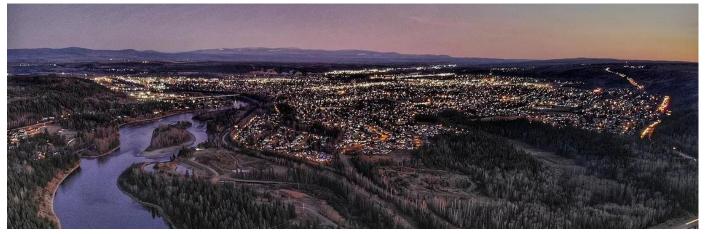


2020 Newsletter



Prince George, site of 62nd annual WDCAG2020 meeting (Clayton Gervais)

WDCAG Newsletter 2019

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WDCAG PRESIDENT'S MESSAGE (submitted by Claire Hay, University of the Fraser Valley) Welcome to the current edition of the WDCAG newsletter for 2020. My name is Claire Hay and I am the current WDCAG President. It is my pleasure to offer a few words for this newsletter edition and report on the happenings of the division. Since the last newsletter so much has changed. We are now in month 8 (I think) of the pandemic and most of us are teaching or taking courses in an online format. It is a challenging time, with daily updates on the state of the pandemic and continual reminders to keep our bubbles small. While the delivery method for university courses may have changed, geography's importance to the world remains integral in our understanding of the current state of affairs. Our discipline remains core to understanding the spatial patterns of the pandemic and its impact on society.

Geography as a discipline is well represented at the national level by the Canadian Association of Geographers under the guidance of Dr. Neil Hanlon from UNBC and its associated regional divisions. While COVID-19 has impacted our ability to hold national and regional meetings, the CAG remains a strong advocate for geography. I encourage all of you to support the WDCAG and CAG through membership, attendance at regional and national meetings (when we can) and supporting students in their geographic adventures.

UPDATES FROM ANNUAL MEETING (with notes from Neil Hanlon, UNBC)

The 62nd Annual Meeting of the WDCAG was held at the University of Northern British Columbia on the traditional territory of the Lheidli T'enneh First Nation in March 2020. The WDCAG Executive and membership extends its thanks to Neil Hanlon for his dedication to organizing a fantastic conference and to all faculty and student volunteers during difficult times.

The official registration was 114, a number reduced considerably as concerns about COVID-19 escalated in the days leading up to the conference. These concerns notwithstanding, we were pleased to welcome delegates from Alberta (Medicine Hat College, University of Lethbridge) and elsewhere in British Columbia (University of Victoria, UBC, University of the Fraser Valley, Trinity Western University, UBC-Okanagan and Thompson Rivers University).

The conference commenced with 3 field trips on Friday and was followed by a keynote address delivered by Dr. Darwyn Coxson, a professor in the Ecosystems Science and Management Program at UNBC. Dr. Coxson spoke of the extraordinary partnerships between researchers, local community groups, industry and government in creating the Chun T'oh Whudujut / Ancient Forest and Protected Area, a part of the world's only inland temperate rainforest in BC's northern interior. This fascinating and inspiring talk was followed by an Icebreaker with pizza and refreshments.

There were 20 oral presentations organized in 7 sessions, and 22 poster presentations that were delivered on Saturday March 14. The conference wrapped up with a social held at a downtown Prince George establishment (Trench Brewing Co.). Student presentation awards were announced at the event, and entertainment was provided by local musical trio, The Ebbs (featuring UNBC Geography faculty member Joe Shea), and a special guest appearance by the Prince George Pipe Band. A great time was had by all.



WDCAG PRESIDENT'S MESSAGE (WDCAG 2020 meeting summary con't)

Each year, the WDCAG acknowledges the outstanding student research being conducted across the division. Awards are presented for posters and oral presentations for undergraduate, masters and doctoral levels. Student presentations were judged by faculty and winners were announced during the social. A special thank you to Greg Halseth and Chris Jackson for organizing the judging of student awards.

The winners were:

Best oral presentations:

- Undergrad Sam Gerrand (U Lethbridge) Burn depth mapping in Waterton Park: Integrating field measurement, multispectral LiDAR, and danger trees.
- Masters (co-winners)
 - Megan Gordon (UNBC) Achieving a just transition for forestry workers, families, and communities in northern British Columbia.
 - Aaron Larsen (UNBC) Discovering old worlds: Conceptualizing space and place in the witch trials of Zug, Switzerland through archival source mapping.
- PhD Kristen Kieta (UNBC) Determining sources of sediment in response to land cover change in the Nechako River Basin.

Best poster presentations:

- Undergrad Natalie Cook (TWU) GIS analysis of association of water ways to Daphne laureola distribution patterns in Metro Vancouver, BC.
- Masters Patrick Robinson (UNBC) Wildfire fuel mapping using LiDAR.
- PhD Aimee Benoit (ULethbridge) Belonging: A conceptual lens for exploring socio-spatial inequalities in neighbourhoods

Annually, the WDCAG presents awards for scholarly distinction, teaching excellence and service to the discipline. This year, the following colleagues were recognized for their achievements:

- J. Alistair McVey Award for Teaching Excellence Dr. Shivanand Balram, SFU
- The William C. Wonders Award for Scholarly Distinction Dr. Gail Fondahl, UNBC

Congratulations to all our award winners.



WDCAG 2020 Conference attendees (Roger Wheate, UNBC Facebook)

Due to COVID19 travel concerns and associated absences there was no Executive Meeting and AGM at the annual meeting in PG. As President, I made a personal decision not to travel for the conference. To ensure that the important business was conducted, the WDCAG Executive conducted an email meeting during the week of May 4-8, 2020. During this meeting, reports from the President, Secretary/Treasurer, Newsletter Editor and Awards Officer were presented and accepted, minutes from the 2019 AGM were presented and approved, and the CAG Travel Grant dispersal to student groups who attended the annual meeting was approved. In addition, nominations to the Executive were accepted and approved. This is an unusual process, but one I hope allows for the business of the division to move forward. These reports will be brought forward again at the 2021 AGM meeting for acceptance by the broader membership.

WDCAG EXECUTIVE 2019-2020

President	Claire Hay, UFV 2019-2021
Past President	vacant for 2020-2021
Vice President	Craig Coburn, ULethbridge
Secretary-Treasurer	Craig Coburn, ULethbridge 2019-2021
Members-at-Large	Henry Frew, Carrick House Consulting 2019-2021
	Steven Marsh, UFV 2020-2022
	Joanne Moyer, Kings U 2019-2021
	Tom Waldichuk, TRU 2020-22
Student Representatives (2-4)	Alberta TBA
	British Columbia – TBA
Western Geography	Human Editor – Joanne Moyer, KingsU
	Physical/GIS Editor – Craig Coburn (ULethbridge)
Archivist	tba
Awards Officer	David Jordan (TWU)
BC Education Chair	Pam Shaw (VIU); Tom Waldichuk (TRU)
WDCAG Newsletter Editor	Daniel Brendle-Moczuk (UVic)
WebAdministrator	Daniel Brendle-Moczuk (UVic)

Thanks to all colleagues for agreeing to serve on the WDCAG Executive. We are always looking for members to join the WDCAG executive. Time commitments are limited; with executive meetings held at the annual meetings and occasional email correspondence. If you would like to join us, please let me know.

WDCAG ANNUAL MEETING March 5-6, 2021

The 63rd Annual Meeting of the WDCAG will be held virtually by the Department of Geography and the Environment at the University of Lethbridge on March 5-6th 2021. Registration will be FREE through Eventbrite <u>https://www.eventbrite.ca/e/wdcag-2021-beyond-2020-geographical-research-in-times-of-crises-tickets-124115253063</u> Registering for a free ticket will unlock the online event page where you will be able to access additional information and links to the conference events and activities. The conference invites submissions from all areas of geographic scholarship to WDCAG 2021, themed Beyond 2020: *Geographical Research During Crises*. 2020's global pandemic, political unrest, social movements, climate change, and economic downturns have forced us to rethink the world we live in. Geographers have engaged with these opportunities and challenges before. What does moving beyond 2020 mean for geographical research?

Proposals for Special Sessions should be directed to <u>wdcag2021@uleth.ca</u> Special Session call closes December 18th, 2020.

Abstracts will be accepted through an online form that will be available on our Eventbrite page soon. Questions about the conference can be directed to <u>wdcag2021@uleth.ca</u> or Dr. Craig Coburn <u>craig.coburn@uleth.ca</u> for additional information.

WDCAG President final thoughts:

As fall continues and we head rapidly towards the winter months, I hope that you all remain safe from COVID as we continue to navigate our new normal. I also ask that you look out for your colleagues and students as this is a time of increased mental health challenges. You can find mental health support resources in BC through the Crisis Line Association of BC at 1800SUICIDE (24 hours): 1-800-784-2433 310 or Mental Health Support (24 hours): 310-6789 and in Alberta through the Mental Health Help Line at 1-877-303-2642 (Toll free, 24/7).

If you have any questions or comments for me, please do not hesitate to contact me at <u>claire.hay@ufv.ca</u>

WDCAG Newsletter Editor's greeting

Hello! Hope you enjoy this 2020 issue in the times of COVID-19. Thanks to all news providers who made time to contribute in this unusual COVID year.

