumental in organising annual meetings, collaborative research projects, and providing access to critical infrastructure for limnological research. The research that has emerged from GRIL is renowned across Canada and globally.

Congratulations Bea! We look forward to seeing your plenary talk at SCAS in Montreal in Feb 2023!

Peters Award

**Winner:
Graydon
McKee**



The Robert H. Peters Award recognizes the best aquatic sciences paper published in the preceding year by a Canadian student or a student working in Canada. The winner of the 2022 Peters Award is Graydon McKee, a recent graduate from Lakehead University. Their paper titled, “Alternative migratory strategies related to life history differences in the walleye (*Sander vitreus*)” was published in *Movement Ecology* (McKee et al. 2022). In the words of Graydon's nominator, “Graydon's work stands to make a significant contribution to understanding the inherent variation that exists within managed populations like fisheries, indicating that management strategies targeted at “a population” without recognizing this variation is unlikely to succeed, or alternatively, only potentially benefit one fraction of the population”. Graydon was recently a featured guest on CBC Radio's Superior Morning to discuss his award winning research paper.

Congratulations Graydon! We look forward to seeing more exciting publications in your research career!

Stevenson Lectureship Award Winner: Dr. Stephanie Green



The Stevenson Lectureship is a prestigious lectureship instituted in memory of Cam Stevenson, the long-time Editor of the Canadian Journal of Fisheries and Aquatic Sciences (CJFAS). The lectureship is conferred upon a young, energetic, and creative researcher at the cutting edge of an aquatic discipline. The Lecturer delivers a stimulating presentation of their work as the keynote address in the opening session of the SCAS/SCSA annual meeting. The Lecturer is invited to submit a manuscript, based on their Stevenson Lecture, to CJFAS. The 2023 winner is Dr. Stephanie Green, Canada Research Chair in Aquatic Global Change Ecology & Conservation, and Assistant Professor, Department of Biological Sciences, University of Alberta. Dr. Green is the PI of the Aquatic Global Change Ecology and Conservation Laboratory at the University of Alberta. The Green Lab studies the causes and consequences of biodiversity change in aquatic ecosystems. Their work covers a range of topics, with many of their papers focusing on science-based tools to inform conservation and restoration decision-making. Since starting her faculty position, Dr. Green has published well over 25 papers and has supervised 8 graduate and 6 undergraduate students.

We look forward to the meeting in Montreal where Dr. Green will present a plenary lecture on her exciting research.



Aerial view of limnocorrals installed in the littoral zone of Lake 378 at the IISD-Experimental Lakes Area as part of the pELastic Project. Limnocorrals received additions of microplastics to simulate a gradient of plastic pollution. Photo credit: Desiree Langenfeld



Adult Mayfly - Grand River Ontario. Photo Credit: Colleen Warlaw



Trophy Lake Trout (i.e., > 89 cm) fitted with an external tri-axial accelerometer tag attached to a velcro strap. M.Sc. student Brad Howell is examining depth preferences and overall dynamic body acceleration of Lake Trout following catch-and-release angling in northwestern Manitoba.

Highlighting student service on SCAS/SCSA committees

By Cale Gushulak

In this first edition of the SCAS Student Spotlight we wanted to highlight the critical service our student members have played in starting the new society. We interviewed Anne Haley (she/her) and Jamie Madden (she/her) of the Communications committee, and Gadfly Stratton (he/they) and Jessica Reid (she/her) of the JEDIA committee to hear their thoughts and experiences as student members of SCAS/SCSA and their service on these committees.

Q1: Briefly, who you are, where you are affiliated, and what you are working on?

-Jamie Madden, I'm a master's student at Carleton University looking at the effects of culling and retention on caught and released fish.

-My name's Gadfly Stratton. I'm a Ph.D. candidate at University of Toronto Scarborough. I'm in environmental science and I'm an aquatic researcher but I study people. I'm studying human dimension aspects; how do people communicate about invasion species, how do they perceive their risks, and also what are some communication barriers. Recently we've looked into invasive species denialism, too.

-My name is Jessica Reid and I'm a master's student at Carleton University. I look at freshwater fish movements in urban areas. This includes suburban rivers and tributaries and also small restoration areas and wetland ponds.

