



Western Division
Canadian Association of Geographers

2021 Newsletter

WDCAG 2021



Beyond 2020: Geographical Research in Times of Crises

University of Lethbridge, site of 63rd annual WDCAG2021 virtual meeting
March2021

WDCAG Newsletter 2021

Table of Contents

WDCAG President's Message	3
WDCAG Newsletter Editor's greeting	5
Special Feature:	
Literature on Conferences, Research & Teaching in the time of COVID	7
News from WDCAG Departments	8-31
Editor's closing Remarks	31

WDCAG PRESIDENT'S MESSAGE (submitted by Craig Coburn, University of Lethbridge)

Welcome to the current edition of the WDCAG newsletter for 2021. As the WDCAG President, I would like to extend greetings to all members of the Western Division. I am writing this note from my office which is situated in Treaty 7, the traditional territory of the Niitsitapi, and in Métis Region 3. As geographers, we strive to increase our understanding and inclusion of Indigenous ways of knowing and their contributions to our world. We're now 22 months into the pandemic and still the end is very much not in sight. It's been the most difficult time that anyone can recall for students and faculty alike. I simply cannot imagine the mental strain that this has placed on students. While the hottest fires may forge the hardest steel, having provincial governments double-down on the pandemic stress with massive budgetary cuts across the division has also been most unwelcome. Please take some time for yourself over the upcoming break and try to disconnect from our societal troubles – mental health issues are on the increase. We can only get through this together.

Recently, you will have received a notification of a national survey to assess our declining membership. This decline is happening across the country and the CAG is trying to assess what we can do to improve the organization and revive our association. The CAG has always been central to geographical research and teaching in Canada. Many of us have been members since we were undergraduate students and have “grown-up” in the Western Division. I not only encourage all of you to support the WDCAG and CAG through membership and attendance at regional and national meetings (when we can) but encourage you to reach out to your current students and invite them to join and share in our geographical adventures.

Geography in the West is as strong as ever. This fact was clearly demonstrated at the 71st Annual Meeting of the Canadian Association of Geographers hosted by the Geography Program at UNBC. With Dr. Catherine Nolin serving as CAG 2021 Organizing Committee Chair – the group at UNBC set the standard for an outstanding national event. They worked tirelessly to bring an outstanding conference experience to the world. Western geography at its finest.

UPDATES FROM WDCAG ANNUAL MEETING

The 63rd Annual Meeting of the WDCAG was held virtually by the University of Lethbridge. The “Beyond 2020” naming of the conference was a hopeful theme that the organizing committee (Craig Coburn, Julie Young, Mariah Besplug, Caitlin Hanrahan and Wael Nasser) were hoping would signal the end of the pandemic. As a division, we came together in numbers never seen before for this event. With 341 participants from across the entire division and across Canada. It was an uplifting experience to see this level of support. Special thanks to the University of Lethbridge for providing the critical technical support and digital services to make it all happen.

Award Winners:

Undergraduate Poster: Rachel Stewart-Dziama (UVic) “Problematic polygons: Alternative cartographic representations of Indigenous territories”

Undergraduate Paper: Mackenzie Ross (UVic) “Is anyone out there? Can signature in-person field school learning outcomes be achieved online?”

Masters Poster: Melina Sorensen (Royal Roads University), “Predicting the ecotoxicological impacts of microplastics in the Salish Sea using GIS.”

Masters Paper: Annie Pumphrey (UNBC) “Who bears the brunt? An examination of ‘bear jams’ in Peter Lougheed Provincial Park, Alberta”

PhD Poster: Anne-Cécile Delaisse (UBC) “The ‘in-between’ role of the Francophone community for French-speaking immigrants in Metro Vancouver”

PhD Paper: Benjamin Dosu (U of Lethbridge) “Rural Ghanaian women and girls as subalterns in water collection and use”

The Annual Meeting for 2022 will transform into another innovative event. The Executive of the WDCAG has decided to continue our annual meeting tradition with a twist. While we will not meet physically and we're all at the brink of collapse without additional time to organize an online event – we have decided to offer students the opportunity to share their research with the division.

We're requesting that your department host a 3 minute thesis (3MT - https://en.wikipedia.org/wiki/Three_Minute_Thesis) style student presentation competition (perhaps in place of a speaker in a weekly seminar or in a course). A panel of faculty from your department will evaluate the presentations and select a "Best Undergraduate" and "Best Graduate" presentation.

These successful presenters will present at the AGM and the Executive will select a best undergraduate and graduate winner with a \$150 award for each presenter and a student membership in the CAG! Students will have to present at the AGM on Saturday, March 5th and we would like to know your department winners by Monday, February 28th, 2022.

The AGM will host these students over Zoom and we'll also do our routine business. So, while it's not a virtual conference – it's still an opportunity to come together and support our students and their research.

We are committed to returning to a live Annual Meeting for the 65th – location yet to be declared.

Stay safe – Craig.

WDCAG EXECUTIVE 2019-2020

President	Craig Coburn, ULeithbridge 2020-2022
Past President	Claire Hay 2021-2022
Vice President	vacant for this year
Secretary-Treasurer	Henry Frew, Carrick House Consulting 2021-2022
Members-at-Large	Terry Day, OC 2021-2023 Julie Young, ULeith 2021-2023 Joanne Moyer, KingsU 2019-2021 Tom Waldichuk, TRU 2020-2022
Student Representatives (2-4)	Alberta Nick Noad ULeith, Sean Herridge-Berry, ULeith British Columbia – Melina Sorensen RRU, Glen Thielmann UNBC
<i>Western Geography</i>	Human Editor –Joanne Moyer, KingsU Physical/GIS Editor – Craig Coburn (ULeithbridge)
Archivist	tba
Awards Officer	David Jordan (TWU)
BC Education Chairs	Glen Thielmann, UNBC; 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 Newsletter Editor's greeting

Hello! Hope you enjoy this 2021 issue. Thanks to all news providers who made time to contribute in yet another (groan) COVID year.

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

Literature on Research & Teaching during COVID (mostly by geographers)

(compiled by dBM, WDCAG Newsletter Editor)

Fuller, S. et al. (2021). Delivering the discipline: Teaching geography and planning during COVID-19. *Geographical Research* 59(3)

Hibszter, A., & Tracz, M. (2021). The impact of covid-19 on education in Poland: Challenges related to distance learning. *Geographia Polonica*

Kelman, I. (2021). Ethically researching local impacts of environmental change without travel. *Geosciences* 11(8)

Paez, A. (2021). Reproducibility of research during COVID-19: Examining the case of population density and the basic reproductive rate from the perspective of spatial analysis. *Geographical Analysis*.