As a partial test as to whether anyone reads the editor's comments...I have observed that while students miss the camaraderie of the physical classroom, they are more expressive in online class 'chat' than they were in the physical classroom. Any comments/thoughts? <u>danielbm@uvic.ca</u>

daniel Brendle-Moczuk, MLIS, Geospatial & Social Sciences Data Librarian, UVic

Teaching during COVID-19 (submitted by Lisa Kadonaga, UVic Geography)

Moving to an online class format forced me to become more open to using technology to share my own experiences with the students. I originally created a YouTube course channel this spring during the lockdown so students would have a place to upload videos in lieu of presentations. Since then I've expanded the channel to include supplementary videos to introduce students (we have a lot of first-years and some of them are outside of BC and even in based in other countries) to what the campus and the area around Victoria look like. https://www.youtube.com/channel/UCYwGPXY2MpbfwMdxpKum1wg/playlists

I am hoping to use this as a way to build a "sense of place" and feeling of affection for UVic and the region, so it is more than just a logo on a screen. Geographers know how important this kind of attachment to place can be.

In addition, during the lockdown I made friends with a New York-based comedian and writer, Anthony Atamanuik. He makes most of his living from working on TV programs and doing live stage shows, both of which have been virtually shut down since March 2020. With his regular work on hold, he ended up using Twitter and Twitch to livestream his own talk show and do comedy performances with colleagues across the continent.

Anthony encouraged me to take advantage of Zoom's features (which I had never used before) to do things that I hadn't yet attempted in my teaching, and even helped out by recording this **midterm review hints** video for my class. <u>https://www.youtube.com/watch?v=fjyzYe-WNNs</u> (Anthony also developed and starred in *The President Show* for Comedy Central. Catherine O'Hara of *SCTV* and *Schitt's Creek* said that he does the best Trump impression she has ever seen.)

The students enjoyed the midterm review hints video and the number of views so far has exceeded the class enrolment.

Anthony is currently developing a guest lecture for my course. He has a degree in film theory and he also studied political science extensively so he'll provide an interesting perspective on environmental perception and resource management policies in cinematic fiction vs. reality.

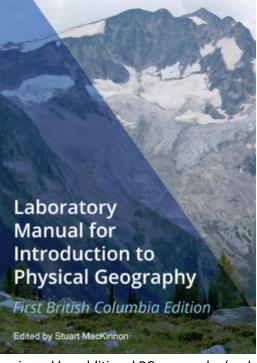
He also shared his sometimes-harrowing experiences living in NYC in the heart of the pandemic's first wave on this continent as part of my new geographical research project on how people's perceptions of safe vs. dangerous spaces have shifted due to the pandemic.

Feature: Laboratory Manual for Introduction to Physical Geography, First British Columbia Edition

After the intense instructional period that resulted from post-secondary institutions across British Columbia (BC) shifting immediately to online delivery in March 2020 for the remainder of the academic semester because of COVID-19, many instructors started thinking towards the upcoming academic year under similar requirements. A group of instructors came together through the BC Geography Articulation group in May to discuss potential plans and approaches to deliver courses, and in particular, labs, for the 2020/21 academic year. As these meetings continued, and more instructors were invited into the group, the idea of a collaborative open educational resource Physical Geography lab manual surfaced.

After some discussion, Stuart MacKinnon stepped forward to coordinate this effort. In addition to Stuart, 13 other authors stepped forward to volunteer their time and produce new labs for online delivery and the lab manual project began at the end of May 2020.

- Katie Burles (College of the Rockies)
- Terence Day (Okanagan College)
- Nina Hewitt (UBC Vancouver)
- Crystal Huscroft (Thompson Rivers University)
- Gillian Krezoski (University of Victoria)
- Allison Lutz (Selkirk College)
- Stuart MacKinnon (UBC Okanagan)
- Craig Nichol (UBC Okanagan)
- Andrew Perkins (Simon Fraser University)
- Todd Redding (Okanagan College)
- Ian Saunders (UBC Okanagan)
- Fes de Scally (UBC Okanagan)
- Leonard Tang (Langara College)
- Chani Welch (Okanagan College)



In only 3 months, 22 labs and a tutorial were created and reviewed by additional BC geography (and geography/earth-science) instructors. A trial version of a Pressbook lab manual was created with the assistance of UBC librarian Erin Fields, Open Education and Scholarly Communication Librarian and her MLIS student librarian, Amanda Grey.

The lab manual was designed to be unique compared to available lab manuals that can be purchased. The idea was to avoid the traditional lab manual style that students usually work through cover to cover. It was instead built so that instructors could pick and choose labs and adapt the labs to fit the learning environment of their students. Because the lab manual is released with a creative commons license (CC BY-NC-SA 4.0), instructors are free to use and adapt to their needs and students do not need to pay anything. This lab manual could not have come together without the dedicated support of many individuals from across BC and it is an excellent example of the collaboration that is possible when committed instructors come together.

The lab manual is being beta-tested across a number of universities and colleges within BC and will be widely distributed in summer 2021 after some revisions to the trial version. If you have questions about the lab manual or the project itself, please contact the editor at <u>stuart.mackinnon@ubc.ca</u>.

WDCAG INSTITUTIONS NEWS & REPORTS

Augustana Campus of the University of Alberta (submitted by Glen Hvenegaard)

The Augustana campus offers a minor in geography and interdisciplinary majors in Environmental Science (BSc) and Environmental Studies (2 BA streams: general and outdoor education).

Glynnis Hood has a new book, *Semi-aquatic Mammals: Ecology and Biology*, with Johns Hopkins University Press. The official release date was in October 2020. Her MSc Student, **Melissa Dergousoff** is now writing her thesis *Trace metal concentrations in the tissue of beavers (Castor canadensis) from Alberta's boreal forests*. Melissa is cosupervised with Dr. **William Shotyk** from the Department of Renewable Resources (UofA). Glynnis also published 'Not all ponds are created equal: Long-term beaver (Castor canadensis) lodge occupancy in a heterogeneous landscape' in the *Canadian Journal of Zoology* <u>https://doi.org/10.1139/ciz-2019-0066</u> and she co-authored 'Protected areas alone rarely predict mammalian biodiversity across spatial scales in an Albertan working landscape' (Frances Stewart, first author) in *Biological Conservation* <u>https://doi.org/10.1016/i.biocon.2019.108252</u>. She also submitted revisions for four other papers. Her conference presentations range from Baltimore to Reno, as well as more local ones in Alberta. She currently has ongoing research on semi-aquatic mammal distributions in the Beaver Hills Biosphere (funded by the Alberta Conservation Association and the Beaver Hills Biosphere Association), and research investigating factors influencing flood risk in beaver-modified systems (newly funded by NSERC). Over the past year, Glynnis taught a senior field course, Freshwater Ecology and Management, Introduction to Geographic Information Systems (including a lab), and Wildlife Ecology and Management.

Adjunct professor and sessional instructor, Dr. **Dee Patriquin** taught a lab in our Freshwater Ecology and Management course (Fall 2019) and Resource and Environmental Management course (Winter 2020). She also works full-time as a Senior Environmental and Regulatory Planner with WSP.

Glen Hvenegaard taught a field course, Introduction to environmental science, parks, geomorphology and a capstone course last year. His students completed community service-learning assignments on many projects, such as waste audits, historic trails, environmental education, wildlife habitat assessments, water management, reforestation, and recycling. Glen also published *Tourism and visitor management in protected areas: Guidelines for sustainability* <u>https://www.sprep.org/attachments/VirLib/Global/tourism-protected-areas.pdf</u> (co-edited by Glen and three others) and it was translated into Portuguese, Mongolian, and German.

Julie Ostrem started her MA project on interagency collaboration in UNESCO biosphere reserves – her first paper was just published in *International Journal of UNESCO Biosphere Reserves*, <u>https://viurrspace.ca/handle/10613/23306</u> Another Glen directed studies student investigated landlord stewardship effects on purple martin nesting success (and submitted to *Wildlife Society Bulletin*).

Glen also co-presented papers at the Alberta Parks Forum and published papers in *Applied Environmental Education and Communication* (perceived impacts of park interpretation), *The Conversation* (park interpretation as a management tool), and *Nature Alberta* (Common Goldeneye nesting).. Glen and colleagues collected data about the outcomes of personal interpretation in Alberta's provincial parks (including the impacts of COVID-19).

Greg King returned from parental leave to lead a 3-week 'block' course focused on sustainability. The course focused on team-based project learning with nine groups of students undertaking partnerships with local community and university partners ranging from audits on campus transportation and waste/recycling behaviours to working with the local library and hospital on sustainability programs. Greg also led a course on soil science and soil resources. **Sarah Preston**, in a unique summer RA position, worked with Greg to complete a neighbourhood urban forest report for Camrose to plan and plant a campus orchard funded through a Sustainable Food Endowment. Greg is continuing work on research projects that incorporate dendrochronology and wood anatomy including several projects investigating the growth dynamics and carbon sequestration potential of urban forests in central Alberta and Ontario. He has also become involved in a new project investigating the potential of using local historic structures to inform long-term reconstruction of precipitation and lake water levels.

