

## ***SPRING 2013 NEWSLETTER***

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### **MESSAGE FROM THE PRESIDENT**

The 55<sup>th</sup> WDCAG conference took place from Thursday, March 7 to Saturday, March 9 at the University of Lethbridge. There were 220 who attended the conference, with representation from all over BC and Alberta. As well, there were attendees from Western Washington University, University of Regina, Ontario, the Maritimes, the UK, and from Agriculture and Agri-Food Canada. There were a total of 80 student presentations, consisting of 46 papers and 34 posters, in addition to 32 faculty presentations.

The Thursday night ice breaker took place at a pub/lounge in Lethbridge's historic downtown. The Friday field trips included visits to Head Smashed In Buffalo Jump, which is a UNESCO heritage site, Sundial Medicine Wheel, Fort Whoop-Up National Historic Site, Lethbridge's downtown, and Agriculture and Agri-Food Canada's Lethbridge Research Centre. The weather was a clear and crisp (-16 degrees C to start the day), and luckily there was no wind while about 25 of us participated in the downtown field trip. The Friday keynote speaker was Dr. Alwynne Beaudoin, from the Royal Alberta Museum who talked about the likely impact of the Mt. Mazama volcanic eruption on people living 7600 years ago using narratives that she created for the impacted inhabitants.

The conference sessions on the Saturday were well organized. The morning and afternoon coffee breaks were half an hour long, which allowed enough time for people to look at the posters and to evaluate the student ones. The posters were located close to the coffee, and there was enough space to keep them posted up all day. Also, the program was in an attractive foldable map format this year, which made it easy to quickly get an overview of who was presenting in which session.

I want to thank Hester Jiskoot for organizing the conference with help from Trina Filan, Ian MacLachlan, Craig Coburn and other faculty from the Geography Department. The student volunteers also did a great job helping in all aspects of the conference— thank you!

One hundred and forty people attended the banquet on Saturday evening. The banquet was at the Lethbridge Inn, where we were treated to an all you can eat buffet, complete with wine. The highlight of the night was handing out the student awards for best paper and poster presentations -- the top two presenters for each category are listed below. I would like to commend all the students for their informative and enlightening

poster and paper presentations. I was pleased with how well Hester and Trina co-ordinated the evaluation of paper and poster presentations before the conference started – I definitely recommend that this same strategy is used at next year’s conference. Congratulations to the award winners!

Best PhD Paper Presentations:

1<sup>st</sup>. **Rongxu Qui** (Wei Xu), U. of Lethbridge, “A Gravity-Spatial Entropy Model for Measurement of Urban Sprawl”

2<sup>nd</sup>. **Qiqi Wang** (Theresa Garvin, Candace Nykiforuk), U. of Alberta, “The lived experience and sense of place among urban and suburban elderly Chinese immigrants in Edmonton”

\*There was no award given for best PhD poster presentation.

Best Masters Paper Presentations:

1<sup>st</sup> . **Stephnie Watson**, U. of Lethbridge, “Rethinking Public Transportation Funding”

2<sup>nd</sup>. **Peter Kennedy**, (Jinkai Zhang, Karl Staenz), U. of Lethbridge, “Automatic Template-guided Clustering and Labelling of Tree/non-tree Land Cover”

Best Masters Poster Presentations:

1<sup>st</sup> . **Morgan Tymko**, U. of Alberta, “When you smoke, they smoke: Children’s rights and opinions about vehicular smoking bans.”

2<sup>nd</sup>. **Ashley Bracken**, Craig Coburn, Karl Staenz, U. of Lethbridge, “Detecting Soil-Erosion in Semi-Arid Mediterranean Environments Using Simulated ENMAP Data.”

Best Undergraduate Paper Presentations:

1<sup>st</sup> **Joanna Yang**\_(with Abigail Manuel, Dora Ng, Adrian Kan), U. of British Columbia – Vancouver, “Intangible and Tangible Heritage Preservation in Vancouver and Hong Kong”

2<sup>nd</sup>. **Jed Zimmerman**, Shane Doddridge, (U. of Northern British Columbia), “Interdisciplinary Delegation to Ayacucho, Peru: Exemplifying Potential for Human Rights Advocacy Through GIS “

Best Undergraduate Poster Presentations:

1<sup>st</sup>. **MacKenzie Crawford**, Kings University College, “The environmental risk of using a P3 Funding Model for Edmonton’s Southeast Lightrail Transit Expansion”

2<sup>nd</sup>. **Jacinda Johnston** and Terri McCausland, Kings University College, "Dripping Dry: Water Scarcity in Rockyview Country"

After the announcement of the student awards for oral and poster presentations, many students asked for, and were given, their presentation evaluation forms. At next year's conference I hope we can continue to give students constructive feedback on their presentations.

**The 2013 executive of the WDCAG consists of:**

Craig Coburn (Secretary-Treasurer); Fes de Scally, Hester Jiskoot, David Jordan, and Ben Moffat (Members –at-Large); Jim Windsor (Awards Officer); Pam Shaw (BC Education Chair); Claire Beaney (Newsletter Editor); Laura Lajeunese (BC Student Representative); Susan Griffin (Alberta Student Representative); Theresa Garvin (Past President); Tom Waldichuk (President)

N.B. The Archivist and Vice-President's positions are vacant.

The WDCAG executive met to discuss the future of our Western Geography. We agreed to change the journal into an online publication, which was later approved at the AGM. Craig Coburn agreed to become editor of physical geography and GIS submissions, which was held by Dr. Darryl Carlyle-Moses (thank you Darryl for your help), and Damian Collins will continue to be editor of human geography submissions. Once articles are accepted, they will be posted on the journal website. Craig Coburn has agreed to create a new website for the journal. For the time being, could you please use the following website: <http://www.geog.uvic.ca/wcag/publications.htm>. The terms for submission are on the journal's website. The journal is eager to receive student submissions.

At the AGM we also agreed to enter exploratory talks with the Prairie Division about having a joint publication (the Prairie Division puts out Prairie Perspectives after its annual conference). We also agreed to open up Western Geography to submissions from the Prairie Division.

Jim Windsor announced that the recipient of the J. Alistair McVey award for teaching excellence was Dr. Ian O'Connell of the University of Victoria Geography Department. The other two faculty awards were not awarded this year, and on that note, Jim reminded Division members to please send him nominations for the awards. The Ineke Dijks Graduate Presentation Award for best graduate paper presentation was awarded by Hester Jiskoot to Rongxu Qui (and Wei Xu) of the U. of Lethbridge in the PhD category and to Stephanie Watson, also of U. of Lethbridge, for the best Masters presentation. As well, there was approval given to Ben Moffat's proposal that the Division give posthumous recognition to geographers in the Division who have recently passed away.