Pasquaré Mariotto, F. & Bonali, F.L. (2021). Virtual geosites as innovative tools for geoheritage popularization: A case study from Eastern Iceland. *Geosciences* 11(4)

Peace, A.L., Gabriel, J.J. & Eyles, C. (2021). Geoscience fieldwork in the age of Covid-19 and beyond: Commentary on the development of a virtual geological field trip to Whitefish Falls, Ontario, Canada. *Geosciences* 11(12)

Pugsley, J.H. et al. (2021). Virtual Fieldtrips: construction, delivery, and implications for future geological fieldtrips. *Geoscience Communication Discussions*

Sy, K.T.L., White, L.F., & Nichols, B.E. (2021). Reproducible science is vital for a stronger evidence base during the COVID-19 Pandemic. *Geographical Analysis*.

Wang, M., Wu, J., An, N., & Lin, M. (2021). The effect of emotional experiences in fieldwork: embodied evidence from a visual approach. *Journal of Geography in Higher Education*, 1-22.

Whitmeyer, S.J., & Dordevic, M. (2021). Creating virtual geologic mapping exercises in a changing world. *Geosphere* 17(1)

Ziółkowska-Weiss, K. & Mróz, F. (2021). Education of students of the polish universities in the first weeks of the Covid-19 pandemic caused by the sars-cov-2 coronavirus. *Geographia Polonica* 94(3)

WDCAG INSTITUTIONS NEWS & REPORTS

Augustana Campus of the University of Alberta (submitted by Greg King)

The Augustana campus offers interdisciplinary majors in Environmental Science (BSc) and a newly designed program in Sustainability Studies (BA), both of which incorporate Geography courses.

Glynnis Hood's MSc Student, **Ignacio Aguirre** is working on his thesis *Ecohydrological modeling of beaver dams: How can flow regulating functions of beaver dams be represented in a hydrological model?* Ignacio is co-supervised by Dr. **Cherie Westbrook** from the University of Saskatchewan.

Over the past year Glynnis published Accessing and mobilizing “new” data to evaluate emerging environmental impacts on semi-aquatic mammals, *Land* 9(10) <https://doi.org/10.3390/land9100345>) and co-published Biased baselines? Differences in manual and computer-based modelling of blue-winged teal (*Spatula discors*) habitat suitability with **Curtis Stratmoen** (former BSc student) in the *Journal of Nature Conservation* (61: 125998. <https://doi.org/10.1016/j.jnc.2021.125998>); Glynnis also published Resident perceptions of human-beaver conflict in a rural landscape in Alberta, Canada with **Nicholas Yarmey** (former BSc student) in *Human-wildlife Interactions* (14(3) <https://digitalcommons.usu.edu/hwi/vol14/iss3/17>). In addition, Glynnis taught various courses, including *Statistical Methods for the Natural Sciences* and *Resource & Environmental Science*.

Glen Hvenegaard is on sabbatical leave for 2021-22. He is working on projects related to purple martin conservation, environmental history of an important local naturalist, and park interpretation. Last year during the pandemic he taught wildlife diversity, interpretation and environmental education, climatology, and a capstone course. His students had independent studies projects published in the *Wildlife Society Bulletin* about the impacts of nestbox location and stewardship activities on purple martin occupancy and in *Western Birds* on purple martin dispersal. **Glen, Elizabeth Halpenny, and Jill Bueddefeld** edited a special issue in *Land* entitled Parks and protected areas: Mobilizing knowledge for effective decision-making about knowledge mobilization in protected areas (https://www.mdpi.com/journal/land/special_issues/parks_MK).

MA student, **Julie Ostrem**, is analyzing data for her project on interagency collaboration in UNESCO biosphere reserves (luckily, her data collection involved interviews by zoom). She co-presented papers at a few online conferences and is working with Alberta Parks to reverse the cuts to live interpretation in provincial parks.

Greg King is enjoying being back on campus and working at the Augustana Tree-Ring Lab after a year of teaching and meetings from his kitchen table. During that time Greg remotely taught two iterations of our introductory course and led a course called *Applications in Sustainability* which focused on food sustainability. The course was project-based and involved groups of students working with local food producers associated with the Food Artisans of Camrose County on sustainability-linked projects. Despite the pandemic or maybe because of it, he was able to plant successfully a campus micro-orchard in two phases and has been stewarding it over the past year. Greg and Glen have a chapter in submission for an upcoming book entitled “Reclaiming the City: Lessons in Sustainability”. Greg presented work at the American Association of Geographers on the response of residential development on mature trees and has started work on a research project that uses dendrochronology and wood anatomy to investigate the response of urban trees to drought in collaboration with colleagues from UQAM. He is also working on a project with several undergraduate students and community members that combines tree-ring and documentary archival research to reconstruct the environmental history of the Cooking Lake area in the Beaver Hills Biosphere.

Adjunct professor and sessional instructor, Dr. **Dee Patriquin** taught a lab in our *Freshwater Ecology and Management* course (Fall 2021) and will be teaching our *Wildlife Ecology* course (Winter 2022). With **Glen, Elizabeth Halpenny, and C.J. Blye**, she published the first of several papers anticipated to come from a SSHRC funded study of knowledge mobilization in Canadian Parks, based on a case study of the Beaver Hills Biosphere (see special edition link in Glen's description above. Dee also works full-time as a Senior Environmental and Regulatory Planner with WSP, with a focus on environmental management projects for municipal, Indigenous and industry clients. She and other WSP colleagues recently completed a synthesis of best practices for the Transportation Association of Canada (TAC), *Managing and Enhancing Roadside Terrestrial Ecology* (<https://www.tac-atc.ca/en/publications/ptm-mtre-e>).

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

Currently, **Dee** is preparing the *Astotin Basin Flood Resiliency Action Plan*, an interdisciplinary study blending ecology, hydrology, stormwater management and climate change to recommend future planning by Strathcona County. The plan included innovative inventory techniques such as eDNA (in collaboration with **Glynnis**) and remote sensing mapping analysis, to identify areas requiring flood protection, ecological restoration, or human adaptations for flood resiliency.

We are also happy to welcome Dr. **Scott Heckbert**, Principal Environmental Scientist at the Alberta Energy Regulator as an adjunct with the Science Department at Augustana. Scott is teaching our introductory course this fall and undertaking several research projects involving our entire faculty.

Dr. **John Pattison-Williams** has also joined the Science Department as an adjunct faculty member this year. John is a President of Pattison Resource Consulting and Research Fellow in the Department of Resource Economics and Environmental Sociology. He is teaching *Parks and Wilderness* (AUENV420) at Augustana and *Natural Resource Economics and Management* (AREC365) at the North Campus. He currently sits on the Canadian Working Group of the North American Grasslands Roadmap, a tri-national agreement to stop and reverse grassland loss in Canada, USA and Mexico, and coordinates the Policy Committee of the Prairie Habitat Joint Venture. Recent co-authored publications include Quantifying agricultural profitability associated with wetland drainage practices in Alberta, *Wetland Ecology and Management*. 29(3); An empirical analysis of hunter response to chronic wasting disease in Alberta, *Human Dimensions of Wildlife* 25(6); and co-authored a technical report for the Canadian Agri-Food Policy Institute titled Chronic wasting disease and the Canadian agriculture and agri-food sectors: Current knowledge, risks and policy options. A co-authored forthcoming publication is Intrahousehold frictions and household poverty traps in rural India, in *Economics of Transition and Institutional Change*.