-I'm Anne Haley. I'm at Carleton University and I'm studying large sharks in the Turks and Caicos Islands trying to assess their spatial movement as well as their energetic body conditions.

Q2: Can you give us a fun fact about yourself or your research?

-Jamie: My interest in fish was sparked from watching Jeremy Wade on River Monsters!

-Jessica: My study species Muskellunge are known as the fish of 10,000 casts which has made it very interesting to design an entire project around them.

-Anne: I've always loved diving, so I had my diving certification before this project.

Q3: What makes you passionate about studying or pursuing a career in aquatic science?

-Jamie: I've always loved fishing, and it would be really cool to be able to affect change at some level – whether in policy or in the community- with my research in C&R fishing.

-Gadfly: I started out interested in invasive species, and aquatic systems are just really interesting to study considering them as vectors (for invasive species). There's also the social aspect. When you look at where people live, it tends to be by the water and so studying those human dimensions and how we think about invasive species it was just a really great fit to be looking at the ones specifically in the water.

-Jessica: I knew I wanted to do something with animals, and with Steve's (Cooke) lab, it just presented the best opportunity and the best research lab in Canada to get involved in fish. I didn't come from a fish or aquatic background, but now I'm in it for the long haul. Seeing how underrepresented a lot of freshwater work is it makes me more passionate!

-Anne: I have always been fascinated by the adaptations that marine organisms have come by especially since humans are restricted to land. There are a lot of neat comparisons that can be made about how they've evolved and what they do.

Q4: What drew you to join an SCAS/SCSA committee and what type of experience do you hope to gain as a committee member?

-Jamie: As a new grad student, I was hoping to get involved in the field and learn about how organizations like SCAS work, and hopefully learn



Jamie Madden is a MSc student at Carleton University and is a member of the Communications committee



Gadfly Stratton is a PhD candidate at University of Toronto Scarborough and is a member of the JEDIIA committee



Anne Haley is a PhD candidate at Carleton University and is a member of the Communications committee

about the logistics and work it takes to run by serving on the communications committee.

-Gadfly: I have been trying to get into more equity, diversity, and inclusion initiatives and involvement so seeing that SCAS was committed to those things was really exciting. I want to help make the society more inclusive for everyone. SCAS is new so we can make sure those things (EDI initiatives) are injected into it from the beginning and that it's really welcoming for everyone joining us from now on.

Being an out queer person, I don't see many people like myself in my department or my school, and often on committees we don't see people who are outwardly queer or outwardly trans, so I joined this committee to represent my community.

-Jessica: It came out of a sense of imposter syndrome, and trying to spin that in a positive sense. In fisheries, as a woman, I feel underrepresented or afraid to say things. I can't see myself in a lot of circles, or I fear that I won't be respected when I'm in them, and I think that translates to academia in general for underrepresented groups. I think this (serving on the committee) would be the perfect opportunity to turn frustration and that isolated feeling into something good.

-Anne: I took about four years off since my master's so when I had this opportunity to start my Ph.D., I was very excited to get back into the academic environment through joining the lab and committees. Seeing the break down of how science communications didn't come together during COVID made me have a renewed interest in the best way to disseminate scientific information.

Q5: Are there any goals or problems that you are working towards as a member of the SCAS/SCSA communications / JEDIIA committee?

-Jamie: To learn more about scientific communication and how best to present research to be accessible and useful to the general public as well as the disconnect between scientific research and its implementation. Organizations like Keep Fish Wet are working to bridge that gap, and I'm hoping to be a part of the road forward.

-Gadfly: In the JEDIIA committee, we have talked about how we don't generally see a lot of white men at these meetings (about EDI initiatives) and the burden is put on women, on racialized people, and on queer folk, so as a trans-masc person I'm hoping some more men will join and carry some of that burden.

Society is particularly unsafe for queer and trans people, and there has been a lot of discourse about whether advocating for more inclusion is moving away from science. Because science is happening in larger society, it means that if I'm not safe in society then I am not safe in labs and at conferences. I need to be safe everywhere in society, and the same is true for all kinds of marginalized groups. We need to move away from the idea that data is disconnected from people. We're in this society (SCAS) because we want to be with other people.