Craig Coburn mentioned that all student groups travelling to the conference would receive a minimum travel grant of 50 dollars and that the cheques will be issued to student organizations. We are grateful for the student travel grant from the CAG.

This was my inaugural AGM as president of the Division. I would like to thank Ben Moffat for helping me chair the meeting and for taking on the role as Acting President. I would also like to thank Craig Coburn for agreeing yet again to be the secretary-Treasurer, which has given the Division added stability over the years. I would also like to thank Jim Windsor for his advice regarding the future of the Division's journal and the promotion of awards. Finally, I would like to thank Theresa Garvin in her role as president since 2011. Theresa worked especially hard at revising the division's constitution, and she was a great mentor for me as incoming president.

Next year's conference will be at the University of Victoria in March (actual date to follow), which should be close to cherry blossom viewing time. Please tell your friends and colleagues about the conference. I would love to see more people attend from our bigger universities in the Division as well as students and instructors from our smaller colleges around BC, Alberta and Washington State. Our conference is still small enough, so that meaningful feedback on presentations can be received and one can meet new colleagues or reconnect with old ones. Have a great summer and see you next year in Victoria!

*Submitted by Tom Waldichuk*

#### **NEWS FROM THE AUGUSTANA CAMPUS, UNIVERSITY OF ALBERTA**

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

**Glynnis Hood** taught Resource and Environmental Management and Biogeography during the Fall Term and is teaching Statistical Methods for the Natural Sciences, Human Activities and the Natural Environment, and Environmental Impact Assessment this Winter Term. She continues to conduct research on wetland biodiversity, landscape modification by beavers, and methods to reduce human-beaver conflicts through adaptive management. Her MSc student, **Nils Anderston**, who is investigating how amphibians respond to beaver-modified wetlands in east-central Alberta, will defend his thesis in mid-April. She and a former Directed Studies student, **Chantal Bromley**, have just published the results of an ice phenology/beaver study in *Mammalian Biology*. She and her colleague Dr. David Larson have another paper in review that is a result of 3 years of research on aquatic macroinvertebrates in beaver-modified wetlands. During the Winter Term, she and her Directed Study student, **Tom Kotlarz**, conducted a field study that used baited camera traps examine habitat use of mesocarnivores (e.g., fisher, coyotes, and weasels) in the Cooking Lake Moraine in east-central Alberta.

**Glen Hvenegaard** is teaching a capstone course in Environmental Studies and Geography, a new wildlife ecology course, and an ecology lab. At Christmas, he received a Teaching Leadership Award from the Augustana Faculty. Recently, he presented at the Prairie Conservation and Endangered Species Conference in Red Deer, and at the George Wright Society Conference in Denver. He published new articles on whale watching and ecotourism principles (with former directed studies student **Nhial Tiitmamer Kur**) in *Tourism in Marine Environments* and insect festivals (with 4 colleagues) in *The Management of Insects in Recreation and Tourism*. He and Elizabeth Halpenny edited a special issue of *Parks* on tourism and the Aichi Targets for conserving biodiversity. He and Lars Hallstrom are continuing their analysis of rural community sustainability plans. Glen and his colleagues are anxiously awaiting the return of Purple Martins (outfitted with light-sensitive geolocators last summer) to Camrose in order to determine their migration timing and patterns. Glen, Glynnis, and their colleagues are nearing the home stretch in fund-raising for a sustainability science research centre to be located at Miquelon Lake Provincial Park. He continues with other research projects on wildlife festivals and park interpretation.

For more information, contact Dr. Glen Hvenegaard at [glen.hvenegaard@ualberta.ca](mailto:glen.hvenegaard@ualberta.ca) or Dr. Glynnis Hood [glynnis.hood@ualberta.ca](mailto:glynnis.hood@ualberta.ca). Check our program websites at <http://www.augustana.ca/programs/science/geography/> and <http://www.augustana.ab.ca/programs/science/envscience/>

*Submitted by Glen Hvenegaard*

## **NEWS FROM CAMOSUN COLLEGE**

A program review of Geography was completed and a number of new second year physical geography and technique courses were launched to match the program requirements at the University of Victoria. New courses on Geographies of Development, Remote Sensing and World Regional Geography are being planned for 2013- 2014. The World Regional Geography is part of the new Global Studies Program to be offered by the Humanities and Social Sciences Departments starting September 2013.

A new project-based course Service Learning and Global Issues, funded by the Camosun College President's Fund, was offered as a pilot in Winter 2013 by **Francis Yee** who team taught this course with Francis Adu-Febiri from Sociology. They will also develop this new course and two other Geography and Sociology courses in an on-line format with BC Campus funding support.

Social Sciences Department's first field school to Africa will be led by the same Francis and Francis team in May 2013. Thirteen students will join them to visit women organization, rural development association, and eco-tourism project in partnership with a local NGO, VIDEA.

**Chris Ayles** and a colleague will be traveling to Costa Rica this spring to look into setting up a future international field school, with the likely foci of physical geography / natural hazards and cultural anthropology. He is using this as an excuse to step down as chair of the Geography Articulation Committee before its annual meeting at Langara.

*Submitted by Francis Yee*

## **NEWS FROM SIMON FRASER UNIVERSITY**

This update from SFU Geography focuses on the exciting and important work being undertaken by some of our 55 graduate students.

**Kimberly House**, MSc Candidate: Landscape and Conservation Science Research Group, Supervisor: Meg Krawchuk: Over the past 15 years in north central British Columbia, a mountain pine beetle (MPB) outbreak of unprecedented size has impacted the majority of mature lodgepole pine forests, resulting in unforeseen volumes of standing dead trees, with impacts on current disturbance regimes, ecosystems, and floral and faunal communities. Kimberly is interested in how stand-replacing wildfires interact with MPB-killed trees to affect abiotic and biotic drivers of insect and bird communities at multiple scales. This research is important for building our understanding of MPB-altered ecosystems and the impacts of wildfire when prefire conditions have been shifted away from live forest landscapes.

**Josuha Labove** is a PhD Candidate interested in borders—both as a geopolitical production but also as a clue to the production of unique legal spaces. How is space made and made meaningful? Working with Nicholas Blomley, his research aims to consider how multiple and intersecting claims to jurisdiction, sovereignty, and policing (re)define law and space as mutually constitutive and performative. Taking border preclearance operations as a case study, he investigates the infrastructure and bureaucracy involved in the construction of 'borderless North America' as a means to unsettle the taken-for-grantedness of borders and their role in Canadian and American daily life.

**Hung Chak Ho (Derrick)** is a PhD student. His primary research focuses on mapping the urban heat island of Vancouver, BC, applying statistical modelling techniques to remote sensing data to the spatial distribution of air temperature. The results will be beneficial for environmental health planning, specifically to reduce the health risks from heat stress.