Finally, Augustana is home to the [Augustana Miquelon Lake Research Station and Hesje Astrophysical Observatory](#) located in [Miquelon Lake Provincial Park](#). 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 co-taught a field studies course at the station in September 2021 in which students developed and conducted research projects on many topics including ant mounds, beaver foraging of aspen, woodpecker feeding preferences, and dendroecological investigations of trembling aspen and white spruce.

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

1: Class photo from the 2021 Field Studies course that took place at the Augustana Miquelon Lake Research Station.



Camosun College (submitted by Emrys Prussin)

We were happy to welcome students back to face-to-face courses this fall, a nice return to hands-on labs.

Chris Ayles has been very involved with the *Camosun College Climate Coalition*, a student organization focusing on climate issues and action.

Douglas College (submitted by Rory Crowley)

Douglas College Geography and the Environment has returned to teaching face-to-face 90%. Great to be in person with experiential learning opportunity throughout our offerings. Our enrollments have dipped from pre COVID, but we are currently maintaining the same number of courses offered. Our Lab Technicians, **Sasha Djakovic** and **Sabrina Henwood**, received the *Above and Beyond* award from Douglas College for adapting our open lab spaces for COVID and supporting students online. In May/June Douglas College is again doing a field school in Iceland with two Geography courses. Douglas College Geography and the Environment has also contributed to the organization of the now online once per semester *Urban Challenges Forum*.

Langara College (submitted by Katrina Erdos)

The majority of classes in the Langara Department of Geography and Geology are in-person or mixed mode, although there is still considerable student demand for fully online courses. Enrolment was surprisingly strong during the online-only period in 2020/21, with increases in both domestic and international enrolment. However, enrollment in the fall 2021 and spring 2022 semesters is not as robust, and there have been efforts (currently led by Langara Global) to reorganize global recruitment as well as to develop a more organized and streamlined domestic recruitment effort.

We have had several new hires over this past year. In Fall 2020, we welcomed **Corin DeFreitas** (GEOG 1100: *Introduction to Human Geography*), and in Summer 2021, **Gary Parkholm** (GEOG 1150: *Geography of British Columbia*, and **Yue-Ching Cheng** (GEOG 1190: *Geomorphology*) joined the team. In Fall 2021, we were pleased to welcome **Natasha Fox** (GEOG 1160: *Development and Change in Asia-Pacific*).

A major change for our department was the retirement of **Nancy Ballou**, our lab demonstrator, after 31 years at Langara! **Tony Zhang** has now taken on a full-time lab demonstrator position, and **Sean Pope** has a half-time position, supporting geology courses.

All international field programs have been put on hold until at least Summer 2023, but we will offer a local urban geography field studies program in summer 2022.

The “Spacing out: Mind expanding talks in geography” speaker series continued in Fall 2021, via Zoom, with **Johanna Wagstaffe**, meteorologist and science reporter for CBC News Network and CBC Vancouver giving a very well-received presentation on the successes and challenges of communicating seismic risk from the perspective of a newsroom scientist. In Spring 2022, our next speaker series event will feature **Valorie Crooks**, **Nadine Schuurman**, and **Leah Rosenkrantz** (all from SFU Geog) in a panel presenting their research mapping COVID vulnerability and recovery in BC neighbourhoods.

Okanagan College (submitted by Arthur Green)

While many of us have returned to in person teaching, we continue to see a demand for online courses that allow students from our regions (Salmon Arm, Kelowna, Vernon, and Penticton) and international students unable to cross borders to access educational opportunities.

Presentations

Terence Day, I-Chun Catherine Chang, Calvin Chung, William Doolittle, Jacqueline Housel, Paul McDaniel. *The long-term impact of COVID-19 on postsecondary teaching and learning* panel chaired and organized by Terence Day, AAG Annual Meeting April 2021.

Michael Solem, **Terence Day**, Dean Haakenson, Di Wilmot, 2021. International Geographical Union Commission on Geographical Education: Opportunities and Challenges for Geographical Education around the world during COVID and post COVID times webinar May 16, 2021.

Terence Day *Undergraduate geography in post-pandemic universities and colleges*. WDCAG Meeting March 2021

Media

- <https://www.lapresse.ca/actualites/2021-11-20/inondations-en-colombie-britannique/quand-la-nature-reprend-ses-droits.php>
- <https://www.castanet.net/news/Kelowna/351318/Okanagan-College-displays-secret-Soviet-map-of-Halifax>
- <https://kelowna10.com/slice-of-soviet-spy-craft-on-display-at-okanagan-college>

Publications

Day, T., Chang, I.C.C., Chung, C.K.L., Doolittle, W.E., Housel, J., & McDaniel, P.N. (2021). The immediate impact of COVID-19 on postsecondary teaching and learning. *The Professional Geographer* 73(1)

Green, A.G. et al. (2021). A scoping review of the digital agricultural revolution and ecosystem services: Implications for Canadian policy and research agendas. *FACETS* 6 <https://doi.org/10.1139/facets-2021-0017>

Krishna Bahadur, K.C., **Green A.G.** et al. (2021). Opportunities and Trade-Offs for Expanding Agriculture in Canada's North: An Ecosystem Service Perspective. *FACETS* 6 <https://doi.org/https://doi.org/10.1139/facets-2020-0097>

Glaros, A., **Green A.G.** et al. (2021). Horizon scanning and review of the impact of five food and food production models for the global food system in 2050. *Trends in Food Science & Technology* <https://doi.org/10.1016/J.TIFS.2021.11.013>

Congram, D., **Green A.G.** et al. (2021). Deposition and dispersal of human remains as a result of criminal acts: Homo sapiens sapiens as a taphonomic agent. In *Manual of Forensic Taphonomy*, edited by J.Pokines and S.Symes, 2nd ed. <https://doi.org/10.4324/9781003171492-10>

Price, M., **Green A.G.** et al. (2021). *What can go right? Positive use cases for science and technology in human rights investigations*. Access Accountability Transitional Justice Working Group.

<https://www.cadal.org/research-reports/pdf/What-Can-Go-Right.pdf>

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

Undergraduate Program

There has been a lot going on in SFU Geography's undergraduate program, with enrollments generally up during the COVID-affected past year. Around 700 students are currently registered in our major, minor and certificate programs, and our courses have almost 4,900 enrollments across three very busy teaching semesters. With that level of sustained activity, our on-going program evaluations and adjustments have continued to expand programming offerings, and to enhance student experiences and learning outcomes of our students. Some notable recent changes include the following.