-Jessica: Being part of the JEDIIA committee will help me get comfortable with being uncomfortable and whether that's because of unlearning biases, or putting myself in an uncomfortable position while advocating with the committee and experiencing pushback. I'm looking forward to some good trouble and eventually for that to not be trouble.

-Anne: I want to make sure that we get scientific information out in a way that is accessible and inclusive way. I want to make sure everyone gets an opportunity to be highlighted.

Q6: Would you recommend joining an SCAS/SCSA committee to other student members?

-Jamie: Definitely! It's a great way to get involved, learn, and meet people in your field.

-Gadfly: I would definitely recommend joining a committee of any kind that you're passionate about. If you want to change something in the society, joining a committee can give you a role to play in the direction of the society.

-Jessica: I think it's a good way to get out of your bubble. Getting a different headspace, thinking about a different topic, and meeting new people and make you more creative and more productive.

-Anne: Yes, definitely! I think it's a really interesting way to see the inner workings of a committee and getting a chance to meet other people.

Q7: Do you have any advice for other SCAS/SCSA student members?

-Gadfly: Make sure you always put yourself first. Try to listen to your gut for what's right for you.



Jessica Reid is a M.Sc. student at Carleton University and is a member of the JEDIIA committee

Don't put yourself in unsafe situations don't be afraid to advocate for yourself, or find support from others. Standing up for yourself doesn't mean standing by yourself.

-Jessica: Protect your space and set boundaries on your time. Boundaries are healthy. Don't forget to check in with yourself and put yourself first.

-Anne: Give yourself rest when you need it and maintain your balance.

Q8: Is there anything else you would like to share with the SCAS/SCSA community?

-Jessica: The JEDIIA committee is actively recruiting, and looking for input so please watch for emails and social media posts to get involved so we can hear your valuable input.

-Anne: I'm excited to be involved and to meet everybody and stay informed of all the research that is coming out of the society.

If you are a student looking to get involved in SCAS please consider joining the Student/ECR committee. We are looking for students and early career researchers of diverse backgrounds and experiences to join this committee to build and define its structures and activities in meaningful ways.

Please contact Xavier Bordeleau, Chair of the Student/ECR committee for more information at Xavier.Bordeleau@dfo-mpo.gc.ca

SCAS/SCSA Web Presence

<https://www.scas-scsa.ca/>

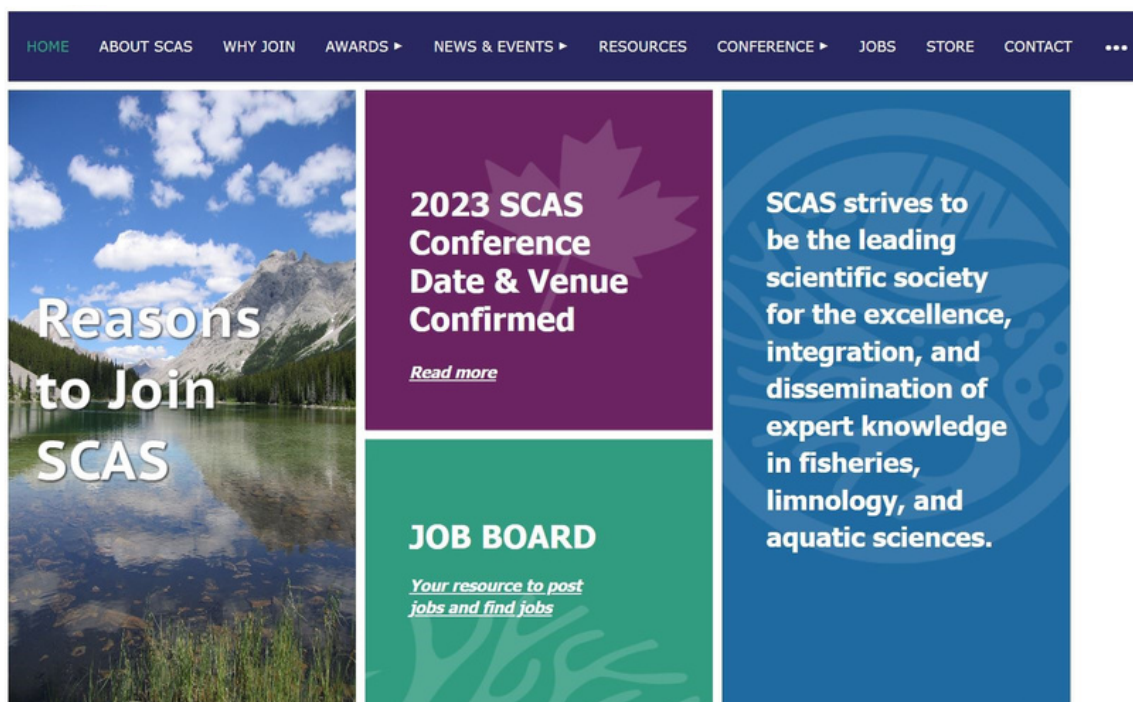
By Andrea Kirkwood, Chair, Communications Committee