Augustana Campus of the University of Alberta (con't)

Augustana is also home to the <u>Augustana Miquelon Lake Research Station and Hesje Astrophysical</u> <u>Observatory</u> located in <u>Miquelon Lake Provincial Park</u>. The station hosts students, researchers, and communities for teaching, research, and local partnerships and we welcome anyone interested in a potential visit to be in touch! Glynnis and Greg taught a Field Studies course at the station in September 2021. Students develop and conduct research projects on many topics, such as ant mounds, park interpretation, beaver foraging of aspen, garter snakes, and shorebirds. See <u>http://www.augustana.ualberta.ca/research/centres/amlrs/</u>



Meghan Maier installing wildlife cameras to track differences in mammal uses by habitat and time of day in Miquelon Lake Provincial Park.



Randy Paquette conducting a vegetation count at a reclaimed site in Miquelon Lake Provincial Park as part of his Environmental Science Field Studies course.

For information about our teaching or research, contact Dr. Glen Hvenegaard at, Dr. Glynnis Hood, or Dr. Greg King. For more information on our programs visit our websites at <u>https://www.ualberta.ca/augustana/programs/degree/geography</u> and <u>https://www.ualberta.ca/augustana/programs/degree/environmental</u>

Camosun College (submitted by Emrys Prussin)

The Geography department at Camosun College is working hard to move courses online and offer engaging and applied learning to students. This winter we will be saying farewell to **Francis Yee**, who is wrapping up a post-retirement contract and officially retiring. **Tim Elkin** is retiring but returning on a post-retirement teaching contact. **Trisha Jarrett** has returned to full time teaching after serving as Chair of the Environmental Technology program. Both **Chris Ayles** and **Emrys Prussin** have stepped back from teaching to take on the roles of CCFA president and Environmental Technology Chair, respectively.

Douglas College (submitted by Rory Crowley)

Douglas College department of Geography and the Environment have eight regular faculty and two lab technicians delivering first and second year courses in both New Westminster and Coquitlam in the lower mainland of BC. Our enrolments have been steady in both human and physical geography. While Douglas held its first lceland field school in 2019, we anticipate the potential of future field schools or professional development courses going forward once the threat of COVID succumbs to vaccinations.

Recently our open lab spaces on both campuses were equipped with augmented reality sandboxes that we are excited to share when students are back on campus. Lastly, Douglas College is planning a new building in New Westminster which would house Geography and the Environment.

Langara College (submitted by Katrina Erdos)

Due to the coronavirus pandemic, the European Field Studies program which the Geography department was scheduled to offer in Summer 2020 was cancelled. This program was to have been a collaboration with the Department of Classical Studies at Langara, and would have involved 2 weeks of study at Langara, followed by almost 3 weeks in Italy.

Medicine Hat College (submitted by Ben Moffatt)

The big news is **Ben Moffatt** retired from teaching full-time at MHC. Related, he was immediately (re)hired to teach *Introduction to Physical Geography*. Currently all MHC Geography courses are taught from my home office....and in fact all MHC Social Science and Humanities classes are also taught remotely. MHC, like most public higher education institutions in Alberta, had to cope with serious budget cutbacks this past year so distance education must have seemed a stroke of luck to administration/finance. There have been a number of serious changes in and around all the faculties (now called "schools") here at the College. Ben will teach one more course (so he says) *Map and Air Photo Interpretation* in winter 2021 before he rides into the sunset of retirement.

We all thank Ben for his service and humour over the years and wish him the best of times!

Okanagan College (submitted by Todd Redding)

Terence Day, Todd Redding and **Chani Welch** all contributed to multiple labs in the draft edition of *Laboratory Manual for Introduction to Physical Geography*, First British Columbia Edition. See **Special Feature** pg 7.

Simon Fraser University (SFU) (submitted by Geoff Mann)

Unsurprisingly, 2020 has been a crazy year at SFU Geography. Research and teaching continue, of course, but there is little in our everyday work lives that the pandemic has not affected, sometimes substantially. Like lots of other institutions, all our teaching is now remote, and the department feels a little like a ghost town. Virtually all our interactions with our colleagues are virtual, and even the rare coffee shop meeting is cancelled for now. Undergraduate enrollments are as high or higher than they have ever been, but what the semesters to come will look like, no one knows.

There is, however, lots of good news. In addition to **Magie Ramírez**, who joined us in September 2019, we have three new faculty in the department in 2020: **Jesse Hahm** (hydrology), **Bing Lu** (remote sensing), and **May Farrales** (urban social change), who is cross-appointed to the Dept. of Gender, Sexuality & Women's Studies. **Ivor Winton**, a legendary Senior Lecturer in the department, who introduced thousands of students to geography, retired after 30 years.

Students and faculty—with the absolutely essential support of our staff, who have been amazing through this whole upheaval—have still managed to get some remarkable things done in and for the community, even on top of teaching and scholarly research. To point to just few examples:

PhD student **Andrew Longhurst** & Associate faculty member **Kendra Strauss** (SFU Labour Studies) published a widely-circulated policy paper on the privatization of senior's care in BC. **Rosemary Collard** published *Animal traffic: Lively capital in the global exotic pet trade* with Duke University Press and (with Jessica Dempsey of UBC Geography) contributed a key piece to the *Progressive International*, arguing for a feminist response to COVID-19. **Nick Hedley** was involved in *Between worlds: Greek civilization—An extended reality experience* at the Museum of Vancouver. Dr. **Jesse Hahm** won a John R. Evans Leaders grant from the Canadian Foundation for Innovation (CFI) to support research quantifying forest and stream water sources and their sensitivity to a shifting climate. Lecturer **Leanne Roderick** was appointed to the Squamish Economic Leadership Team; and the *Landscapes of Injustice* project, in which **Nick Blomley** and several of his students have been very involved, had a public exhibition at the Nikkei National Museum & Cultural Centre.

In addition to their studies, many of our students took also part in the climate action strikes of Fall 2019.



Some members from SFU Geography Student Union, 2019-2020

Simon Fraser University (SFU) (con't)

Several of our students and faculty were recognized for their achievements over the last year. **Nick Blomley** was appointed a Fellow of the Royal Society of Canada and received the Award of Excellence from the Association of Law, Property and Society. **Valorie Crooks** Tier 2 CRC in Health Service Geographies was renewed. **Shiv Balram** received teaching excellence awards from the CAG and the WDCAG. **Kirsten Zickfeld** was appointed an SFU Distinguished Professor for her work on global climate change; and recently-retired **Alison Gill** received the 2020 President's Award for Outstanding Service to the Canadian Association of Geographers.

In addition, recent PhD **Taylor Anderson** (now Assistant Professor at George Mason University) won the 2020 Governor General's Gold Medal and the AAG William L. Garrison Award for Best Dissertation in Computational Geography. **Ruby Barnard** (now M.Arch student at UBC) won the Dean's Silver Medal. **Chris Mitchell**, who just graduated with a B.A., received the SFU Service Award for his contribution to campus and community. PhD student **Katie Gravestock** won the 2020 New Voices Prize from the Canadian Association of Work & Labour Studies. Undergraduate **Bradley Sarandi** was awarded the 2020 Warren Gill Memorial Prize.

On top of all this, **Max Hurson**, **Liam Kennedy-Slaney**, **Andrew Longhurst**, **Leah Rosenkrantz** and **Alysha Van Duynhoven** all received tri-council doctoral awards. PhD student **Tsatia Adzich** was awarded a prestigious Indigenous Graduate Entrance Scholarship. **Rachel Chimuka** won the Canadian Pacific/Teck Resources Award. **Tingan Li** won the Simons Foundation Graduate Award. **Kendra Munn** and **Rachel Singleton-Polster** both received tri-council Master's awards. Lots to be thankful for and to celebrate.



SFU Geography Graduate Association, 2019-2020

Simon Fraser University (SFU) (con't)

Completed theses September 2019 – August 2020

Curran, Michael (MSc), Bedrock Structural Influences on River Morphology. (Jeremy Venditti)

Kasraei, Babak (MSc), High-Resolution Digital Soil Mapping for Managed Forests using Airborne LiDAR Data. (Margaret Schmidt)

Romano, Samantha (MSc), *The potential of emerging interfaces to transform engagement with historical narratives in geographic space*. (Nick Hedley)

Rydvanskiy, Ruslan (MSc), Mixed Reality Interfaces in Flood Risk Management. (Nick Hedley)

Tuyisenge, Germaine (PhD), Access, Equity, and Ethics: A qualitative exploration of Rwanda's maternal community health worker program. (Valorie Crooks)

Vassel, Anika (MA), *Medical crowdfunding and the communication of health-related financial needs in digital environments*. (Valorie Crooks)

Wideman, Trevor (PhD), Land Use, Planning, and Private Property: Waste and Improvement in Early 20th Century Winnipeg and Vancouver, Canada. (Nicholas Blomley)

Wright, Nesha (MSc), *Projected changes in Northern Hemisphere permafrost in temperature stabilization and overshoot scenarios.* (Kirsten Zickfeld)

Zhang, Jin (MSc), Spatial distribution of soil class and soil pH in the Thompson – Okanagan region, British Columbia. (Margaret Schmidt)

Trinity Western University TWU (submitted by Geraldine Jordan)

One of our TWU students presented at the ESRI User Conference last fall 2019: Cook, N. and G. Jordan. 2019. Using GIS to analyze the proximity of elementary schools to major road networks in Surrey, BC. ESRI Vancouver, October 22, 2019.