**Tyler Herrington**: MSc Candidate: Supervisor: Dr. Kirsten Zickfeld: Tyler's research utilizes the University of Victoria Earth System Climate Model (UVIC ESCM) version 2.9 to explore the cumulative carbon emissions compatible with avoiding tipping points in several regions of the world. This work is inspired by Zickfeld et al

(2009) who explored the cumulative carbon emissions compatible with achieving the 2°C Copenhagen target. He is investigating four potential tipping points: disappearance of summer Arctic Sea Ice; disappearance of the Greenland Ice Sheet; shutdown of the Atlantic Thermohaline Circulation; and dieback of the Amazonian Rainforest. The research will provide important information to policy makers regarding the “carbon budget” we have to work with, as well as give us some insight into whether or not these tipping points are path dependent (i.e. sensitive to the rate of CO<sub>2</sub> emission).

**Cristina Temenos** is a PhD Candidate in the Department of Geography, working with Eugene McCann. Her research interests are in policy mobilities, urban social movements, and the politics and practices of public health. Her PhD research engages these interests through a focus on the geographies of harm reduction drug policy in cities in Europe, North America, and the Caribbean. Cristina is interested in the ways that social movements produce and mobilize knowledge about health and human rights to advocate for policy change in cities, and the ways that policy helps to (re)shape the social lives of cities. She is a contributing member of the Imagining Urban Futures (IUF) research program (<http://research.northumbria.ac.uk/urbanfutures/>).

**Jonathan Cripps**: PhD: Supervisor Tracy Brennand: Models of future climate change predict that fresh water from melting ice sheets may disrupt the oceanic thermohaline circulation, creating a need to understand the rate and scale of meltwater generation and release from continental ice sheets. The Cordilleran Ice Sheet (CIS), which existed over British Columbia during the last glacial episode, provides an opportunity to study meltwater storage and release. This project will quantify the volumes of several paleo-glacial lakes which developed during CIS retreat, determine whether their drainage was catastrophic, and estimate the rate of freshwater transfer to the ocean.

As a member of the Health Geography Research team at Simon Fraser University, **Britta Ricker's** PhD research focuses on the use of tablet computers to gather spatial information for trauma surveillance purposes. Her research interests converge around the multifaceted spatial information collection and dissemination opportunities afforded by mobile computers. This includes the study of location-based services (LBS), volunteered geographic information (VGI) and geovisualizations for spatial learning and mobile health initiatives. Her supervisor is Nadine Schuurman.

**Gretchen Hernandez** is a PhD Candidate in Geography at SFU. Her dissertation research focuses on the conceptual and structural transformations occurring in Bolivia that support the emergence of indigenous-led initiatives to improve economic, social and environmental well-being at the local level, within a framework of increasing territorial autonomy and decentralized governance. The research is situated at the intersection of several areas of theory, including social economy, the importance of place in development planning, and indigenous self-determination. Her supervisor is Dr. John A. Brohman, a development geographer with

expertise in Latin American and popular development.

Recent theses

**Maureen Attard**, MSc: Evaluation of aDcps For Suspended Sediment Transport Monitoring, Fraser River British Columbia

**Ryan Bradley**, MSc: Coherent Flow Structures and Suspension Events over Low-angle Dunes: Fraser River, Canada

**Charles Fritz**, MSc: Obesity and the Built Environment: a spatial analysis of two Canadian Metropolitan Areas

**Sarah Howie**, PhD; Bogs and their lags in coastal British Columbia, Canada: characteristics of topography, depth to water table, hydrochemistry, peat properties, and vegetation at the bog margin

**Jared Peters**, MSc: Late Pleistocene Evolution of Glacial Lake Purcell: A Potential Floodwater Source to the Channeled Scabland

**Jacquelyn Shrimmer**, MSc, Influences on Hyporheic Exchange in a Small Coastal British Columbia Suburban Stream

**Blake Walker**, MSc: Spatial-Temporal Epidemiology of Violent Trauma in Built Urban Environments

*Submitted by Nick Blomley*

**NEWS FROM UNIVERSITY OF THE FRASER VALLEY**

The Geography Department at UFV has spent the past academic year immersed in a departmental review. The production of the “self-study” document was completed in early April and we await arrival of external reviewers, Roger Hayter, (SFU) and Colin Laroque (Mount Allison), in May. Production of the self-study was a laborious task, overseen by our Head, **Michelle Rhodes**, assisted by faculty members **Claire Beaney** and **John Belec**. The review occurs at an important juncture in Geography’s development at UFV. The 2000’s was a period of major growth; the department now houses 11 full-time, permanent faculty, 2 half-time permanent faculty, 1 faculty emeritus, and 5 adjunct faculty. In 2012-13, the department was also home to two post-doctoral fellows and several sessional faculty members, including four that are more senior (past probation) non-permanent instructors. The department also has one staff position, that of the department assistant. Concomitant with the growth in faculty and students, has been an expansion in program offerings. It’s



expected that the departmental review process will provide crucial insight into the inevitable issues of identity and direction.

### Student Research

Providing opportunities for undergraduate research is a hallmark of Geography at UFV and is evident in the faculty research summaries, below. We are justifiably proud of the success that many Geography students have with their work within the institution, and beyond. At UFV's recent student research competition (March 2013), for example, four of the eight awards were received by Geographers including:

- **Steve Clegg**, The Secret Life (and Death) of Fraser Valley Maple Trees (Supervisor: Michelle Rhodes).
- **Ariel Brown**, Radioisotope Dating Ancient Floods in the Fraser Lowland (Supervisor: Jonathan Hughes).
- **Paul Stephany**, Representations of indigenous territory: Mapping Blackfoot oral tradition using GIS (Supervisors: Ken Brealey and Michelle Rhodes).
- **Kelly Hodgins**: The impact of the Seasonal Agricultural Workers Program (SWAP) on Chilliwack Agriculture (Supervisor: Garry Fehr).

The department has also seen what is likely a record number of students gaining entry to graduate and professional programs across Canada this year. We look forward to hearing about their future successes!

### Student Internships

UFV Geography student interns **Helma Kardux**, **Shaun Koopman** and **Jason Kowal** have been working on an AUCC/CIDA funded project in Chandigarh, India since late December 2012. During this time they have facilitated the participation of 120 more families in the urban agriculture project and collected household data from 3000 households for the environmental vulnerability mapping project in the Janta Colony slum. In addition to the agriculture and mapping components, the students have also used their time to teach first aid and basic computer literacy, and to upgrade an existing sewing livelihoods program through new product development and internet marketing. There will be four more students leaving for Chandigarh in August to continue working with Panjab University on this project.