Our B.A. program was redeveloped to clearly focus on human geography and thus the program name was changed from "Geography" to "Human Geography". While maintaining our undergraduate education's dedication to the breadth of geographic knowledge, this revision gives students who want to focus on social science a more appropriate program structure.

Our Bachelor of Environment (B. ENV.) in Global Environmental Systems (GES) was developed relatively recently to build expertise in social and biophysical systems at the global scale. Student interest in this hybrid science/social science degree has continued to grow, so we are closing the B.A. Environmental Specialty program once all students have completed their degrees.

Our BSc Physical Geography program was redesigned to reflect industry demands in coursework, and to more adequately reflect three streamlined pathways towards recognized accreditation and certification. The "biogeophysical science" and "geoscience" streams were modified such that they target the academic requirements needed to apply for registration as a Professional Agrologist in BC or a Professional Geoscientist in Canada, respectively. These are skills-based professional accreditations required in the environmental and natural resource sectors. The "physical geography and spatial information science" stream was renamed the "geosystems and GIScience" stream and was modified to better target the requirements necessary to apply the theory and techniques of GIScience in the environmental and natural resources sectors.

We launched a new Geographic Information Science minor in Spring 2021. The *Geographic Information Science* Certificate was also recently renamed (from Spatial Information Science certificate) and modified to make it more accessible to students. Our *Urban Studies* certificate was redesigned and redeployed during Spring 2021 to better streamline the number of courses involved.

Some progress on departmental priorities in Career Development and Reconciliation was made by adding a new course to our curriculum called *Geography in Practice* (GEOG 266 W), and a requirement was added for a First Nations course in all our programs.

All of our programs include opportunities for experiential learning. Our annual physical geography field school is a good example of this, with one exercise among the suite of activities involving use of seepage meters that the students constructed/installed themselves (see photo).



Simon Fraser University (SFU) (con't)

Because of COVID restrictions this past year, our field school was re-organized into local day trips held entirely outside with very small groups of students and enhanced COVID-19 protocols (see photo).

Student response was positive, as for many, it was the only in-person instruction they received all year, and they enjoyed the opportunity to apply their theoretical skills in geography to the local landscape. When we pivoted to remote teaching during COVID, a group of faculty and sessional instructors had regular brown-bag sessions to stay connected and support each other through the transition, share ideas, troubleshoot problems.



Student News: Undergraduate Kudos

Grace Sherrell, who graduated in Spring 2021 with a BA Human Geography major, won the Canadian

Association of Geographers Undergraduate Award. This award is presented each year to the top students graduating in Geography honours/majors programmes at universities across Canada. **Grace** will be pursuing a Master's degree in Community and Regional Planning at the University of British Columbia.

Evangeline Lapalme, who graduated in Spring 2021 with a BA Geography major, an Archaeology minor and a GIS certificate, won the *Peter Schaub Memorial Book Prize Award*. This prize was established to honour the memory of Peter Schaub, a former Dean's medal award winner and outstanding geography student who was an active participant in the Geography Student Union (GSU). **Evie** was the GSU Co-Chair, and will be pursuing an Advanced Diploma in GIS at BCIT.

Esme Fysh, who graduated in Fall 2020 with a BEnv in Global Environmental Systems, a minor in Archaeology, and a Certificate in Spatial Information Systems, won the *Kim Fofonove Memorial Book Prize*. This prize was established by members of the Department and by friends of former geography student Kim Fofonove to recognize an outstanding geography major or honours student from the graduating class each year. **Esme** is now working as an Authorizations Technician with the BC Government Ministry of Forests and Lands.

Bradley Sarandi, a student in the BA Geography Major program who is also completing Minors in Dialogue, and in Development and Sustainability, and Certificates in both Environmental Literacy and Urban Studies, won the 2020 *Warren Gill Memorial Award*. This award recognizes leadership and service within the community by a Human Geography student. In addition to participating in a range of volunteer activities on campus, **Bradley** also worked with organizations in Vancouver's Downtown Eastside to found Cultivate Inclusivity, a social enterprise that partners with local employers and employment agencies to empower community members that face barriers to finding employment.

Graduate Program

Our mentorship-based Graduate Program comprises a vibrant group of 56 emerging scholars with a wide range of expertise in geography, studying for Master's and Doctoral degrees. In the past year, fourteen graduate students successfully completed their degrees and several others obtained important scholarships and awards.

Tsattia Adzich, **Adrienne Arbor** and **Joy Russell** were awarded Tri-Council Doctoral or Master's awards. **Kendra Munn** won the *ESRI Canada National Young Scholars Award* and the *ESRI Canada GIS Scholarship for SFU*. **Rachel Vimbikayi Chimuka** received a Graduate Dean's Entrance Scholarship (GDES) and **Scott Peters** a BC Graduate Scholarship. **Morgan Wright** won the *Simons Foundation Environment Award*, **Alexander Smith** the *Wayne Goeson Memorial Award* and the *Canadian Pacific/Teck Resources Award*, and **Rachel Singleton-Polster** the *Andre Gerolymatos Graduate Award* and a *Mackenzie King Open Scholarship*.

Simon Fraser University (SFU) (con't)

Completed theses & Dissertations September 2020 – August 2021

Cameron, Zach (MA), *Permaculture as a driver of social change? A textual analysis of permaculture design with perspectives from coastal British Columbia.* (**Rosemary Collard**)

Chimuka, Vimbikeyi Rachel (MSc), *Exploring carbon cycle feedbacks under negative CO2 emissions.* (**Kirsten Zickfeld**)

Doran, Carly (MA), *Place-based crowdfunding requests: examining housing-health needs and transnational educational relocations.* (**Nadine Schuurman**)

Gingerich, Travis (MSc), *The nature and timing of postglacial valley fill incision, Fraser River, Big Bar to Watson Bar, British Columbia.* (**Tracy Brennand**)

Ilori, Christopher (PhD), *Physics-based satellite-derived bathymetry for nearshore coastal waters in North America.* (**Nick Hedley**)

Mahieus, Lise (MA), *Imagining neighbourhood futures through public space: the case of Vancouver's Chinatown.* (**Eugene McCann**)

McKittrick, Matthew (MSc), *Location-based social media and GIS: Collection, spatial analysis, and cartographic visualization of geographic data from social media applications.* (**Nadine Schuurman**)

Munn, Kendra (MSc), *Extending spatial multicriteria evaluation methods for three-dimensional suitability analysis of the urban environment.* (**Suzana Dragicevic**)

Nzotungicimpaye, Claude-Michel (PhD), *Investigating the importance of methane for future climate change: wetland methane emissions, the permafrost carbon feedback, and methane mitigation.* (**Kirsten Zickfeld**)