Geraldine Jordan published an article in a medical journal:

Jordan, G., K. Arbeau D. McFarland, K. Ireland, A. Richardson, 2020. Elimination communication contributes to a reduction in unexplained crying. *Medical Hypotheses* 142. <u>https://doi.org/10.1016/j.mehy.2020.109811</u>

Some of our students went to the WDCAG in Prince George this spring 2020 and presented their work: **Cook, Natalie**, *GIS analysis of association of water ways to Daphne laureola distribution patterns in Metro Vancouver, BC*. Trinity Western University.

Anderson, Delia D. and **Clements, David R**., *Ecohydrology of wetland areas in Blaauw Eco Forest, British Columbia*. Trinity Western University.

Due to COVID, our GIS Lab is now virtual. We are working with ESRI's ArcGIS Pro 2.5.0 software that students are able to download from their TWU ArcGIS Online account.

Drs. **David Clements** and **Geraldine Jordan** are working on a research project entitled: "English Ivy growing on a mature Douglas Fir in Burnaby's Central Park."

Thompson Rivers University (TRU) (compiled & submitted by Amber Norris, assistance from TomW) Hello from Thompson Rivers University, Department of Geography & Environmental Studies.

Congratulations to the following people who graduated with a Bachelor of Arts in Geography & Environmental Studies at the October 2019 and June 2020 TRU convocations!

Samantha Biggs Jenifer Fenkhuber Ben Grove (physical geography stream) Breena Iannetti (Rusnell) (honours, graduated with distinction) Brandon Makar (physical geography stream) Hanna Martens (graduated with distinction) Connor McKenzie Breanna Uphill Daniel Werkman (physical geography stream)

Faculty News & Selected Publications:

David Hill had a busy 2019-2020.

COVID-19 Course Development: David redesigned his course on quantitative analysis for on-line. The lecture is delivered via video while the labs are delivered as a web-meeting. So far, student feedback has been positive. Selected publications

Baron J and Hill DJ (2020) Monitoring grassland invasion by spotted knapweed (Centaurea maculosa) with RPASacquired multispectral imagery. *Remote Sensing of Environment* 249 <u>https://doi.org/10.1016/j.rse.2020.112008</u>

Turner B, **Hill DJ**, Caton K (2019) Cracking "open" technology in ecohydrology. In DF Levia DF, D Carlyle-Moses, S Lida, B Michalzik, K Nanko, A Tischer (eds.) *Forest Water Interactions, Ecological Studies Series* No. 240 (pp. 3-28) Switzerland AG: Springer Nature. <u>https://doi.org/10.1007/978-3-030-26086-6_1</u>

Hill DJ, Pypker TG, Church JS (2019) Applications of unpiloted aerial vehicles (UAVs) in forest hydrology. In DF Levia DF, D Carlyle-Moses, S Lida, B Michalzik, K Nanko, A Tischer (eds.) *Forest Water Interactions, Ecological Studies Series* No. 240 (pp. 55-85). Switzerland AG: Springer Nature. <u>https://doi.org/10.1007/978-3-030-26086-6_3</u>

Caton K & **Hill DJ** (2019). On walls and webs: contemplating postdisciplinarity. In T Pernecky (ed.) *Postdisciplinary Knowledge* (pp. 185-199). Oxford: Routledge. <u>https://doi.org/10.4324/9780429058561</u>

Mufford JT, **Hill DJ**, Flood NJ, Church JS. (2019). Use of unmanned aerial vehicles (UAVs) and photogrammetric image analysis to quantify spatial proximity in beef cattle. *Journal of Unmanned Vehicle Systems* 7(3): 194-206. https://doi.org/10.1139/juvs-2018-0025

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Turner B, **Hill DJ**, Carlyle-Moses DE, and Rahman M (2019). Low-cost, high-resolution stemflow sensing. *Journal of Hydrology* 570:62-68. <u>https://doi.org/10.1016/j.jhydrol.2018.12.072</u>

Grants and contracts:

Hyperspectral image analysis for forest fire fuel quantification. Canada Wildfire. Last chance tourism. Thompson Rivers University Internal Research Fund

Crystal Huscroft had her sabbatical interrupted by the reality of having to develop on-line labs for introductory physical geography classes. Along with **Katie Burles** from College of the Rockies, she envisioned the concept of idea, material and curriculum sharing that has evolved into the *BC Physical Geography Open Lab Manual Project* led by Stuart McKinnon from UBC-O. Crystal and Katie Burles co-authored three laboratory exercises for the manual. Crystal is actively moderating a closed chat forum for introductory physical geography post-secondary educators and she would like to recruit more participation. Please email her at chuscroft@tru.ca for access to the forum.

Thompson Rivers University (TRU) (con't)

Michael Mehta is a member of Canada's national research network CANCOVID. During the summer semester, he taught a class called *COVID*-*19: The course*. This cross-listed third year course between Geography and Sociology might have been one of the first university courses in the world specifically on the pandemic. He also received the Environmental Sustainability Achievement Award from Thompson Rivers University for 2020. When he is not teaching or researching global pandemics, Dr. Mehta is the Principal Investigator for a research project entitled 'A multi-modal, life cycle approach to risk and crisis communication' with funding from BC Wildfire Service and TRU.



Michael Mehta gives a talk on solar power at the TRU Open House, Saturday, October 2019

Darryl Carlyle-Moses was promoted to Professor this spring and was a co-editor for *Forest-Water Interactions*, a volume in Springer's highly acclaimed Ecological Studies Series published last spring. Darryl contributed to two chapters in that volume, including a chapter entitled *Urban Trees as Green Infrastructure for Stormwater Mitigation and Use*. Additionally, Darryl was the co-lead on a paper published in the journal *Ecohydrology* entitled, *A Roadmap for Ecohydrology in the 21st Century: A Convergence of Ideas*, and was a co-author of three additional articles having been published in the *Journal of Hydrology*, *Nature Geoscience*, and the *Proceeding of the National Academy of Sciences*. In the fall of 2019, Darryl travelled to Delaware and Maryland to conduct a forest hydrology experiment with colleagues from Spain, Germany, and the United States. The work derived from that experiment is expected to be submitted shortly for publication. Darryl taught GEOG 2020: Weather, Climate and Global Environmental Change in the winter term of 2020 and is teaching that same course in the fall of 2020. Darryl also taught GEOG 3040: Environmental Climatology and Meteorology in the winter and over the last year has supervised five directed studies projects with topics including how green infrastructure influences property values in Kamloops, the hydrological processes of snow, and the meteorological influences on air quality on the TRU campus in Kamloops. Darryl continues to work as the Department Student Advisor.

Some words from Kim Naqvi:

Like everyone, adapting teaching has been a huge work increase, not quite outweighed by opportunities to experiment. That being said, experiments are being made, despite the sobering observation that students are being overwhelmed by a cascade of weekly 'engagement' exercises from anxious faculty.

A successful field exercise in 'Radical botany' for Cultural Geography sent students out to photograph and identify their known or unknown natural landscape and produced truly fascinating responses. Based on a May 2020 article in *The Guardian*, "'Not just weeds': how rebel botanists are using graffiti to name forgotten flora," the exercise could have been better used for extensive feedback and discussion, and reminded me to let students teach each other more. Elsewhere on the teaching front, the pandemic exposed, at least to me, economic geography's often abstract criticism or support of the service/knowledge economy in contrast to deeply exploring the prevalence of the newly renamed 'front line.' Trying to adapt a fall course to that reality has proven much more difficult than expected, though. With luck and a few more sleep-deprived nights, the second half of the semester will explore pandemic-informed critiques of standard economic sectors. Likewise, the winter Geography of Consumption course can continue this track. An ocean of analysis and policy work is emerging, along with on-line conferences and webinars, which are attended as possible. Perhaps to get our students connected to this work is one of our more pressing tasks.

Thompson Rivers University (TRU) (con't)

Gilles Viaud has been busy with his small cities research and research on aging. His directed studies student **Aaron Brandoli** presented at the WDCAG2020 in Prince George. Gilles spent much of the summer getting his courses ready for online delivery in the fall and he took several online seminars taught by the Moodle support staff at TRU.

Tom Waldichuk attended the Japan Studies Association of Canada annual conference in October2019 at Mount Allison University, where he presented a paper on the diffusion of solar panels on abandoned farmland in Japan. In early November 2019 he hosted a physical geographer and two students from Hirosaki University – one of TRU's sister universities in Japan. The three visitors gave public presentations about their individual research to the TRU

department in November2019.

Later they visited one of Dr. Michael Mehta's lectures to experience an undergraduate class in Canada, and in the afternoon they went to the Secwepemc outdoor museum and on a drive through the Campbell Creek area of Kamloops, so they could see the drumlins near Knutsford.