The University of the Fraser Valley, in conjunction with Ardhi University's Institute of Human Settlements Studies, are continuing their AUCC funded internship program "Sustainable Human Settlements" under the Students for Development programme. Four more students from UFV will be hosted as interns by Ardhi University, working on sustainable schools upgrading, informal settlements upgrading, mapping and GIS. The project has had many successful outcomes including a successful celebratory event where some project

funding was raised hosted by GDS in December 2012. <http://blogs.ufv.ca/blog/2012/11/pennies-for-playgrounds-urban-planning-childrens-rights-and-climate-change-ufv-sponsored-exhibit-opens-dec-6-at-the-reach/>

### Study Tours

The department is gearing up for two study tours in the next 6 months. First up is the Arizona study tour, offered in conjunction with the Department of Biology. Three faculty—including Geographers **Steve Marsh** and **Michelle Rhodes**—will be taking 15 students to study human and plant adaptation to arid and semi-arid environments, and the evolution of sustainable (or not-so-sustainable) communities. The group will leave in mid-May to enjoy what's sure to be a *very* warm week in Tucson and a week in Flagstaff battling Memorial Day crowds at the Grand Canyon. Then, in September, the annual 6-day *Adventures in Geography* mini-tour, led by **Garry Fehr** and **Olav Lian**, will take 11 students to central BC. The group will spend most of their time in Kamloops, Clinton, and Wells Gray Park.

### Programs

This summer, the departments of Geography and History will be working with representatives of the Sto:lo Nation to offer the *Indigenous Maps, Films, Rights, and Land Claims* certificate. This 4-week, 3-course (12 credit) intensive program is designed to introduce students to a range of conceptual and practical skills that are of direct relevance to the history, communication, implementation, and critique of rights, title, and land claims. It focuses on a range of representational practices, including, but not limited to, film, oral histories, documentaries, surveys and maps, and legal discourse analysis, and their importance to the Indigenous land and rights process generally, but with a focus on British Columbia in particular.

### Faculty Research

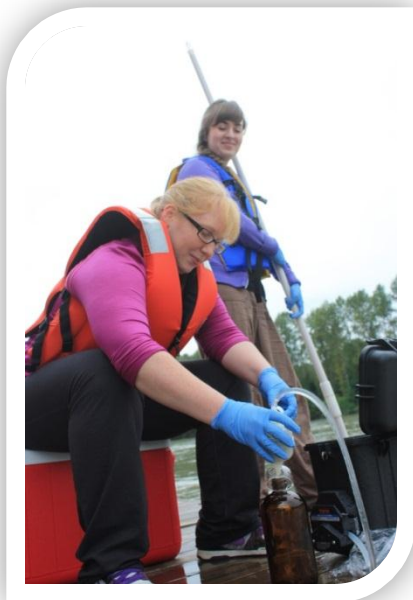
Partly as a result of Geography's faculty expansion in the mid-2000's, the Department is currently experiencing a sabbatical tsunami. Between 2012 and 2014, nine Geography faculty will have started or completed a sabbatical. This includes **Claire Beaney**, who has been completing courses towards the BC Instructor Diploma. To date, she has finished 4 courses: Foundations of Adult Education, Curriculum Development, Delivery of Instruction and Evaluation of Learning. These courses have made a significant impact in thinking about course and program development as well as strategies for course delivery. Claire is engaging in conversations with colleagues in the department as well as in the Collage of Arts about teaching pedagogy and best practices in the classroom largely stemming from work on the BC Instructor Diploma.

**Jonathan Hughes** will be on sabbatical starting fall 2013 to investigate the geochemistry of paleoflood deposits in the Fraser Lowland. Recent graduates (2012) of UFV and Jonathan's Paleoecology Laboratory have accepted M.Sc. positions at McGill University, Simon Fraser University, and UBC-Okanagan.

Also about to embark on sabbatical is **Scott Shupe**, who is set to go on leave this September. Scott will be continuing his research on the use of remote sensing to analyze the eastern Fraser Valley's airshed.

While on her sabbatical, **Cherie Enns**, will be co-teaching a course in the Masters of Housing program at Ardhi University, through faculty exchange. She will be working with masters students who are interested in affordable housing and sustainable housing developments. Cherie has also been invited to present on child friendly communities at a conference in Nepal <http://childfriendlynepal.org/index.php/expression-of-interest>. Cherie is also working to create an e-learning/mobile learning project wherein students would be able to access courses and classes through mobile technologies in partnership with several other organizations and the University of the Fraser Valley. The proposed course integrates climate change mitigation, sustainable development (on an International scale), and sustainable settlements.

**Olav Lian** and postdoctoral fellow **Christina Neudorf**, will continue their field work on Calvert Island (BC central coast) on long-term coastal evolution, in June. This research, funded by the Hakai Beach Institute, is in collaboration with Ian Walker (University of Victoria) and his research students. Olav continues his collaboration with Darlene Lim of NASA's Ames Research Center on the Pavilion Lake Research Project, and will be busy this spring contributing to a special issue of Geobiology related to the investigation of microbialites in Pavilion and Kelly Lakes."



**Steve Marsh** will continue his collaboration with Woods Hole Oceanographic Institution prior to and during his sabbatical starting in Winter 2014. This partnership has been ongoing for the past four years, and also involves other faculty from the departments of Geography and Biology. Three UFV students (two Geography and one Biology) will be headed off to the Woods Hole facilities at Woods Hole, MA this fall to be introduced to the Institution's labs and work alongside Woods Hole researchers analysing Fraser River samples. *(Left photo shows Geography students Michelle Bennett, seated, and Rosalie Lyumes shown collecting water samples at Fort Langley.)* This fall will see the opening of the "My River, My Home" children's art exhibit at the Fraser River Discovery Centre in New

Westminster. This exhibit includes children's art collected from the river basins being studied as part of the Global Rivers Observatory overseen by Woods Hole Oceanographic Institution. UFV Geography, through the efforts of Steven Marsh, continues to participate in the Global Rivers Observatory project with Woods Hole Oceanographic Institute.

**Ken Brealey**, seconded to the position of Acting Associate Dean of Arts, recently completed a Douglas Treaty Claim for the Esquimalt First Nation and their legal representatives. The litigation is going to trial later this year. He also finished a large report and map series on Cowichan Tribes Land Use and Occupancy for the Cowichan Tribes and their legal representatives, first started in 2011. This work also provided paid research opportunities for Paul Stephany who will continue in graduate students at Guelph University in September.

**Lenore Newman**, the Tier II CRC in Food Security and Environment, will continue finishing work a number of manuscripts and a book. As she's doing so, she'll also be keeping us all up to date on her explorations into Canada's shifting food culture through posts on her blog: <http://www.sandandfeathers.com/>.