Papalazarou, Chloe (MSc), *Investigating the dependence of the effectiveness of carbon dioxide removal on the amount and rate of removal.* (**Kirsten Zickfeld**)

Pickering, John (PhD), *Exploring health, ageing and care for short-term Canadian international retirement migrants living seasonally in Yuma, Arizona: A case study.* (**Valorie Crooks**)

Shourouni, Roya (MSc), *Protecting privacy of semantic trajectories using heuristic algorithms.* (**Nadine Schuurman**)

Tenenbaum, Howard (PhD), *United States bank migrations and deposit dollar concentrations.* (**Geoff Mann**)

Wang, Xuzheng (PhD), *Financialization and development regime building in waterfront redevelopment in Chinese port cities under neoliberalism: A case study of Qingdao Olympic Sailing Centre.* (**Peter Hall**)

Thompson Rivers University (TRU) (compiled by Samantha Stirrett & submitted by Tom Waldichuk)

Hello from Thompson Rivers University, Department of Geography and Environmental Studies!

It's been quite a year and we're all happy to be back on campus.

A warm welcome to our new part-time faculty **Emmanuel Ackom** and **Eva Snirer**.

Congratulations to our 2021 Bachelor of Arts in Geography & Environmental Studies:

June 2021:

Rylan Anderson

Scott Cramer

Samantha Loewen

Inwon Nteogwuija

Breanna Sartori

October 2021:

Seungwoo Jung

Scott Wood

Holly Antifay

Here's what some of our faculty have been up to in the past year:

Emmanuel Ackom is Assistant Teaching Professor at TRU teaching GEOG 4990_01 *Climate Crises: Taking Action* (Special Topic), GEOG 3100 *Environment, Resources & Sustainability*, GEOG 1100 *Introduction to Environmental Studies and Sustainability* and GEOG 1000 *Introduction to Earth System Science* (Laboratory). He is also Adjunct Professor at the University of British Columbia in Vancouver. Before joining us at TRU, he was a Senior Scientist in Sustainable Energy and Climate with the United Nations collaboration center for 11 years. His work at the UN provided technical and policy support in clean energy and climate change to countries in Africa and Asia, managed a large portfolio of capacity building and low carbon development policies, led UNEP'S Global Network on Energy for Sustainable Development (GNESD) and secured European Commission H2020 fund to provide cutting edge research and training of PhD students under the project Innovative Tools in Cyber Physical Energy Systems (InnoCyPES). In addition to teaching, he is an Associate Editor for the *International Journal of Climate Change Strategies and Management* (Emerald) and Editorial Board Member of the *Carbon Management* journal (Taylor & Francis) and is an expert group member (EGM) of the United Nations Economic Commission for Africa (UNECA). He recently presented his publication entitled "Close-by yet inaccessible: Urban poor communities and modern energy conundrum in Africa" at the *Sustainable Energy for Africa* (SE4A) workshop by invitation of the Belgian Academy for Overseas Sciences (ARSOM-KAOW) and the Academy for Sciences, Arts and Literature of Bénin (ANSALB) in November 2021.

David Hill began serving as department Chair on June 1, 2021. In April 2021, he was awarded an NSERC discovery grant entitled "*Integrating Very-High-Resolution Imagery into Adaptive Rangeland Management.*" This grant will support research on the analysis of high-spatial resolution hyperspectral imagery acquired using remotely piloted aircraft systems (RPASs). He also received a grant from the BC Wildfire service to investigate methods for estimating the available forest fire fuel utilising remote sensing imagery. Field work for this project involved acquiring RPAS imagery and ground reference data in the forests around Kamloops and was cut short when the Sparks Lake fire threatened the area. David is supervising three students in the Masters of Environmental Science program at TRU, who are assisting him with these projects. This fall, he also developed a new course exploring natural and technological disasters through the lens of risk, vulnerability, and resilience.

Micheal Mehta has completed a research project funded by BC Wildfire Service and TRU on risk and crisis communication models and on best practices for managing wildfire risk in the province. He also created two new courses this year in the areas of environmental and social impact assessment and on sustainability and social change - both at the fourth-year level. He has been developing new approaches for using virtual reality in the classroom and is developing curriculum using the Engage VR platform. He taught a short 5-week course on renewable energy within virtual reality where topics like solar, wind, and marine energy were explored.

Darryl Carlyle-Moses was awarded the 2020 TRU Award for Excellence in Research and Scholarship and has recently published two articles resulting from his collaboration with an international team of experts studying stemflow – the portion of precipitation that is partitioned by tree canopies that flows down the boles of trees and stems of other plants. One article, a commentary, appearing in the journal *Frontiers in Forests and Global Change*, was entitled “Commentary: What we know about stemflow’s infiltration area” [Carlyle-Moses et al. 2020 (<https://www.frontiersin.org/articles/10.3389/ffgc.2020.577247>)], while a second article stemming from a field work campaign conducted in Maryland in 2019, was published in the journal *Ecohydrology* and is entitled “Stemflow infiltration areas into forest soils around American beech (*Fagus grandifolia* Ehrh.) trees” [Llorens et al. 2021 (<https://onlinelibrary.wiley.com/doi/10.1002/eco.2369>)]. Darryl is co-supervising a M.Sc. student in Environmental Science and was busy conducting field measurements with that student throughout the spring, summer and fall of 2021 in support of a stemflow project on the TRU campus. Speaking of the M.Sc. Environmental Science program, Darryl became the Coordinator of that program in June 2021 (3-year term). Finally, Darryl taught courses in weather and climate and boundary-layer climatology last year and is preparing to teach Biogeography and a new course, Water Security, in the winter 2022 term.

Kim Naqvi is working on a series of open access first year assignments which address the UN’s Sustainable Development Goals. The assignments – still under construction -- address Goal 3, “ensure healthy lives and promote well-being for all at all ages,” through three broad approaches. First, an indicators of deprivation and a proxy indicator of over-consumption are examined at international and sub-national scales. Second, differing perceptions of obesity, are explored through secondary sources. Third, the presentation of highly processed foods versus Canada Food Guide recommendations is examined in field work in neighbourhood food outlets. While preparing the political geography background to the goals, the absence of treaty and land claims issues in current Canadian introductory texts was noted, so this is becoming a secondary project.

Tom Waldichuk continued as Chair of the department from the fall of 2020 until May 31, 2021. Similar to his colleagues, he taught online, teaching introductory environmental geography in the fall and third year rural geography in the winter. Through the fall and winter the department worked on updating course and program learning outcomes to make them more aligned with institutional learning outcomes, and it also updated its tenure and promotion document.