Tom Waldichuk photo

The following day Tom led the group to Wells Gray Park, where they were met by member from Thompson Rivers Geography Society (TRUGS). Although it was rainy and foggy, they still had a great time seeing the potholes along the Murtle River and picnicking under the big trees in the Helmcken Falls parking lot.



Potholes along the Murtle River that students in TRUGS came across during their field trip to Wells Grey Provincial park in November2019. To the right, Visitors from Hirosaki U, Japan look in awe at the wonderous and powerful, Dawson Falls on the same cold, wet day. (Tom Waldichuk photos)

Thompson Rivers University (TRU) (con't)

Tom has continued to chair the department and, like his colleagues, after the changeover to online teaching in March, spent much of his time learning MS-Teams, Zoom, Bluejeans, BigBlueButton, and how to make an electronic signature. His favourite pastime while working from the kitchen table during the spring and summer was growing tomatoes from seed.

Due to Covid-19 and family concerns in Vancouver, at the last minute Tom was not able to travel to the WDCAG2020 in Prince George. **Avery Danyluk** and **Marina Keast**, who he taught in GEOG 4230 *Attitudes toward the environment*, presented their respective posters titled "University green spaces and fear: The TRU Horticulture Garden and gendered perceptions of safety," and "A walk home from Thompson Rivers University: A women's perspective."

TRUGS (Thompson Rivers Geography Society) provided many opportunities for geography students throughout the 2019-2020 school year despite COVID-19 restrictions. Twenty students from the geography department at TRU attended the geography conference in Prince George. A few of our undergraduate students, including Sayge Fisher and Scott Cramer, had the honour of presenting their respective works, "Tidal energy prospects – West Coast B.C." and "The integration of geothermal energy into the province of British Columbia: sources, risks and potential." Before the introduction of online classes took over, TRUGS provided ample opportunities for student engagement --from hikes to weekly scholarly debates -- to exchange ideas with fellow students. Perhaps, more than ever, the ability to share ideas in times of isolation -- albeit limited -- illustrates our need as human beings to learn through social engagement and thus, highlights the importance of extracurriculars, such as TRUGS (information supplied by **Lukas Djepkema**). **N.B., Emily Toews** also gave a presentation at the WDCAG titled "Incorporating renewable energy sources and green material into residential dwellings to maximize energy efficiency."



Kaitlin enjoying the scenery as she crosses the Murtle River in Wells Gray Park.



Students observe and examine the physical geography of Wells Grey along the Murtle River, November 2019. (Tom Waldichuk photos)

University of the Fraser Valley (UFV) (submitted by Jonathan Hughes)

Department News

Change and adaptation well describe Geography at UFV during its recent transition to the School of Land Use and Environmental Change (SLUEC). It is an exciting time made more challenging by the current COVID-19 pandemic. What has stayed constant is our love for geography and its application to all dimensions of the natural environment and the human experience within it.

SLUEC includes geography, environmental studies, and agriculture programs. The physical geography program continues to emphasize geomorphology, climate change, watershed science, and biogeography. The geographic information systems (GIS) program supports studies of transportation, conservation, and landscape change while the human geography program specializes in planning, transportation, and community forestry. Many geography courses are offered in conjunction with City Studio as a means to engage our students with our local communities. Geography faculty work with UFV Resident Elders and other Indigenous leaders to promote collaboration between SLUEC and Indigenous communities, in particular those of the Stô:Lō People. Geography and its associated programs within SLUEC support Truth and Reconciliation with regards to Indigenous heritage and the Indigenous communities we serve and from whom we learn.

SLUEC decided to offer its programs entirely online starting summer 2020 and continuing through this winter and possibly the summer of 2021, too. The pronto switch to online instruction was a challenge for geography faculty and students. To help prepare for online teaching and learning many of our faculty attended workshops over the summer. **Carolyn Atkins, Jennifer Hetherington, and Kathy Peet** along with others worked collaboratively to create an effective online version of our first-year physical geography course (GEOG 103), including its laboratory component, which is no small feat. Despite frustrations, limitations, and set backs, the faculty and students have risen to the occasion of online learning hopeful of better times to come.

We are fortunate with three new hires: **Mariano Mapili**, **Stefania Pizzirani**, and **Afia Raja**. These amazing people have added fresh perspectives to our programs with new courses and invaluable service within and outside SLUEC. Mariano's focus is on GIS applications in biogeography and conservation of agricultural lands. Afia specializes in GIS and transportation. Both of these faculty collaborate with City Studio. Afia deserves special kudos for attending the WDCAG conference this year with students just as the pandemic was unfolding. Stefania's research focuses on community forestry and Indigenous communities. This winter Stefania is offering *Sustainable Fashion* (GEOG 300S, co-taught with **Carin Bondar**) and she is working to revitalize our certificate in *Indigenous Maps, Films, Rights, and Land Claims*, a program championed by the late **Ken Brealey**.

Geography at UFV wouldn't thrive without the help of dedicated Sessional Faculty and Limited Term Appointments (LTA's). **Jen Hetherington** and **Jason Young** (current LTA's) add strength and breadth to our programs. Jen was instrumental in bringing our first-year physical geography laboratory course online, which she is teaching this year along with human geography courses. Also supporting our human geography program, this winter Jason will offer *Surveillance and Society* (GEOG 300T) and Sessional Faculty **Eva Snirer** will offer Forensic GIS (GEOG 300N). **Terah Sportel** and **Rachel Chapmen** continue to teach courses critical to our human geography program. **Carin Bondar** will join us this winter to help with Environment: Science and Communications (GEOG 257) and *Sustainable Fashion* (GEOG 300S). Carin is also helping to promote SLUEC programs to our local high schools.

Faculty & Staff News

Amy Huesken started as the School Assistant for SLUEC on January 1, 2020. A quick study, Amy is critical to the functioning of our geography programs and SLUEC is grateful for all she does.

Jonathan Hughes became the inaugural Director of SLUEC on January 1, 2020. He tries to keep up with Amy and the others.

Emeritus Faculty **Trevor Carolan** published "On GeoActivism/GeoPolitics" for the Green Technology Education Centre <u>https://www.gteccanada.ca/reader/on-geoactivism-geopoetics/</u> and "Elaho" in *Poems for the Watersheds*. <u>https://caitlin-press.com/our-books/sweet-water/</u>

Claire Hay has accepted a full-time position in UFV's Teaching and Learning Centre. We are thankful for her help as we navigate online learning and new pedagogical approaches.

University of the Fraser Valley (UFV) (con't)

Cherie Enns' "Thinking about Global Humanitarian Interests in the Midst of a Global Pandemic" <u>https://blogs.ufv.ca/president/guest-post-dr-edward-akuffo-and-dr-cherie-enns/</u> and "Oliver's Stay-cation: Cities, Communities and COVID-19"

https://drive.google.com/file/d/19Ve8Syhp465tLpPvIP-TJtaZF4DBnIO7/view

are timely with the latter being a children's guide to the pandemic.

Cherie also received a Shastri Institutional Collaborative Research Grant on "Making Chandigarh Child Friendly: Lessons from Canada." Cherie has supervised virtual East African internships and piloted City Pandemic Planning Studies. In addition to these achievements, Cherie has worked tirelessly on a concept paper for a new planning program within SLUEC.

Olav Lian is an Associate Editor for the *Canadian Journal of Earth Sciences* and continues as Adjunct Faculty at Simon Fraser University where he supervises graduate students. With colleagues at the Forest Practices Authority in Australia, Olav is working to understand long-term climate-driven landscape changes as recorded in stabilized aeolian dunes in Tasmania (two papers published in 2019-2020). He continues collaboration with the BC Geological Survey working to understand the character and timing of landscape and biological adjustments during the shift from glacial to non-glacial conditions in NE BC. He continues to collaborate on projects with the Manitoba Geological Survey, Geological Survey of Canada, Desert Research Institute (USA), and University of Waterloo, to understand the timing and character of the Hudson Bay Lowland prior to the last glaciation. Other projects include studies of the nature and timing of permafrost landscapes in the Canadian Arctic and the 'fossil' permafrost landscapes in the NE USA. Much to his credit, Olav has maintained an active research laboratory supporting students throughout the pandemic. Olav is funded by NSERC and other government agencies.

Steve Marsh continues his collaboration with UFV Adjunct Faculty **Bernhard Peucker-Ehrenbrink** (Marine Chemistry & Geochemistry, Woods Hole Oceanographic Institution) to assess water quality in the Lower Fraser River and its tributaries. The project is supported by the Global Rivers Observatory to assess how environmental change and societal pressures affect the biogeochemistry of river basins. Steve has led a team of student researchers throughout the pandemic as they sample and assess water quality.

Lenore Newman, our Canada Research Chair in Food Security and Environment, was featured in Genome BC's podcast "The Future of Food: How Genomics is Shaping the Way We Eat," https://www.genomebc.ca/blog/podcast-the-future-of-food-how-genomics-is-shaping-the-way-we-eat and she authored opinion pieces in the National Observer titled, "It's time to pivot Canada's food system into the 21st century" https://www.nationalobserver.com/2020/05/07/opinion/exploring-world-post-covid-digital-agricultural-renaissance and "As temperatures rise, Canada's farmers face an uncertain future." https://www.nationalobserver.com/2020/05/28/opinion/temperatures-rise-canadas-farmers-face-uncertain-future She also published a book review in Science on "Diversity and the dinner plate." https://science.sciencemag.org/content/368/6493/836 In Fall 2020 she is teaching Geography of Fermentation (GEOG 316).