As part of the launch of our new society, it was very important to the founding executive to have a society website ready to launch, replete with useful content and functionality for members. Thanks in particular to John Lark, Mike Rennie, and Karen Smokorowski for volunteering their time to take on the heavy lifting of procuring a website vendor, and working through the challenges of building a content-rich, functional, and accessible website. The website is still a work in progress (e.g., currently undergoing full French translation by a dedicated group of volunteers), and involves a steep learning curve to get the WildApricot platform optimized for peak functionality. Overall though, we are quite happy with it and encourage any and all feedback from our members to ensure that it is working for you.

Please check out the SCAS/SCSA website: <https://www.scas-scsa.ca/>

In addition to our new society website, we continue to maintain a social media presence on Twitter: https://twitter.com/scas_scsa. Even with concerns surrounding Twitter's new owner and uncertain future, this social media platform continues to facilitate knowledge sharing among aquatic scientists and the public. As SCAS/SCSA gets more established, we will expand our web presence to include Instagram and growing platforms such as Mastodon to our social media repertoire.

If you have any interest in helping to expand and grow your society's web presence, or offer expertise in content management systems, please consider joining the SCAS/SCSA Communications Committee. If you would like any further information about what the Communications Committee does, please drop us a line: SocCanAquatSci@gmail.com



Recent Citings

- Abirhire, O., Davies, J., Imtiaz, N., et al. (2023) Response of phytoplankton community composition to physicochemical and meteorological factors under different hydrological conditions in Lake Diefenbaker. *Science of The Total Environment* 856: 159210, <https://doi.org/10.1016/j.scitotenv.2022.159210>
- Arnott, S.E., Fugère, V., Symons, C.C., et al. (2022) Widespread variation in salt tolerance within freshwater zooplankton species reduces the predictability of community-level salt tolerance. *Limnology & Oceanography Letters*, <http://doi.org/10.1002/lol2.10277>
- Aukes, P.A.K., Schiff, S.L., Venkiteswaran, J.J., et al. (2021) Size-Based Characterization of Freshwater Dissolved Organic Matter finds Similarities within a Water Body Type across Different Canadian Ecozones. *Limnology and Oceanography Letters* 6: 85-95, <https://doi-org.uproxy.library.dc-uoit.ca/10.1002/lol2.10180>
- Avlijas, S., Mandrak, N.E., & Ricciardi, A. (2022) Effects of substrate and elevated temperature on the growth and feeding efficiency of an invasive cyprinid fish, Tench (*Tinca tinca*). *Biological Invasions* 24: 2383-2397, <https://doi.org/10.1007/s10530-022-02778-7>
- Card, J.T., Beiber, J., Louison, M.J., et al. (2022) An examination of freezing in yellow perch (*Perca flavescens*) following ice fishing using a histological approach. *Journal of Applied Ichthyology* 38: 285-292, <https://doi.org/10.1111/jai.14304>
- Cyr, H., and W.G. Sprules. 2022. The wind-driven distribution of nearshore zooplankton in a stratified lake varies with their body size. *Freshwat. Biol.* 67:991-1004. <https://doi.org/10.1111/fwb.13896>
- D'Avignon, G., Gregory-Eaves, I., & Ricciardi, A. (2022) Microplastics in lakes and rivers: an issue of emerging significance to limnology. *Environmental Reviews* 30: 228-244. <https://doi.org/10.1139/er-2021-0048>
- Evans, T.M., Feiner, Z.S., Rudstam, L.G., et al. (2022) Size spectra analysis of a decade of Laurentian Great Lakes data. *Canadian Journal of Fisheries and Aquatic Sciences* 79: 183-194, <https://doi.org/10.1139/cjfas-2020-0144>
- Harrow-Lyle, T.J. & Kirkwood, A.E. (2022) The non-native charophyte *Nitellopsis obtusa* (starry stonewort) influences shifts in macrophyte diversity and community structure in lakes across a geologically heterogeneous landscape. *Aquatic Ecology*. <https://doi.org/10.1007/s10452-022-09950-0>
- Hataley E., Shahmohamadloo R., Ortiz Almirall X., et al. (2022) Experimental evidence from the field that naturally weathered microplastics accumulate cyanobacterial toxins in eutrophic lakes. *Environmental Toxicology and Chemistry*, <https://doi.org/10.1002/etc.5485>
- Haubrock, P.J., Cuthbert, R.N., Ricciardi, A., et al. (2022) Economic costs of invasive bivalves in freshwater ecosystems. *Diversity & Distributions* 28: 1010-1021, <https://doi.org/10.1111/ddi.13501>
- Hébert, M.P., Soued, C., Fussmann, G., & Beisner, B.E. Dissolved organic matter mediates the effects of warming and inorganic nutrients on a lake planktonic food web. *Limnology & Oceanography*, In press, <https://doi.org/10.1002/lno.12177>
- Hébert, M.P., Symons, C., Cañedo-Argüelles, M., et al. (2022) Lake salinization drives consistent losses of zooplankton abundance and diversity across coordinated mesocosm experiments. *Limnology & Oceanography Letters*, <https://doi.org/10.1002/lol2.10239>