While teaching rural geography, Tom worked with Riipen.com (<https://app.riipen.com/tru/courses?query=geography>), a digital work experience platform, where students work on course projects that can assist non-profit and other organizations. The students worked on group projects related to rural promotion for an organization called “1000 Towns of Canada” (<https://www.1000towns.ca/>) and projects related to food security for the “Unique Get Together Society.” (<https://www.uniquegettogethersociety.com/>)

Tom also assisted a couple of students with their oral and poster presentations at the online TRU undergrad conference. He also participated in the online WDCAG conference and had his class of students watch the keynote address on the Friday evening. Tom gave a talk about solar panels in farm fields in Japan. Tom also attended the virtual CAG conference, where he gave a talk on virtual field trips.

Tom continues to chair the Geographies of Asia study group of the CAG. He organized two panels for the CAG conference in June, the Geographies of Asia Student presentation awards, and he organized and chaired the business meeting.

Tom also spent time applying for funding from the Japan Foundation to host the Japan Studies Association of Canada annual conference at TRU, which was postponed in July 2020 due to Covid-19. Tom spent much of August and September organizing presentation panel for what became an online conference during the first weekend of October.

Crystal Huscroft and **Gilles Viaud** are also full-time faculty in the department.



Looking south from TRU's Arts and Education building and **Michael Mehta's** solar compass, September 2021
(Tom Waldichuk photo)

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:Lô 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 <https://www.gteccanada.ca/reader/on-geoactivism-geopoetics/> and "Elaho" in *Poems for the Watersheds*. <https://caitlin-press.com/our-books/sweet-water/>

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"

<https://blogs.ufv.ca/president/guest-post-dr-edward-akuffo-and-dr-cherie-enns/> 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."

<https://www.abbynews.com/news/the-fraser-valley-warming-quicker-than-vancouver-why/>

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 Laura Chasmer)

The Department of Geography and Environment at the University of Lethbridge has continued to progress through teaching and research activities despite constraints associated with Covid-19. These difficulties were compounded by the most dramatic transformation of post-secondary education by a provincial government in Canadian history. We had 5 faculty members retire this past year and none have been replaced. Despite these difficulties, we are working on restructuring our Department to ensure that the high-quality programs offered in the past can continue. Teaching has continued in 'in person' and 'online' formats with a relatively large increase in students shifting majors into Geography from first to second year.

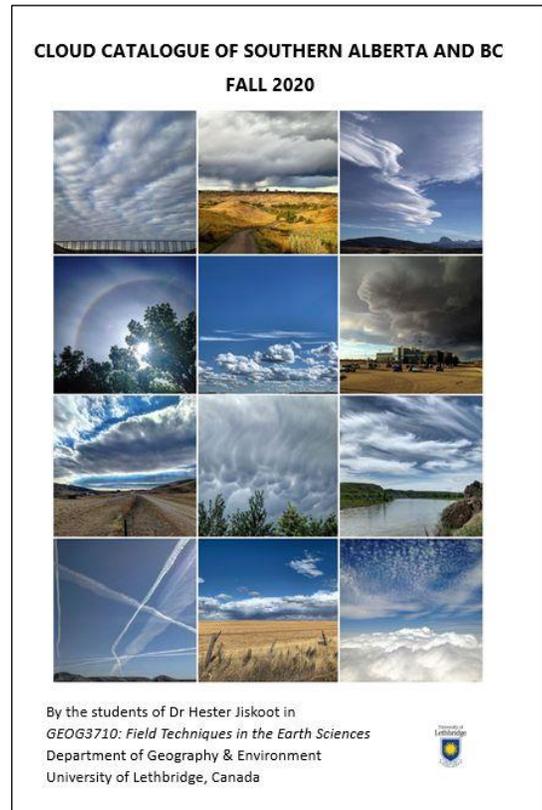
The following presents some of the highlights from our department over the last year:

Teaching

Highlights of teaching included course activities by Geography professor Dr. **Hester Jiskoot**, who gave her undergraduate students various hands-on collaborative projects, including generating a *Cloud Catalogue of Southern Alberta and BC* in GEOG3710 *Field Techniques in the Earth Sciences*. Pairs of students were assigned one of 15 cloud types, hydrometeors or photometeors (<https://tinyurl.com/y86ch3bv>).

cover page of the Cloud Catalogue (<https://tinyurl.com/y86ch3bv>) generated by student entries from Hester Jiskoot's Fall 2020 course GEOG3710 *Field Techniques in the Earth Sciences*.

In addition, **Jiskoot** also offered a field excursion in the new course *GEOG2850 Applied Geoscience: Rock, roll, quake, shake* that included an urban gravel pit, an erratic, a waterfall, a giant rockslide (photo below) and volcanic outcrops, despite Covid-19 restrictions.



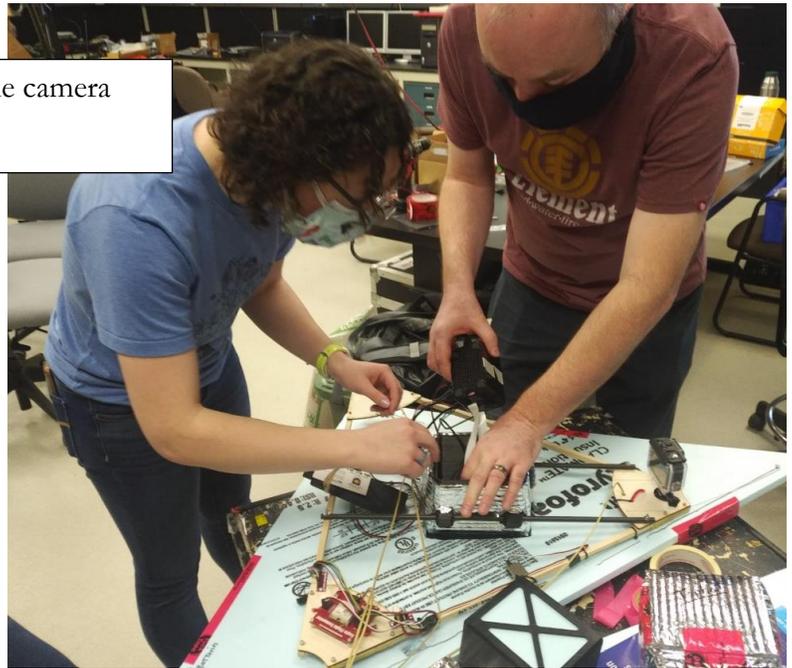
Hester Jiskoot and some of her students at Frank Slide, Crowsnest Pass, during the fieldtrip for the new Spring 2021 course *GEOG2850 Applied Geoscience: Rock, roll, quake, shake*.

University of Lethbridge (con't)

Dr. **Stefan Kienzle** produced a series of GIS tutorial videos (Stef's GIS Lab) to support online classes and to act as a permanent resource to the students. He plans to make about 50 videos publicly available on YouTube. In addition to these, Dr. **Kienzle** and other professors at the University of Lethbridge in the Department of Geography have adapted teaching to accommodate COVID-19, offering courses both in-person and online. **Kienzle** notes: "I believe various types of hybrid systems are the future of teaching and here to stay".