Adjunct faculty **Lionel Pandolfo** was a referenced expert and corroborating source in the Abbotsford news article on why "The Fraser Valley has been warming at a quicker rate than Vancouver." <u>https://www.abbynews.com/news/the-fraser-valley-warming-quicker-than-vancouver-why/</u>

Michelle Rhodes accepted a full-time albeit temporary position as Director of UFV's General and Integrated Studies programs.

Scott Shupe is using drones to compare humid and arid environments with 3-D terrain mapping and feature characterization to identify landscape change at scales that are too localized for most airborne and satellite sensors. The focus of his current research is to characterize and interpret detailed vegetative and geomorphic features in contrasting environments: the humid, vegetated environment of the lower Mainland of British Columbia and the dry, semi-arid environment of Utah.

University of Lethbridge (submitted by Stefan W. Kienzle)

The Department of Geography & Environment at the University of Lethbridge offers exciting programs in key career fields with strong employment prospects. Become an expert on current issues, challenges and opportunities through our unique multidisciplinary and experiential learning programs, covering a wide range of topics such as archaeology, climate change science, environmental science, field techniques, human geography, physical geography, remote sensing (drones, satellites), or urban and regional studies. Our programs offer students the opportunity to engage in experiential learning in GIS and remote sensing, field study at the University of Lethbridge West Castle Field Station, and through numerous field activities in Canada and abroad.

Dealing with COVID-19, we have embraced online teaching. Some of our faculty members have developed outstanding video teaching materials over the summer, which will benefit future generations of students. As the best geography lab is outdoors, our field-oriented colleagues continue to get undergraduate students into nature, following all necessary extra safety precautions. Many colleagues who carry out significant field work were able to continue despite COVID restrictions. Drs **Rene Barendregt, Phil Bonnaventure, Shawn Bubel, Laura Chasmer, Chris Hopkinson** and **Hester Jiskoot** have spent significant extra hours to continue their field research safely.



Photo 1: **Dr. Rene Barendregt** on excursion with undergraduate students to the Belly River glacial lake deposits

Photo 2: Pre COVID field research in the Castle River watershed with Faculty member Dr. Phil Bonnaventure (fourth from left), MSc students Rory Gibson, Madeleine Garibaldi, Kyle Bexte, Oliver Kienzle and Trevor Deering (Photos: Stefan Kienzle)



University of Lethbridge (con't)

WDCAG 2021 Conference: The 63rd Annual Meeting of WDCAG will be hosted by the Department of Geography and Environment at the University of Lethbridge on March 5-6, 2021. Geographers from all fields of geography and related disciplines are invited to attend remotely. Registration will be FREE through Eventbrite (<u>https://www.eventbrite.ca/e/wdcag-2021-beyond-2020-geographical-research-in-times-of-crises-tickets-124115253063</u>) Proposals for Special Sessions should be directed to <u>mailto:wdcag2021@uleth.ca</u>. The Special Session call closes December 18th, 2020. Please visit <u>https://www.uleth.ca/artsci/geography/wdcag-2021</u> for updates.

Our **Speaker Series** now invites speakers from everywhere, which is one benefit of adapting to online seminars and conferences (think WDCAG 2021!). Please contact Laura Chasmer (<u>laura.chasmer@uleth.ca</u>) if you are interested in presenting an exciting topic. For information, please see: <u>https://www.uleth.ca/artsci/geography/department-geography-environment-speaker-series</u>

Dr. Craig Coburn, still maneuvering the department through these trying times as Department Chair, is planning another of his, what shall we call it?, Applied Remote Sensing lectures, where he builds a camera system with his students to take pictures from almost outer space from a meteorological balloon launched by the class. Can we invite anyone from the Flat-Earth-Society?

Stefan Kienzle's web site <u>albertaclimaterecords.com</u> has been updated and extended in March 2020, which led to significant interest in both local and international media. This web site educates everyone about how Alberta's climate has changed since the 1950s. The web site is used by a wide range of professionals and an increasing number of high schools across Alberta.

Dr. Maura Hanrahan continues her popular All Things Arctic Blog https://captainbobbartlett.com

Dr. Rene Barendregt is very active in his field work and tirelessly entices our students (and faculty and friends) to discover unknown corners of our neighbourhood (see Photo 1)

Our department celebrated the recognition of **Dr. Shawn Bubel**'s lifelong excellence in teaching by awarding her the 2020 Distinguished Teaching Award.

Despite Covid-19, **Dr. Laura Chasmer**, with four (of her seven) graduate students and one undergraduate student managed to complete the 2020 field season at Waterton Lakes National Park, Elk Island National Park, and within a burned chronosequence south of Fort McMurray.

Dr. Julie Young co-edited a book with Dr. Susan McGrath entitled *Mobilizing Global Knowledge: Reflections on Refugee Research in an Era of Displacement* (Order or download: <u>https://press.ucalgary.ca/books/9781773850856/</u>) Julie is also organizing her second conference on border studies: *CFP: The Line Crossed Us 2021: New Directions in Critical Border Studies* on June 10-11, 2021. The conference will be entirely online. Full details at: <u>https://www.lethbridgeborderstudies.com/2021</u>

Dr. Matt Letts has started his new role as Interim Dean in the Faculty of Arts and Science. He has served as Associate Dean in the Faculty since 2012. He was co-organizer of the Undergraduate Research in Science Conference (URSCA) 2020, held on-line in May, hosting eight post-secondary institutions.
Board of Governor's Research Chair Dr. Chris Hopkinson, Chair in Terrestrial Ecosystem Remote Sensing, was one of the lead organizers of the 2020 Canadian Symposium on Remote Sensing. Originally planned to be held in Yellowknife, Northwest Territories, the conference was moved on-line due to COVID-19. The theme was Landscapes of Change - Remote Sensing for a Sustainable Future (https://crss-sct.ca/).

University of Lethbridge (con't)

We also want to celebrate some of our students. This year, **Aimee Benoit** stands out, PhD student of **Dr. Tom Johnston** and **Dr. Ivan Townshend**. (photo right) She won the Gold Medal of the Governor General (awarded to the student with the highest academic standing at the graduate level), and the School of Graduate Studies Silver Medal of Merit.

A heartfelt congratulations also goes to our **graduate students** who successfully completed and defended their thesis. Well done!

Aimee Benoit, PhD: You have to find your own place. Neighbourhood participation and belonging in Calgary, Alberta.

Sejer Meyhoff, MSc. March, 2020. Validation of stable isotope analysis for determining dietary proportions and trophic dynamics in plains sharp-tailed grouse (*Tympanuchus phasianellus jamesi*)



(additional news submitted by Tom Johnston)

UofL 2013 graduate of the Urban and Regional Studies major, **Julian SpearChief-Morris**, was recently named The University of Lethbridge Alumni Association's 'Young Alumnus of the Year'. The Urban and Regional Studies major was initiated by members of the Department of Geography (as it was called then), and for more than four decades has been coordinated by a member of our department.

After graduating at the top of his class, Mr. SpearChief-Morris was accepted into the law program at Harvard, were in his second year he became the president of the Harvard Legal Aid Bureau, the first Indigenous person to hold that post. During his tenure, Julian logged more than 1,200 hours of pro bono work, and helped to redefine the organization's mission relative to matters of social justice.

At present, Julian is an associate with Jenner and Block, a law firm in Washington, DC. There, he deals with matters ranging from corporate finance to human rights law. Additionally, Spear-Chief-Morris provide strategic advice to clients on government relations and policy. As noted in an article published in October2020 in the *Lethbridge Herald*, "Spear-Chief-Morris represents businesses, tribal governments and individuals representing complex and interconnected legal, political and policy challenges."

University of Northern BC (UNBC) (submitted by Gail Fondahl)

We had an eventful year at UNBC. Last November UNBC faculty participated in a 3.5 week job action – picketing at -15°C for a week certainly showed our determination (and fortitude?!). Then March 2020, we may have hosted what was the last live conference in BC or even Canada – as folks from around the Canadian west flocked to Prince George to share research and camaraderie at the 62nd WDCAG conference. (See conference report within President's Report on pgs 3-4.)



WDCAG at UNBC, March 2020



Alysha Edwards, UNBC. *Mapping indigenous knowledge on the land: Culturally appropriate methods for and by Takla First Nation.*

As folks headed home, we kept fingers crossed that there'd be no reports of Covid-19 among participants – indeed, as folks went home, the province moved into 'social distancing' and a supposed shortage of TP.

Field courses were cancelled and fall courses re-envisioned and 'pivoted' to on-line. A few of us also cancelled our treasured sabbaticals, as plans for activities disintegrated with the cessation of travel. Most of us are working from home, and we have missed our hall chats and GEOG parties to celebrate promotions, new grad students and such. But luckily the COVID situation is pretty good in northern BC.