Stay in touch with UFV Geography:

We're now on Twitter: <https://twitter.com/UFVGeography> and @UFVGeography

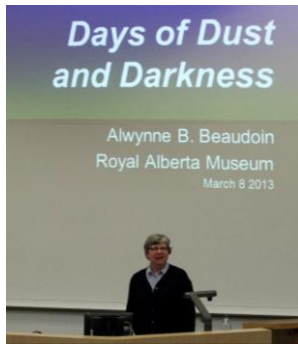
Homepage: <http://www.ufv.ca/geography>

*Submitted by John Belec*

## **NEWS FROM UNIVERSITY OF LETHBRIDGE**

### WDCAG-2013 Annual Meeting

The Department of Geography at the University of Lethbridge hosted the *55<sup>th</sup> Annual Meeting of the WDCAG*, 7-9 March 2013, which was attended by about 220 delegates who came from all wind directions: as far as Bellingham, Vancouver Island, Regina and Prince George. The program started with an icebreaker in a local pub, where many generations of geographers mingled, and during which a spontaneous jam session occurred. Friday's four field trips were a great success and well attended albeit a little chilly for some the west-coast geographers who were not prepared for the continental climate with morning ice fog. We offered a full day Geoarchaeology trip to Head-Smashed-In Buffalo Jump and Gem of the West Museum, led by **Shawn Bubel**, an Urban Geography walking tour of Downtown Lethbridge, led by **Ian MacLachlan**, a Historic Geography tour of Fort Whoop-Up National Historic Site, organised by **Dan Johnson**, and an Agricultural Geography tour of the Lethbridge Research Centre, organised by **Anne Smith**.

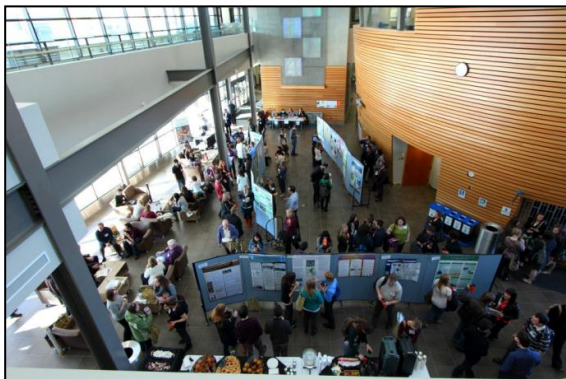


Friday evening's keynote address was by Dr Alwynne Beaudoin (photo), Head Curator Earth Sciences at the Royal Alberta Museum, who, in her talk *Days of Dusk and Darkness*, vividly explained how the 7600-year-old Mt Mazama volcanic ashfall affected western Canada. She used scientific, anecdotal and narrative presentation styles and even had the audience close their eyes to experience the post-eruption environment.

As always, the main event of the WDCAG-2013 meeting was the conference on Saturday, where we had over 40 poster and 70 oral presentations in 5 parallel sessions, covering the full spectrum of geography. (Photo right: *Gary Weikum (UofL), Brian Goehring (TRU), and other delegates enjoying the session "Urban & Regional Vulnerability and Hazards".*)



*UofL's Tom Johnston, Trina Filan, Ian MacLachlan and Wei Xu interacting with other WDCAG geographers at the posters.*



*Poster and paper sessions were held in Markin Hall one of the great new facilities at the UofL.*



The WDCAG-2013 was concluded with a traditional Buffet-style Banquet, where novelties included a slideshow of the Scavenger Hunt photos taken around Lethbridge, and a much-coveted dish of rollmops (pickled herring). We awarded three Scavenger Hunt trophies: the first prize, congrats once again, went to the students of TRU.



The WDCAG awards for best student oral and poster presentation were announced by chief judge Tom Waldichuk. Two Lethbridge graduate students won in their categories: **Stephnie Watson** (MSc oral; left picture) and **Rongxu (Andy) Qiu** (PhD oral; right picture). Congrats to all students



for presenting such great quality geography research!

We finished the evening by dancing the night away in country-style.

As Chair of the organizing committee (undersigned **Hester Jiskoot**), I would like to thank **Ian MacLachlan** and



**Trina Filan** for their fine work as co-organizers, and **Charmaine Bonifacio** for being the most outstanding volunteer coordinator of about 20 student volunteers from our University of Lethbridge Geography Club (ULETHGC) and Graduate Student body. Many others at the UofL also contributed time and effort to making this a smooth conference. (Photo *Conference chair Hester Jiskoot surrounded by WDCAG-2013 volunteers at the Banquet.*)

We would further like to thank Alwynne Beaudoin (keynote speaker) and Anne Godlewska (Past-President CAG), for making their way to Lethbridge and for contributing to the meeting. Last but not least, many thanks to all the students and faculty attending this year's meeting for making it such a great success. The conference and keynote talk ended up on the front page of the Lethbridge Herald, our local newspaper! We hope to see everyone again at the WDCAG-2014, which will be held at the University of Victoria.

More information, conference material, and photos of the WDCAG-2013 Annual Meeting can be found on the conference website ([www.wdcag2013.ca](http://www.wdcag2013.ca)) and facebook page ([www.facebook.com/groups/wdcag2013/](http://www.facebook.com/groups/wdcag2013/)).

## Faculty news

Our department has 17 faculty and 2 academic assistant, and a superb administrative assistant Margaret Cook. We are pleased to announce that this Spring, **Chris Hopkinson** has joined us as *CAIP Research Chair in Terrestrial Ecosystem Remote Sensing*. Both he and his partner Laura Chasmer presented at the WDCAG2013 conference, and we welcome them both warmly to Lethbridge. In September 2012, **Matthew Letts** became Associate Dean: we now have two geographers in the Arts & Science Dean's office, as **René Barendregt** has been Associate Dean since 2002. Fortunately, both are still teaching in our department. Other personnel changes include **Stefan Kienzle** becoming Coordinator of the Environmental Science Program, while **Ivan Townshend** was promoted to full professor. **Shawn Bubel** and her family relocating to Hokkaido, Japan, for the Spring 2013 semester faculty exchange program. Since 1982, the University of Lethbridge has administered a university-wide exchange program with Hokkai Gakuen University in Hokkaido. We say thanks and goodbye to **Gary Weikum**, who has taught many courses in Human Geography and Planning over the past 3 years.

Many of our faculty have been awarded research grants over the past year. **Sarah Boon** and **Hester Jiskoot** were both awarded NSERC Discovery Grants for their snow and glacier research programs. Grants from the University of Lethbridge Research Fund were also awarded to them, as well as to our two archaeologists **Kevin McGeough** and **Shawn Bubel**. Kevin additionally received an Internal SSHRC Grant and Shawn an Alberta Rural Development Network grant. SSHRC partnership grants went to **Ivan Townshend** (with UofT) and **Wei Xu** (with UBrock). **Stefan Kienzle** received two Alberta Innovates – Energy and Environment Solutions Grants, **Derek Peddle** a TECTERRA grant and **Wei Xu** an Alberta Agriculture and Rural Development grant. **Jim Byrne** landed a MITACS grant for the funding of several graduate students. **Karl Staenz** and **Jinkai Zhang** received a Canadian Space Agency grant. With all this funding and an exciting range of research interests, our department provides a wide range of opportunities for both undergraduate and graduate research projects.