Dr. **Craig Coburn** taught Remote Sensing (RMTS) 4650 *Physics of Remote Sensing*, working with 12 brave students to develop a high-altitude balloon remote sensing system. The students worked on building the system and deployed it, illustrating that we continue to provide students with hands on, exciting opportunities for learning. The balloon reached the top of the atmosphere!

Students working on the camera for the balloon system.



Dr. Craig Coburn and University of Lethbridge high altitude balloon with students from RMTS 4650, ready for deployment!

University of Lethbridge (con't)

We offered a new microcredential course in Summer 2021: *Introduction to QGIS Basics* in our newly expanded GIS lab led by instructor **Marcus Dostie**.

Student Graduations and Research Successes

In addition to continued excellence in teaching, we have a multitude of student successes to report this year! Several students defended theses, including the latest group of graduate students:

Mariah Besplug (supervisor Dr. **Julie Young**), defended her MA thesis in August 2021, *Building refuge: Narratives from the private sponsorship of refugees program in the Lethbridge, Alberta area*;

Nick Noad (supervisor Dr. **Phil Bonnaventure**) *Spatial and temporal trends in surface-based temperature inversion impacts on permafrost*;

Emily Jones (supervisors Drs. **Laura Chasmer** and **Chris Hopkinson**) *Wildfire return intervals: Impacts of diminishing fire return intervals on boreal peatlands using combined field/lidar approaches*.

Multiple students were also involved in publications. These included (but are not limited to):

undergraduate student **Samuel Gerrand**, who published an article with supervisor **Laura Chasmer** following support from a NSERC USRA scholarship: 'Partitioning losses from fire combustion in a montane valley, Alberta Canada' in *Forest Ecology and Management* 496;

PhD student, **Celeste Barnes**, who published her article: 'Comparing mountain snowpack depth model results from different airborne laser scanning flight path samples' with supervisor Dr. **Chris Hopkinson** in the *Canadian Journal of Remote Sensing*.

Other graduate students in our Department also published articles. In addition, PhD student Kailyn Nelson received a NSERC CGSD scholarship for her work on carbon losses from boreal peatlands during wildfire.

Outreach and Research Dissemination

The Department of Geography and Environment hosted three national/international online conferences this year. The first was the highly successful *WDCAG conference*, led by Drs. **Craig Coburn**, **Maura Hanrahan**, and **Julie Young** with students **Wael Nasser** and **Mariah Besplug** and was hosted by @UlethGeo in March 2021. The conference brought in an excellent cross-section of student and professional presentations from universities across western Canada.

The second conference was the second annual *The Line Crossed Us: New Directions in Critical Border Studies* in June 2021. It was a free virtual event in light of the pandemic and was hosted by the Lethbridge Border Studies Group, and was a collaboration between Geography Canada Research Chair, Dr. **Julie Young** (Geography) and colleagues in History and Indigenous Studies. We were thrilled at the level of participation. There were 53 paper presentations by 73 different speakers. Presenters came from 45 institutions and organizations across 24 cities in 12 countries, representing 22 distinct disciplines. We would like other Geography Departments across Canada to "stay tuned" for news about upcoming initiatives in advance of our next conference in 2023, following @UlethGeo and @LethBordStudies.

The third conference, also hosted in June 2021, was co-chaired by @UlethGeo professor Dr. **Chris Hopkinson** in partnership with Wilfrid Laurier University Canada Research Chair Dr. **Homa Pour**. Dr. **Craig Coburn** led the technical committee. The conference brought in about 240 attendees with 120 presentations. **Hopkinson** and **Coburn** also co-authored an article: "Delegate perspectives on transitioning the 41st Canadian Symposium on Remote Sensing to a virtual event due to the Covid-19 pandemic" in *Canadian Journal of Remote Sensing*.

University of Lethbridge (con't)

Departmental Research Activities

Dr. **Laura Chasmer's** research on wildland fire expanded into the Eastern Slopes this summer, in partnership with NSERC SPG-N Canada Wildfire and Foothills Research Institute. **Chasmer** worked with a team of graduate and undergraduate students and one postdoc (NAME her/him?) to collect fire fuel data in Waterton, Banff, and Jasper, Alberta coincident with airborne and terrestrial lidar data collections. **Chasmer** and graduate students wrote several articles on the use of remote sensing and integrated field methods to understand fire fuels and post-fire vegetation regeneration in boreal and montane ecosystems.

In addition, Dr **Chris Hopkinson** led the airborne lidar campaign with PhD student and lidar operator **Maxim Okhrimenko** across the Eastern Slopes of the Canadian Rockies into NWT, to the Mackenzie Delta. The hot weather from this summer resulted in numerous fires, making it difficult to survey with airborne lidar this summer, thus holding up the team for several weeks.



Dense, colorized lidar point cloud from University of Lethbridge Titan airborne lidar system. Image of site in NWT provided by **Maxim Okhrimenko**.

Dr. **Stefan Kienzle** also noted that his research on mapping climate change had gained considerable media attention (provincially to internationally) due to the impacts of the Polar Vortex and the heat dome that gripped western Canada in the summer 2021.

A few professors were on sabbatical this year, including Drs **Julie Young** and **Phil Bonnaventure**, so stay tuned for exciting new research next year!

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

At UNBC, the department of Geography and the department Environmental Sciences joined forces last April to create the Department of Geography, Earth and Environmental Sciences (GEES).

Read about recent activities in our UNBC GEES Fall newsletter:

<https://www2.unbc.ca/sites/default/files/sections/department-geography-earth-and-environmental-sciences/202111geesnewsletternov21.pdf> . Highlights include an introduction to Dr. **Shiva Mohan**, who joined us for two years; profiles of our two Banting Post-doctoral Fellows, Dr. **Nadezhda Mamontova** and Dr. **Darian Stahl**; a summary of last June's CAG meeting, hosted by UNBC (with links to the virtual field trips); and recent faculty publications. Enjoy!