Faculty & Program News

Congratulations to Drs. **Catherine Nolin** and Dr. **Roger Wheate**, who were both promoted to Full Professor this past year. **Catherine** continues to serve as Chair of UNBC GEOG, while **Roger** continues as Chair of our Natural Resources and Environmental Studies Graduate Program, under the aegis of which many students earn their MA NRES, MScNRES or MNRES with a focus in Geography.

Since July 2020, **Catherine** is Chair of the Conference of Latin American Geography (CLAG). CLAG is the premier organization for geographers engaging in research in Latin America and the Caribbean and works to foster research, education, and service related to Latin American geographical studies. See: <u>https://clagscholar.org/</u>

Zoë Meletis is among the contributing editors for a *FIGS zine* (Feminist Intersectional Solidarity Group of the CAG); see <u>https://www.cag-acg.ca/figs-zine</u> It is a collection of feminist responses to calls for ongoing academic productivity during COVID-19 times. It resulted from a 'call for anything' released by FIGS in May 2020.

Zoë also continues her equity-related service through Inspiring Women Among Us (IWAU), a set of events each fall, that highlight women's accomplishments. She recently contributed to two related reports: one about an IWAU-hosted workshop in March, and one about *Claiming Spaces*-- a new online resource created in partnership with the City of Prince George. Note: *Claiming Spaces* centres on a series of short videos from unconventional inspiring leaders. References below. They can both be found here: <u>https://iwau.ca/reportsarchives</u>

Healy, T., Wilson, S., Meletis, Z., and Booth, A. (March 2020). EDI @ UNBC. Taking the Pulse.

Booth, A., Frizzell, G., Harding, P., S-L., **Meletis, Z.,** and Pumphrey, M. (September 2020). Towards Parity Demonstration Project Report. Claiming Spaces.

In August2020 **Joe Shea** conducted fieldwork at Conrad Glacier in the Purcell Mountains, south of Golden BC with **Kevin Ostapowich** (MSc), where the installed a network of sensors to measure alpine ground and snowpack temperatures.



New Postdoctoral Fellows include Dr. Jacob Bendle (PhD Royal Holloway, University of London) and Dr. Anna Shenokova (PhD ETS) working with Dr. Brian Menounos; and Dr. Nadezhda Mamontova (PhD Oxford; Banting Fellow), working with Dr. Gail Fondahl.

Graduate Students (completed)

Kinsley, Bridget. 2019. Investigating Scientific and Social Influences on the 2017 Grizzly Bear Hunt Bans. MA NRES (Geography). Supervisor: **Zoë A. Meletis**

Sherpa,Tashii. The Importance of Land and Water to the Culture of the Xeni Gwet'in First Nation: An analysis of statements presented at environmental impact assessment hearings MA NRES (Geography) Supervisor: **Greg Halseth**

Other Graduate Student Information

Graduate PhD student **Kristen Kieta** (Supervisor **Ellen Petticrew**) received an NSERC scholarship topped up with a prestigious NSERC Alexander Graham Bell award. Her work is on sediment fingerprinting in the Nechako watershed.

Research continued at the Quesnel River Research Centre over the spring and summer although researcher numbers were restricted due to COVID protocols. A new MSc student **Gabriel Lint** (BSc U Manitoba) began her project in the Quesnel watershed in May 2020. She is investigating interactions between nutrient gradients and metal uptake in primary and secondary producers in lakes impacted by mining wastes.

Two summer students also worked at QRRC, **Tyler Halverson** (Geog BA UNBC) and **Jerry Chen** (UNBC ENSC). Tyler provided research support while Jerry undertook an internship research project.

In September 2020 instrumentation was installed in Quesnel Lake funded by BC Real Estate foundation grant and support from the Concerned Citizens of Quesnel Lake. It will measure water quality parameters at the edge of the dilution zone of diffuser pipes that were installed by Mount Polley mine that deliver waste water to the lake.

Publications (selected)

Filippova, V., Savvinova, A., **Fondahl, G.** (2020) Эвенки бассейна реки Олекма: расселение и современное землепользование [Evenki of River Basin Olyokma: Resettlement and land use in the XXI Century], *Nauchnyy dialog* 1: 495-501 https://doi.org/10.24224/2227-1295-2020-1-495-509

Fondahl, G., Filippova, V., Savvinova, A. (2020) Introducing a registry of Indigenous persons in Russia: Rationale and Challenges, *Espace/Populations/Sociétés* 2020 (1-2). <u>https://doi.org/10.4000/eps.9582</u>

Fondahl, G., Espiritu, A., Ivanova, A. (2020) Russia's arctic regions and policies. In *The Palgrave Handbook on Arctic Policy*. K. Coates and C. Holroyd (Eds.), pp. 195-216. Palgrave. <u>https://doi.org/10.1007/978-3-030-20557-7_13</u>

Hamilton, A.K., Laval, B.E., **Petticrew, E.L.** et al. (2020) Seasonal turbidity linked to physical dynamics in a deep lake following the catastrophic 2014 Mount Polley Mine tailings spill. *Water Resources Research* 56 <u>https://doi.org/10.1029/2019WR025790</u>

Hanlon, N. (2020) Social capital. In A. Kobayashi, ed. *International Encyclopedia of Human Geography*, 2nd ed. Vol. 12. Elsevier, pp. 227-231. <u>https://doi.org/10.1016/B978-0-08-102295-5.10865-0</u>

Hanlon, N., Skinner, M.W., (2020) Services, Rural. In A. Kobayashi, ed. *International Encyclopedia of Human Geography*, 2nd ed. Vol. 12. Elsevier Publishers, pp. 179-184. <u>https://doi.org/10.1016/B978-0-08-102295-5.10133-7</u>

Hyrcha, S., Rea, R., McClenagan, R., Emmons, S., **Wheate, R**. (2020) Using GPS technology to track hitchhiker activity in Northern BC. *The Western Geographer* 24.

Ivanova, A., **Fondahl, G.** (2020) Legal reform, governance and security in the Arctic. In *Handbook of Arctic Security*. G. Hoogensen-Gjørv, M. Lantaigne, & H.G. Sam-Aggrey (Eds.), pp. 83-104 (Chapter 25). London: Routledge

Markey, S., **Halseth, G.,** Ryser, L. (2019) Commentary: An agenda for comparative regional development research. *New Zealand Geographer*. <u>https://doi.org/10.1111/nzg.12232</u>

Markey, S., Ryser, L., **Halseth, G.** (2020) The Critical role of services during crisis and in recovery: Learning from smart services and infrastructure projects. In the Canadian Rural Revitalization Foundation's series on *Supporting Rural Recovery & Resilience After COVID-19*. <u>http://crrf.ca/ri-ruralservice/</u>

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Wilson, G., **Fondahl, G**., Hansen, K.G. (2020) Governance for arctic sustainability. In *Arctic Sustainability, Key Methodologies and Knowledge Domains. A Synthesis of Knowledge 1*, J.K. Graybill and A.N. Petrov (eds.). Chapter 5. London: Routledge. <u>https://doi.org/10.4324/9780429277016</u>

Presentations (selected)

Betkus, G., Freeman, S. and **Hanlon, N.** "Comparing in-person and videoconferencing consultations within a geriatric outreach program in northern British Columbia." 62nd annual meeting of the Western Division of the Canadian Association of Geographers, Prince George, BC, 14 March 2020.

Fondahl, G. "Canada's New Arctic and Northern Policy Framework: Address Social and Cultural Problems of Canada's Northern Population", Population in the Arctic: Social and Cultural Dimensions, Northern Sustainable Development Forum, Yakutsk, 25 September 2019.

Fondahl, G. «Territorii traditsionnogo prirodopol'zovaniya kak vlkad upraveleniya v ustochivoe razvitiya korennykh severyan v Respubliki Sakha (Yakutia)» [The territories of traditional nature's use as a facet of governance in the sustainable development of indigenous northerners in the Republic of Sakha (Yakutia)], All Russian Scientific-Practical Conference with International Participation, "Indigenous Numerically Small Peoples of the Russian Federation: Problems, Priorities and Prospects for Development and Transformation of Society", Yakutsk, 24 September 2019.

Poulin, L and **Hanlon, N.** "Leveraging critical rural gerontology to improve rural gerontological health: Innovation in aging." 74th Annual Meeting of the Gerontological Society of America, Austin, TX, 15 November 2019.

Major New Grants:

Greg Halseth: Co-applicant on SSHRC – Insight Grant led by Denise Cloutier (UVic) on "Building solutions to housing insecurity and health for older women in vulnerable circumstances".

Greg Halseth: SSHRC – Insight Grant on "Entrepreneurialism and rural/small-town local government", lead, with partners Sean Markey (SFU), Kelly Vodden (Memorial), Ryan Gibson (Guelph), Lars Hallstrom (Alberta).