## Degree programs and student news

Over the past years we have made some changes to streamline our undergraduate degree programs, strengthening all our undergraduate curricula in Geography. Both our BA and BSc streams are thriving, with 75-100 majors in Geography, Urban & Regional Planning, Canadian Studies and Remote Sensing, over 25 Geography & Archaeology majors, and around 120 Environmental Science majors.

We also have a vibrant graduate program, with about 30 graduate students enrolled in MSc, MA and PhD programs. Our NSERC CREATE AMETHYST program in Remote Sensing is especially successful, not the least because of **Craig Coburn's** graduate supervisory capabilities. We congratulate all our graduate students who defended their MA/MSc theses successfully over the past year, including:

**Subir Chowdhury:** Development of a spectral unmixing procedure using a genetic algorithm and spectral shape.

**Sarah Dalla Vicenza:** Forest fire vulnerability in the Northern Rocky Mountains under climate change.

**Reed Davis:** Modelling the effects of forest disturbances on snow accumulation and ablation in the Okanagan.

**Taylor Hamilton:** Effects of topography on the spatial variation of landcover diversity and distribution in a prairie sandhill ecosystem.

**Dan Koenig:** Effects of dune stabilization on soil moisture variability.

**Iliia Parshakov:** Automatic class label assignment for unsupervised image classification using hyperspectral libraries.

**Logan Pryor:** Land cover mapping in an agriculture zone using simulated Sentinel-2 data.

**Li Yu:** Labour Market outcomes, migration intentions of rural-urban migrants and return migration in China.

*Submitted by Hester Jiskoot*

*All photos by Gordon Logie*

## UNIVERSITY OF NORTHERN BRITISH COLUMBIA

### Faculty News:

Along with thirty-three human rights organizations, Geography Adjunct faculty member **José Pablo Baraybar** made a presentation before the Inter- American Commission on Human Rights on forced disappearances in Peru, 16 March 2013 (official video, from min 27:15 at:

[https://www.youtube.com/watch?feature=player\\_embedded&v=q\\_7H9wKAP7o](https://www.youtube.com/watch?feature=player_embedded&v=q_7H9wKAP7o)

**Gail Fondahl** completed her term as UNBC's Vice President Research and will return to 'active duty' in Geography as of July 1, after an administrative leave. She is spending the Winter and Spring months of the leave in Europe. The Canadian International Centre for the Arctic Region (CICAR) organized for her to present a talk, "Arctic Futures: It's about Climate Change — But Also Much More!", on the challenges of change — political, cultural, social, and economic as well as climate change — in the Arctic and the role of social scientists in helping to address such change in numerous locations, hosted by several Canadian embassies (Denmark [<http://www.diis.dk/sw125119.asp>], France, Germany [<http://www.ecologic.eu/7842> ], Ireland, Netherlands, Norway, Poland, Spain). She made the society page of Spain's El Pais! [http://sociedad.elpais.com/sociedad/2013/02/27/actualidad/1361983338\\_097086.html](http://sociedad.elpais.com/sociedad/2013/02/27/actualidad/1361983338_097086.html).

Gail continues to co-lead work on the Arctic Human Development Report-II (forthcoming, 2014), and presented on that at the Centre for Sami Studies, University of Tromsø, the Arctic Centre University of Groningen, and at



the Sami Centre in Umeå, as well as giving progress reports on the AHDR-II at Arctic Council meetings in November and January.

Gail also presented a keynote paper at a conference on *The Arctic in the First Decade of the 21<sup>st</sup> Century: Between Competition and Cooperation*, in Wroclaw, in November

([http://www.canadainternational.gc.ca/poland-pologne/highlights-faits/2012/Arctic\\_Conference\\_2012.aspx?lang=eng&view=d](http://www.canadainternational.gc.ca/poland-pologne/highlights-faits/2012/Arctic_Conference_2012.aspx?lang=eng&view=d)), and gave an invited paper at a conference on *Human-environment relations: skills, knowledge, emotions and politics in Siberia and China (Evenk and Even peoples)* in Versailles, in January.

A biography of **Kevin Hall** was recently featured in the book *Adventurous Dreams, Adventurous Lives*. Written by Jason Schoonover, and published in 2012 by Kindle Books, the book profiles “120 outstanding individuals representing a who’s who of international exploration [as they] recall the indelible moment in their youth when the dream that launched their remarkable lives was born. ... [through their stories] we learn how incredibly inspirational their lives are.”

An innovative new internship program, co-developed by Geography Professor **Greg Halseth** and Political Science Associate Professor Gary Wilson, will help provide training and experience to recent UNBC graduates interested in careers as government administrators in northern communities. <http://www.unbc.ca/releases/7556/new-unbc/northern-development-internship-program-aims-keep-local-government-administrators-north>

**Zoë Meletis** has been on maternity leave in 2012/13, welcoming her daughter Calysta Meletis-McDowell in September 2012. She is looking forward to her return to UNBC Geography in 2013, when she will welcome incoming graduate student Cherise Crispin (MA—Geography). Zoë was also nominated in 2012 for a UNBC Achievement Award- Teaching. Well done Zoë.

In January, **Brian Menounos** was at the University of Toronto to give two invited talks. His first talk, “The complex response of glaciers to climate change in the American Cordillera”, is part of the Distinguished Lecture Series for the Centre for Global Change Science. His second talk, “Do we really understand the relation between ice cover and sedimentation in alpine watersheds?” is a part of the University of Toronto’s Department of Geography seminar series. Brian is also on sabbatical from January to June 2013.

In March 2013, **Catherine Nolin** traveled to the Geography Department at Kent State University in Kent, Ohio to deliver an invited talk as part of the Friday Colloquium Speakers Series: Witnessing "development": Bare life and the violence of the extractive and energy industries on indigenous lands in Guatemala. In March, the UNBC Guatemala Research Group is sponsored these three documentary films as part of the much larger Traveling

World Community Film Festival. Graduate student Erica Henderson and Catherine organized and hosted a Human Rights Workshop for high school students to accompany one of the films.

BBC World Service piece (8 January 2013) on the work of Geography Adjunct faculty member **Fredy Peccerelli**:  
<http://www.bbc.co.uk/programmes/p012s48m>

**Roger Wheate** was a 'visiting scientist' at the Earth Sciences sector of Natural Resources Canada, in Ottawa 13-21 February. He will give a talk entitled "Using remote sensing to monitor changes in Andrei glacier and icefield, 1965-2012."