Recent Citings (cont.)

Hintz, W.D., Arnott, S.E., Symons, C.C., et al. (2022) Current water quality guidelines across North America and Europe do not protect lakes from salinization. *Proceedings of the National Academy of Sciences USA* 119: e2115033119, <https://doi.org/10.1073/pnas.2115033119>

Huang, H., Mangal, V., Rennie, M.D., et al. (2022) Mercury methylation and methylmercury demethylation in boreal lake sediment with legacy sulphate pollution. *Environmental Science: Processes and Impacts* 24: 932-944, <https://pubs.rsc.org/en/content/articlelanding/2022/EM/D2EM00064D>

Howell, B.E., Stewart, E.M.C., Frasca, V.R., et al. (2022) Capture of spawning brook trout by electrofishing does not impair embryo survival. *North American Journal of Fisheries Management* 42: 228-235, <https://doi.org/10.1002/nafm.10735>

Jasiak, I., Wiklund, J.A., Leclerc, É., et al. (2021) Evaluating spatiotemporal patterns of arsenic, antimony, and lead deposition from legacy gold mine emissions using lake sediment records. *Applied Geochemistry* 134: 105053, <https://doi.org/10.1016/j.apgeochem.2021.105053>

Lawrence, M.J., Jeffries, K.M., Cooke, S.J., et al. (2022) Catch and release ice fishing: Status, issues, and research needs. *Transactions of the American Fisheries Society*, <https://doi.org/10.1002/tafs.10349>

Leclerc, É., Venkiteswaran, J.J., Jasiak, I., et al. (2021) Quantifying arsenic post-depositional mobility in lake sediments impacted by gold ore roasting in sub-arctic Canada using inverse diagenetic modelling. *Environmental Pollution* 228: 117723, <https://doi.org/10.1016/j.envpol.2021.117723>

Littlefair, J., Rennie, M.D. & Cristescu, M. (2022) Environmental nucleic acids: a field-based comparison for monitoring freshwater habitats using eDNA and eRNA. *Molecular Ecology Resources* 22: 2928-2940, <https://onlinelibrary.wiley.com/doi/abs/10.1111/1755-0998.13671>

Lui, K., Schiff, S.L., Wu, L., et al. (2022) Large fractionation in iron isotopes implicates metabolic pathways for iron cycling in boreal shield lakes. *Environmental Science & Technology* 56: 14840-14851 <https://doi.org/10.1021/acs.est.2c04247>