University of Victoria (UVic) (compiled by dbm)

News

UVic postdoctoral fellow **Melanie Clapham** and private software engineers utilised deep learning, a method of AI (artificial intelligence) to identify grizzly bears from photos. <u>https://www.nytimes.com/2020/11/11/science/bears-facial-recognition.html</u>

Dylan Hillis & **Chris Darimont** *et al* article on ancient wool dog diets in *Scientific Reports* was a feature on CBC: https://www.cbc.ca/news/canada/british-columbia/ancient-dogs-tseshaht-first-nation-1.5753150

Jutta Gutberlet *et al* and their work regarding plastics so-called recycling 'Evaluating scenarios toward zero plastic pollution' published in *Science* was also covered by CBC: <u>https://www.cbc.ca/news/technology/plastic-reduction-1.5659383</u>

Geography PhD student, **Tyler Jessen**, was named a Vanier Canada Graduate Scholar. Jessen's research, in collaboration with the Kitasoo/Xai'xais First Nation, examines the effects of climate change on mountain goats that depend on a cool alpine environment to survive.

As COVID-19 interrupted all aspects of our lives, urban geographer **Cam Owens** had to transform his usual summer International field school to an online course. "I was skeptical at first," said Owens, "our international field school is immersive and experiential so I was a bit daunted at first how to transition it to a virtual experience." Owens did not pretend that the online course would be able to replace the field school; he tried to make it a valuable learning experience. One highlight was a virtual bike tour of Copenhagen, Denmark hosted by Ole Kassow and Pernille Bussone.

"The bike tour was the most unique experience I've had to date at UVic. It was a highlight of my third year in geography and it offered a very impressive learning experience."—Julia Paquette https://www.uvic.ca/news/topics/2020+copenhagen-virtual-field-school+news

Alexei Goudine, (UVic GeogGrad) & dbm [re-]created (scanned, georeferenced, re-drew hundreds of plant communities polygons) of Phil Dearden's 1976

OAK-GERANIUM (Quercus-Geranium) OAK-EASTER LILY (Quercus-Erythronium) 3.631 ARBUTUS-DOUGLAS FIR (Arbutus-Pseudotsuga) DOUGLAS FIR-OREGON GRAPE (Pseudotsuga-Berberis) D. FIR-O. GRAPE-ONION GRASS (P-B-Melica) D. FIR-O. GRAPE-FOAM FLOWER ... (P. B.-Tiarella) GRAND FIR-RED ALDER (Abies-Almus) BLACK COTTONWOOD - CRABAPPLE (Populus-Pyrus) HIGH WATER TABLE ... URBAN & AGRICULTURAL LAND



Saanich Plant Communities field work and hand-drawn maps; Re-drawn / digitised (2020) geospatial data at <u>https://hdl.handle.net/11272.1/AB2/WBVDF0</u>

Larry McCann, esteemed UVic geographer and recipient of the 2001 Massey Medal of the Royal Canadian Geographical Society died in June 2020. <u>https://www.mccallgardens.com/obituaries/lawrence-larry-mccann</u>

Dan Smith, former UVic Geography Chair, 2000-2008, 2013-2015) and Director, University of Victoria Tree Ring Laboratory, quietly retired. (This Editor requested an interview and in his usual manner, Dan declined)

University of Victoria (UVic) (con't)

Selected Publications:

Clapham, **M**., Miller, E., Nguyen, M., & **Darimont**, **C.T**. (2020). Automated facial recognition for wildlife that lack unique markings: A deep learning approach for brown bears. *Ecology and Evolution*.

Cloutier, D. & Brendle-Moczuk, d. (2019) Health services and service restructuring. In A.Kobayashi, Ed., *International Encyclopedia of Human Geography*, 2nd ed.

Funk, L.M., Stajduhar, K.I., Giesbrecht, M., **Cloutier**, **D**., Williams, A., & Wolse, F. (2020). Applying the concept of structural empowerment to interactions between families and home-care nurses. *Nursing Inquiry* 27(1) <u>https://doi.org/10.1111/nin.12313</u>

Hillis, D., McKechnie, I., Guiry, E., Claire, D.E S., & **Darimont, C.T.** (2020). Ancient dog diets on the Pacific Northwest Coast: zooarchaeological and stable isotope modelling evidence from Tseshaht territory and beyond. *Scientific Reports* 10(1) <u>https://doi.org/10.1038/s41598-020-71574-x</u>

Ferster, C., Fischer, J., Manaugh, K., Nelson, T., & Winters, M. (2020). Using OpenStreetMap to inventory bicycle infrastructure: a comparison with open data from cities. *International journal of sustainable transportation* 14(1) <u>https://doi.org/10.1080/15568318.2018.1519746</u>

Mood, B.J., Coulthard, B., & **Smith, D.J.** 300 years of snowpack variability in southwestern British Columbia reconstructed from tree-rings. *Hydrological Processes* <u>https://doi.org/10.1002/hyp.13933</u>

Nahirnick, N.K., Costa, M., Schroeder, S., & Sharma, T. (2020). Long-term eelgrass habitat change and associated human impacts on the west coast of Canada. *Journal of Coastal Research* 36(1) <u>https://doi.org/10.2112/JCOASTRES-D-18-00112.1</u>

Nandan, V., Scharien, R.K., Geldsetzer, T. et al. (2020). Snow property controls on modeled Ku-band altimeter estimates of first-year sea ice thickness: Case studies from the Canadian and Norwegian Arctic. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* 13 <u>https://ieeexplore.ieee.org/document/9000883</u>

Rose-Redwood, R., Blu Barnd, N., Lucchesi, A.H.E., **Dias, S**., & **Patrick, W**. (2020). Decolonizing the Map: Recentering Indigenous Mappings. *Cartographica: The International Journal for Geographic Information and Geovisualization*, 55(3) <u>https://doi.org/10.3138/cart.53.3.intro</u>

Rose-Redwood, R., Kitchin, R., Apostolopoulou, E., Rickards, L., Blackman, T., Crampton, J. & Buckley, M. (2020). Geographies of the COVID-19 pandemic. *Dialogues in Human Geography* 10(2) <u>https://doi.org/10.1177/2043820620936050</u>

Service, Bourbonnais, Adams, Henson, Neasloss, Picard, Paquet & Darimont. (2020). Spatial patterns and rarity of the white-phased 'Spirit bear' allele reveal gaps in habitat protection. *Ecological Solutions and Evidence* 1(2) <u>https://doi.org/10.1002/2688-8319.12014</u>

Walsh, J.C., Pendray, J.E., Godwin, S.C., **Artelle, K.A.** et al.(2020). Relationships between Pacific salmon and aquatic and terrestrial ecosystems: Implications for ecosystem-based management. *Ecology* 101(9) <u>https://doi.org/10.1002/ecy.3060</u>

Vancouver Island University (VIU) (submitted by Michele Patterson)

COVID & Teaching Geography

Cheers to the VIU Library and their media stations that let us digitize our resources for online learning. Airphotos require a higher resolution than your average photo. With the massive shift to learning online, we've had a lot of content to create!

Fall 2020 Geography Welcome Back video <u>https://viuvideos.viu.ca/media/Geography+Welcome+Back+Event/0_fgjts7p3</u>



In 2019 or early 2020, who would have thought this screenshot would now look so familiar?

Student News

Speaking of COVID, our students are still doing geography! Current student **Chloe Sandahl** and former student **Caleb McIntyre** made a map of local *Nanaimo businesses open during COVID* using <u>Google MyMaps</u>

Congratulations to all of our 2020 Geography Department award winners!

- Award for Service to the Geography Department: Sophie Laboissonniere
- Carto Cup 2020: Chloe Sandahl
- CAG Undergraduate Award: Alex Harte
- Lady Rose Award: CANCELLED due to COVID-19
- Don Stone Scholarship: Colt Gnech

Congratulations to **Jeff Lewis** for receiving a VIURAC Gather Grant. These funds, valued at \$3000, will be used to

support VIU: Awareness of Climate change through Education and Research (ACER) this next academic year in putting on their eighth Climate Change Symposium; a free public event.

ACER is a student-led climate change initiative that aims to promote a greater understanding of the science and social implications of climate change. It is an interdisciplinary project rooted in the belief that making informed decisions on the issue of climate change requires greater public engagement and a deeper understanding of this complex topic.





In January 2020 the city of Nanaimo sent us sent us this Certificate of Appreciation for the clean-up work the department and students did during 2019 in city parks and greenspaces.

Vancouver Island University (con't)



November 2019 saw the launch of the 14th Annual *Urban Issues Film Festival* on the theme of "Urbanization around the world." At its peak, approximately 100 people attended. In addition to a variety of dynamic short films, the organizers also experimented with *Menti*, an interactive program that audience members used to voice their opinions on their phones in relation to the films and related topics.

The MC was of the whole event was VIU grad **Caelen Middleton**, who brought boisterous good spirits. In addition to sponsorship and donations by the Geographic Students' Union, the Master of Community Planning (MCP) Students' Association, Geography and the Sustainability Advisory Committee, the Planning Institute of BC (North Island chapter) co-sponsored and paid for the free pizza dinner for everyone in attendance. A hallmark of last year's festival was that it was exclusively student-led.

Unfortunately, due to COVID, this year's 2020 film festival was cancelled.

Editor's closing Remarks:

Let us remember the many who died and are affected by COVID... and hope calmness, patience & science bring all of us in our global village a better 2021.