University of Victoria (UVic) (compiled by dbm)

News

B.C. Transit takes 'step backward' on accessibility by removing Victoria bus schedules, say advocates, CBC News interviewed graduate student **Colby Harder** supervised by **Dennis Cloutier** and **Trisalyn Nelson**

<https://www.cbc.ca/news/canada/british-columbia/bc-transit-removes-bus-timetables-in-victoria-1.6273905>

'Mind blowing': Grizzly bear DNA maps onto Indigenous language families: Both bears and humans may have been attracted to the same resource-rich regions (in *Science News*) interviewed **Lauren Henson**, PhD student in **Chris Darimont's** Applied Conservation Science Lab

<https://www.science.org/content/article/mind-blowing-grizzly-bear-dna-maps-indigenous-language-families>

Felipe Gomez, PhD student, (supervisor **Eva Kwoil**) is working with dBM at UVicLibraries offering Intro to GIS workshops for students and faculty across campus

Selected Publications

Acker, M. (2021). Gesturing toward the common and the desperation: Climate geopoetics' potential. *Dialogues in Human Geography* 11(1)

Ballard, K. & Bone, C. (2021). Exploring spatially varying relationships between Lyme disease and land cover with geographically weighted regression. *Applied Geography* 127

Cloutier, D. et al. (2021). 'Bare-bones' to 'silver linings': lessons on integrating a palliative approach to care in long-term care in Western Canada. *BMC Health Services Research* 21(1)

Grabs, J. & Carodenuto, S.L. (2021). Traders as sustainability governance actors in global food supply chains: A research agenda. *Business Strategy and the Environment* 30(2)

Henson, L. & Darimont, C. et al. (2021). Convergent geographic patterns between grizzly bear population genetic structure and Indigenous language groups in coastal British Columbia, Canada. *Ecology and Society* 26(3)

Rose-Redwood, R. et al. (2020). Geographies of the COVID-19 pandemic. *Dialogues in Human Geography* 10(2)

Segal, R.A. & Scharien, R.K. et al. (2020). The best of both worlds: connecting remote sensing and Arctic communities for safe sea ice travel. *Arctic* 73(4)

Sholanke, D., & Gutberlet, J. (2021). Call for participatory waste governance: waste management with informal recyclers in Vancouver. *Journal of Environmental Policy & Planning*

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

Faculty News

Don Alexander retired at the end of July, but remains active in the Geography Department.

His recent publications:

Alexander, D. 2021. Book review of *Hope matters: Why changing the way we think is critical is to solving the environmental crisis* by Elin Kelsey, in *Canadian Geographer* [in press].

---2021. Book review of *The good ancestor: A radical prescription for long-term thinking* by Roman Krznaric, *Planning West* [in press].

---2021. Stanley King, Architect Extraordinaire: In Memoriam. *Planning West* 63(1)

---2021. How 'Smart' are Smart Cities? The case of sidewalk labs, Toronto. *Future Plans* 2.

---2021. Lessons of success from False Creek South and Granville Island, *Canadian Planning and Policy*.

---Book review of *Dockside Green: The story of the most sustainable development in the world* by Kim Fowler. *Planning West* 62(4).

Recent presentations:

Factors contributing to Royal Roads University's exemplary leadership on climate issues. CREATE Faculty Research Symposium on April 2021.

Ingredients for University leadership in fostering climate resilience, part of a panel he chaired called Climate change: Challenges and opportunities at the WDCAG [virtual], University of Lethbridge, March 2021.

with Rabi Al-Hasan, gave guest presentation, *The Challenges Facing Rural African Women* in SCIE 350: Technology for Developing Countries, June 2020.

In addition, **Don** has continued his work as co-chair of Vancouver Island University's *Sustainability Advisory Committee* and on the *Annual Urban Issues Film Festival*, now into its fourteenth year.

Matthew Bowes and **Dr. Rick Rollins**, Professor Emeritus, in VIU's Department of Recreation & Tourism completed their Regional Initiatives funded project this fall: *Nanaimo Trail Survey 2021: Economic impact of mountain bike tourism; Management considerations and user characteristics*.

Over the 2021/2022 academic year, **Matt's** urban and regional planning and management students are working with the Campbellton Neighborhood Association, in Campbell River, to develop an action plan to help chart the course for this transitional neighbourhood over the next decade.

Matt, VIU Geography's **Jeff Lewis**, and VIU Political Studies professor Mark Williams contributed a chapter on Climate Change in the Asia-Pacific in **Mark's** 2021 forthcoming book, *The Politics of the Asia-Pacific: An Active Learning Textbook*.

In Spring 2021, **Matt's** sustainable resource management students worked with VIU's Mount Arrowsmith Biosphere Region Research Institute (MABRRI), and the Elders Council for parks in BC with some preliminary planning work on West Ballenas Island, recently acquired Parks Foundation. The work in this class will assist Snaw-naw-as Government, Provincial Government, and Federal Government determine what type of future perhaps, Protection/ Parks/Economic Opportunity, etc they may wish for the Ballenas Winchelsea Archipelago in the near future.

Hannah Wilson's past academic year was dedicated to a complete conversion of her lab-based techniques and physical geography courses for blended and online offering formats. A success story to emerge from this was a series of projects in which cartography students crowd-shared their geo-knowledge on a chosen topic through use of OpenStreetMap.

Vancouver Island University (VIU) (con't)

Jeff Lewis continues as a faculty Advisor for ACER, *Awareness of Climate Change through Education and Research*, funded by NSERC and SSHRC. ACER is a public outreach initiative led by an inter-disciplinary group of students and faculty at Vancouver Island University, which is dedicated to increasing the public's understanding of the science and implications of climate change through presentations, hands-on demonstrations and interactive activities. On top of regular school and community presentations, ACER is currently working on hosting a climate change symposium in the spring of 2022 focused on the economics of climate change. In 2021, **Jeff** gave a number of climate change presentations to various groups including the Vancouver Island Emergency Preparedness Conference, VIU Elder College, as well as to local community groups and a number of schools in the Parksville-Qualicum (SD69) and Nanaimo-Ladysmith (SD68) School Districts.

Pam Shaw is delighted to report that the Master of Community Planning Program has just started its 7th year with another full cohort. Five classes have graduated and are engaged across the globe in addressing a wide range of planning issues. The program continues to focus on creating applied opportunities for students: even with the shift to entirely online classes for 2020/21, the students still engaged with the City of Nanaimo on the Re-Imagine Nanaimo project and with other partners on a wide range of community based research and applied projects. The *Urban and Regional Planning Certificate* (an optional certification open to students in the program) has also been popular, and most students are choosing to complete it along with their graduate degree. Working in cooperation with the National Aboriginal Lands Management Association (NALMA), approval was achieved in 2021 for a new *Professional Indigenous Lands Management Certificate*. The Certificate is a stand-alone accreditation at VIU, or students who complete the Certificate can ladder into the NALMA Level 2 Training. Additionally, students who have NALMA Level 2 plus an undergraduate degree are guaranteed a placement in the *Master of Community Planning Program*. This Certificate was delayed for one year due to the pandemic, but was successfully offered online in Summer 2021. It is anticipated that the Certificate will proceed with the first course as face to face and the other five courses online in subsequent years. The *Mount Arrowsmith Biosphere Region Research Institute* (MABRRI) continues to engage undergraduate and graduate students a variety of research projects relating to human/nature interactions in fragile environments. MABRRI is also a partner in the Canadian Mountain Network, a federally-funded Network of Centres of Excellence.

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 2022.