MacKeigan, P.W., Garner, R.E., Monchamp, M.E., et al. (2022) Comparing morphological and DNA metabarcoding for cyanobacteria across 100s of lakes. *Harmful Algae*, 113: 102187, <https://doi.org/10.1016/j.hal.2022.102187>

MacLeod, H.A., Shuter, B.J., Minns, C.K., & Rennie, M.D. (2022) Freshwater Fish Productivity. *Encyclopedia of Inland Waters 2nd Edition*, Elsevier, <https://doi.org/10.1016/B978-0-12-819166-8.00198-5>

McKee, G., Hornsby, R., Fischer, F., et al. (2022) Alternative migratory strategies related to life history differences in the Walleye (*Sander vitreus*). *Movement Ecology* 10, <https://doi.org/10.1186/s40462-022-00308-7>

Midway, S., Hasler, C., & Chakrabarty, P. eds. (2022) *Methods for fish biology*, 2nd edition. American Fisheries Society, Bethesda, Maryland <https://fisheries.org/bookstore/all-titles/professional-and-trade/methods-for-fish-biology-2nd-edition/>

Molot, L.A., Higgins, S.N., Schiff, S.L., et al. (2021) Phosphorus-only fertilization rapidly initiates large nitrogen-fixing cyanobacteria blooms in two oligotrophic lakes. *Environmental Research Letters* 16(6): 064078, <https://iopscience.iop.org/article/10.1088/1748-9326/ac0564>

Recent Citings (cont.)

Monchamp, M.E., Walsh, D., Garner, R., et al. (2022) Comparative analysis of zooplankton diversity in freshwaters: What can we gain from metagenomic analysis? *Environmental DNA*, In press
<http://doi.org/10.1002/edn3.335>

Negrazis, L., Kidd K.A., Erdozain, M. et al. (2022) Effects of forest management on mercury bioaccumulation and biomagnification along the river continuum. *Environmental Pollution* 310: 119810,
<https://doi.org/10.1016/j.envpol.2022.119810>

Paquette, C., Griffiths, K., Gregory-Eaves, I., & Beisner, B.E. (2022) Shifts in zooplankton community structure and diversity since pre-industrial times in relation to human activities. *Global Ecology and Biogeography* 31: 2337-2352, <http://doi.org/10.1111/geb.13575>

Paquette, C., Gregory-Eaves, I., Beisner, B.E. (2022) Environmental drivers of taxonomic and functional variation in zooplankton diversity and composition in freshwater lakes across Canadian continental watersheds. *Limnology & Oceanography* 67: 1081-1097, <https://doi.org/10.1002/lno.12058>

Painter, K.J., Venkiteswaran, J.J., Simon, D.F., et al. (2022) Early and late cyanobacterial bloomers in a shallow, eutrophic lake. *Environmental Science: Processes & Impacts* 24: 1217-1227,
<https://doi.org/10.1039/D2EM00078D>

Patterson, S.A., Denton, D.T.J., Hasler, C.T., et al. (2022) Resilience of larval wood frogs (*Rana sylvatica*) to hydrocarbons and other compounds released from naturally weathered diluted bitumen in a boreal lake. *Aquatic Toxicology* 245: 106128, <https://doi.org/10.1016/j.aquatox.2022.106128>

Perrotta, B.G., Kidd, K.A., & Walters, D.M. (2022) PCB exposure is associated with reduction of endosymbionts in riparian spider microbiomes. *Science of the Total Environment* 842: 156726,
<https://doi.org/10.1016/j.scitotenv.2022.156726>.

Purchase, C.F., Rooke, A.C., Gaudry, M., et al. (2022) A synthesis of senescence predictions for indeterminate growth, and support from multiple tests in wild lake trout. *Proceedings of the Royal Society B* 289: 20212146.
<https://doi.org/10.1098/rspb.2021.2146>

Reynolds J.S., Jackson B.L., Madison B.N., et al. (2022) Fathead minnows exposed to organic compounds from oil sands tailings as embryos have reduced survival, impaired development, and altered behaviors that persist into larval stages. *Environmental Toxicology and Chemistry* 41: 1319-1332, <https://doi.org/10.1002/etc.5314>