Recent publications:

Albers, S.J.\*\* and **Petticrew, E.L.** 2013. Biogeomorphic impacts of migration and disturbance: implications of salmon spawning and decay. *Geomorphology* <http://dx.doi.org/10.1016/j.geomorph.2013.02.002>

Einbinder, N.\*\* and **Nolin C.** 2012. No means no: After saving their land once from the Prosperity mine, the Tsilhqot'in First Nation in central BC are still fighting for their way of life against a second open-pit proposal. *A\J Canada's Environmental Voice* (formerly Alternatives Journal), 38 (6), November. Free online access: <http://www.alternativesjournal.ca/energy-and-resources/no-means-no>

**Hall, K.** 2013. Weathering and landforms in cold regions. In J.F.Shroder (ed.) *Treatise on Geomorphology*, 4, 258-276. San Diego, Academic Press.

**Halseth, G.** and Ryser, L. 2012. From Policy to Research and Back Again: Experiences from a rural research institute. *Journal of Rural and Community Development*, Special issue edited by L.K. Hallstrom and H. Dolan (Guest Editors). 7(3), 31-39.

Owens, P.N., Giles, T.R., **Petticrew, E.L.**, Leggat, M., Moore, R.D., and Eaton, B.C.\*\* (2013). Muted responses of streamflow and suspended sediment flux in a wildfire-affected watershed. *Geomorphology*.  
<http://dx.doi.org/10.1016/j.geomorph.2013.01.001>

Ryser, L. and **Halseth, G.** 2012. Resolving mobility constraints impeding rural seniors' access to regionalized services. *Journal of Aging and Social Policy*. 24, 328–344.

Ryser, L., Manson, D.\* and **Halseth, G.** 2012. Chapter 9: "Including Youth in an Aging Rural Society: Reflections from Northern British Columbia's Resource Frontier Communities." In *Social Transformation in Rural Canada: Community, Cultures, and Collective Action*. Eds. John R. Parkins and Maureen Reed. Vancouver: University of British Columbia Press.

Ryser, L., Markey, S., and **Halseth, G.** 2013. Developing the next generation of community-based researchers: Tips for undergraduate students. *Journal of Geography in Higher Education*, 37(1), 11–27.

Silver, Jennifer J., **Zoë A. Meletis**, and Priya Vadi. (2012). Complex Context: Aboriginal participation in hosting the Vancouver 2010 Winter Olympic and Paralympic Games. *Leisure Studies*. 3(1) (Special Issue: Leisure, Culture and the Olympic Games): 291-308.  
<http://www.tandfonline.com/doi/abs/10.1080/02614367.2011.645248>

\* denotes Adjunct faculty member; \*\* denotes former /current graduate student

#### Field Courses:

**Peru:** A small interdisciplinary team from UNBC that includes **Catherine Nolin** will again be partnering with the Peruvian Forensic Anthropology Team (EPAF) to offer a 2013 version of the very successful UNBC-EPAF Interdisciplinary Field School to Ayacucho, Peru. The field school is open to students beyond UNBC and will run June 5-26, 2013. For more information & application forms, please contact Catherine Nolin at [nolin@unbc.ca](mailto:nolin@unbc.ca) and see: <http://explearn.gis.unbc.ca/fieldschools/peru/>

**Peru 2013**

**2<sup>nd</sup> Interdisciplinary  
UNBC-EPAF Field School**  
HUMAN RIGHTS FORENSICS DEVELOPMENT

**2 ½ weeks at UNBC: April 22-May 8, 2013**  
**3 weeks in Peru: June 5-June 26, 2013**

**Information Sessions:**  
Tuesday, March 12 at 1:00 PM  
Friday, March 15 at 11:00 AM  
In the GIS Lab (8-125)

**Application Deadline: March 18, 2013**

Applications & more details contact:  
**Scott Emmons** [scott.emmons@unbc.ca](mailto:scott.emmons@unbc.ca)  
**Dr. Catherine Nolin** [catherine.nolin@unbc.ca](mailto:catherine.nolin@unbc.ca)  
[experientiallearning.gis.unbc.ca/fieldschools/peru/](http://experientiallearning.gis.unbc.ca/fieldschools/peru/)

**UNBC** **eopf**

**Peru:** In February 2013, the students who participated in the 2012 UNBC-EPAF Interdisciplinary Field School to Ayacucho, Peru presented a 2 hour multi-media evening highlighting the work of the field school and the issues facing the people and communities of the region. It was a powerful and well done event.

- Graduate student Kirk Walker presented his 16 min. documentary film about the field school which is available at: <http://vimeo.com/57858245>.

- Photos of the evening presentation are available at:  
<https://www.facebook.com/media/set/?set=a.10152584981295595.963263.532435594&type=1&l=897753281c>
- Local news coverage “UNBC Group Back From Peru”: <http://ckpg.com/unbc-group-back-from-peru-video>

***For recent UNBC field schools, please see:***

[http://www.unbc.ca/geography/southafrica\\_2012.html](http://www.unbc.ca/geography/southafrica_2012.html)

[http://www.unbc.ca/geography/guatemala\\_2012/](http://www.unbc.ca/geography/guatemala_2012/) and [http://www.gis.unbc.ca/peru\\_web/](http://www.gis.unbc.ca/peru_web/)

#### Block teaching:

In a very exciting development, the UNBC Geography Program led a university pilot in the “block delivery” of courses. We offered a semester-long pilot of condensed, block delivered courses in Human Geography in the January 2013 semester. Registered students take one course at a time, meeting daily for three hours for a two and a half week period. Three courses have been completed since early January (Geography of International Development with **Dr Catherine Nolin**, Environments of Health and Care with **Dr Neil Hanlon**, and First Nations and Indigenous Geographies with **Dr Sarah de Leeuw**). During the March and early April, students will complete an Independent Study, and the pilot will conclude in late April - early May with Geographies of Culture, Rights and Power (Dr. Catherine Nolin). Feedback to date has been extremely positive, with students very enthusiastic about the block format. For more information, please see:

- “New UNBC Block Courses Offer Focused, Experiential Learning to Students and Members of the Community”: <http://www.unbc.ca/releases/new-unbc-block-courses>
- UNBC pilot project experiments with block teaching: Students give an enthusiastic thumbs-up to this condensed approach to courses: <http://www.universityaffairs.ca/unbc-pilot-project-experiments-with-block-teaching.aspx>

#### Graduate Students:

##### *Thesis Defences*

**Eric Kopetski** (supervisor Greg Halseth) defended his MA thesis in Natural Resources & Environmental Studies (Geography) on February 5, 2013. The title of Eric’s thesis is: “You want me to grow trees?: The social implications of biomass crops on the resilience of Quesnel, British Columbia.”

**Nicholas Ehlers** (supervisor Zoë Meletis) defended his MA thesis in Natural Resources & Environmental Studies (Geography) in November 2012. The title of his thesis is: "Little boats and big concerns? Seeking a balance between ecotourism and motorboat use in Tortuguero, Costa Rica."