Ricciardi, A., & MacIsaac, H.J. (2022) Vector control reduces the rate of species invasion in the world's largest freshwater ecosystem. *Conservation Letters* 15: e12866, <https://doi.org/10.1111/conl.12866>

Robinson C.E., Elvidge C.K., Frank R.A., et al. (2022) Naphthenic acid fraction compounds reduce the reproductive success of wood frogs (*Rana sylvatica*) by affecting offspring viability. *Environmental Pollution*: 120455, <https://doi.org/10.1016/j.envpol.2022.120455>

Salk, K.R., Venkiteswaran, J.J., Couture, R-M., et al. (2022) Warming combined with experimental eutrophication intensifies lake phytoplankton blooms. *Limnology & Oceanography* 67: 147-158,
<https://doi.org/10.1002/lno.11982>

Recent Citings (cont.)

Scherer-Lorenzen, M, Gessner, M. Beisner, B.E., et al. (2022) Pathways for cross-boundary effects of biodiversity on ecosystem functioning. *Trends in Ecology & Evolution* 37: 454-467, <https://doi.org/10.1016/j.tree.2021.12.009>.

Slongo, S., McLaren, B., Siddiqui, S., et al. (2022) Characterizing the flow regime in Brook Trout (*Salvelinus fontinalis*) incubation habitats and implications for management in a hydro-regulated river. *North American Journal of Fisheries Management* 42: 1097-1110, <https://doi.org/10.1002/nafm.10801>

Slongo, B.D., Hayhurst, L.D., Drombolis, P.C.T, et al. (2022) Whole-lake nanosilver additions reduce Northern Pike (*Esox lucius*) growth. *Science of the Total Environment* 838: 156219, <https://doi.org/10.1016/j.scitotenv.2022.156219>

Smith, E.D. & Kirkwood, A.E. (2022) Nearshore plankton and macroinvertebrate community structure is strongly associated with macrophyte abundance in a large lake with high shoreline development. *Fundamental and Applied Limnology*. <http://dx.doi.org/10.1127/fal/2022/1476>.

Sprules, W.G., Cyr, H., & Menza, C.W. (2022) Multiscale effects of wind-induced hydrodynamics on lake plankton distribution. *Limnology & Oceanography*. 67: 1631-1646, <https://doi.org/10.1002/lno.12158>

Sprules, W.G. (2022) The biomass size spectrum. In: Tockner, K, *Encyclopedia of Inland Waters* 2nd edition. vol. 1, pp. 390-400. Oxford: Elsevier. <https://doi.org/10.1016/B978-0-12-819166-8.00024-4>

Stratton, N.G., Mandrak, N.E., & Klenk, N. (2022) From anti-science to environmental nihilism: the Fata Morgana of invasive species denialism. *NeoBiota* 75: 39-56, <https://doi.org/10.3897/neobiota.75.90631>

Tammeorg, O., Nürnberg, G., Tönno, I., et al. (2022) Sediment phosphorus mobility in Vörtsjärv, a large shallow lake: Insights from phosphorus sorption experiments and long-term monitoring. *Science of The Total Environment*: 154572, <https://doi.org/10.1016/j.scitotenv.2022.154572>

Tammeorg, O., Nürnberg, G.K., Nöges, P., & Niemistö, J., (2022) The role of humic substances in sediment phosphorus release in northern lakes. *Science of The Total Environment* 833: 155257. <https://doi.org/10.1016/j.scitotenv.2022.155257>

Thera, J.C., Kidd, K.A., Stewart, A.R., et al. (2022) Using tissue cysteine to predict the trophic transfer of methylmercury and selenium in lake food webs. *Environmental Pollution* 311: 119936, <https://doi.org/10.1016/j.envpol.2022.119936>.

Trumpickas, J., Rennie, M.D., & Dunlop, E.S. (2022) Seventy years of food-web change in South Bay, Lake Huron. *Journal of Great Lakes Research* 48: 1248-1257, <https://doi.org/10.1016/j.jglr.2022.06.003>

Thank you to all members who submitted their updates for this first issue Reflections!

If you have news, updates, new papers, reports, or projects, or ideas for highlights or other articles for our next issue please send them to the Communications committee at SocCanAquatSci@gmail.com

The next issue of Reflections will be circulated in the summer of 2023!