**Brooke Eschuk** (supervisor Neil Hanlon) defended her MA thesis in Natural Resources and Environmental Studies (Geography) on January 15, 2013. The title of Brooke's thesis is: "Come Out and Play!: Exploring the Landscapes of Free-Play in Prince George, British Columbia."

**Jessica Blewett** (supervisor Neil Hanlon) defended her MA thesis in Natural Resources and Environmental Studies (Geography) on November 30, 2013. The title of Jesse's thesis is: "Disablement in Prince George, BC: A Qualitative, Holistic and Participatory Exploration."

#### Undergraduate Students:

BA GEOG '03 grad **Simon Springer** (now Dr. Springer) has returned to Canada and is now an Assistant Professor of Geography at the University of Victoria.

BA GEOG '11 grad **Miranda Seymour** (now Schmolld) is now a law student at Thompson Rivers University.

Miranda is featured in the PG Citizen:

<http://www.princegeorgecitizen.com/article/20130306/PRINCEGEORGE0101/303069992/-1/princegeorge01/law-students-wrestle-with-key-aboriginal-query>

#### Western Division of CAG Conference:

The Geography Program once again traveled with a delegation of faculty members, undergrads and graduate students to the conference of the Western Division of the Canadian Association of Geographers (WDCAG). This year the WDCAG was hosted by the University of Lethbridge, (March 7-9). Jim Windsor, once again, organized the delegation and was accompanied by Catherine Nolin and Roger Wheate.

#### *Paper presentations:*

**Joanna Paterson, Neil Hanlon:** Experiences of Northern Medical Program Graduates and Strategies for Their Retention in Rural Communities.

**Erica Henderson, Catherine Nolin, Fredy Peccerelli:** Dignifying a Bare Life and Place Making Through Exhumation: Cobán Creompaz Former Military Garrison, Guatemala.

**Catherine Nolin:** Rights And Justice: Geography's Partnerships for Human Rights Research in Post-Conflict Guatemala and Peru.

**Jed Zimmerman:** Interdisciplinary Delegation to Ayacucho, Peru: Exemplifying Potential for Human Rights Advocacy Through GIS.

**Blake W. Hawkins, Neil Hanlon:** Discursive Spaces of Spanish Influenza in Prince George, BC

*Poster presentations:*

**Leana Garraway, Neil Hanlon:** Building Resilience in Vulnerable Populations in Ayacucho, Peru Through a Trans-Disciplinarity Focused Organization (Equipo Peruano de Anthropologia Forense (Epaf))

*Notables:*

**Jed Zimmerman** was awarded the runner-up prize for the Best Undergraduate Paper Presentation. Congratulations, Zed!

Stay in touch with UNBC Geography:

We're now on Twitter: <https://twitter.com/UNBCGeography>

Facebook: <https://www.facebook.com/pages/UNBC-Geography/428896160643>

Homepage (under reconstruction): <http://www.unbc.ca/geography>

*Submitted by Greg Halseth*

## **NEWS FROM UNIVERSITY OF VICTORIA**

### Awards

**Ian O'Connell** (Senior Instructor) – The J. Alistair McVey Award for Teaching Excellence from the WDCAG, recognizing geography instructors known for the quality of their teaching.

**Ken Josephson** (Cartographic Technician) – UVic Staff Sustainability Champion Award for going beyond the call of duty to make our campus more sustainable.

**Jessica Blythe** (PhD Student) – Andy Farquharson Award for Excellence in Graduate Student Teaching

**David Lai** (Professor Emeritus) – University of Victoria Community Leadership Award for Outstanding leadership in linking UVic and the community for greater public benefit.



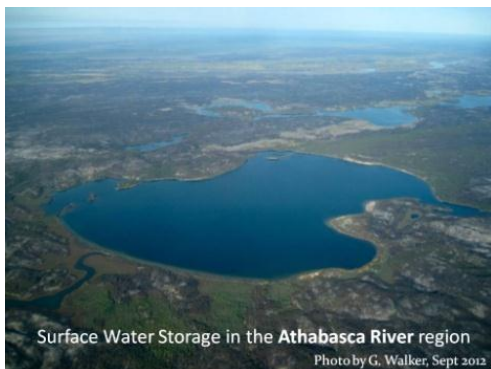
## Research

### ***Water and Climate Impacts Research Centre (W-CIRC) at the University of Victoria***

The Water & Climate Impacts Research Centre (W-CIRC) was established in September 2002 at the University of Victoria (UVic) as part of a co-location agreement between UVic and the National Water Research Institute (NWRI) of Environment Canada. The main goal was to enhance collaboration with university researchers and other EC scientists at UVic to enhance delivery on the scientific mandate of EC's Aquatic Ecosystem Impacts Research Division. A primary focus of W-CIRC's current research is participation in the hydrology, hydro-climatology, hydrologic-hydraulic modelling, sediment processes and ecological flow needs sub-components of the Water Quantity/Hydrology/Sediment program that forms part of EC's 'world-class' Oil Sands monitoring program. Additional areas of scientific foci are on the hydrologic and ecological impacts of atmospheric change and variability, particularly in the Canadian Arctic.

W-CIRC currently has seven Master of Science students working on a wide range of projects including analysis of productivity in an arctic lake, ecological and climate change impacts on rivers and snowpack in northern Alberta, and large-scale spatial and temporal analysis of climatic patterns across Western Canada.

**Gillian Walker's** thesis work evaluates if the intensification of the water cycle, which is expected to occur as our climate changes. (Photo from the Water and Climate Impacts Research Centre website: <http://w-circ.uvic.ca/index.php>).



**Ian Darke's** research examines the response of a coastal dune system to an invasive grass removal project. The aim is to restore habitat for a variety of threatened dune species including the SARA red listed species Pink Sand Verbena, *Abroniaumbellata*. It is hypothesized that the invasive European beach grass, *Ammophilaarenaria*, has rapidly displaced native dune species and has accelerated stabilisation of coastal



dune systems in Pacific Rim National Park Reserve. Approximately 400 metres of the coastal foredune was

mechanically cleared of invasive vegetation and later successional species at the Wickaninnish dunes site over a 3 year period. Following 5 years of monitoring and collaboration with Parks Canada staff we have shown that removal of the invasive grass has led to enhanced aeolian activity, greater geomorphic diversity and a slowing of the trend towards stabilisation. Anecdotal evidence suggests that species richness and diversity have also been increased at the site. However, given difficulties in keeping the site free of the invasive grass, which is extremely pervasive in temperate dune systems, and current climatic trends in the Pacific Northwest it is likely that the longer term trend of the system will continue to move towards stabilisation. The project has nonetheless been useful for furthering our understanding of beach dune dynamics and developing better monitoring practices for habitat restoration efforts of this nature.

### ***Ocean-Atmosphere Forcing and Geomorphic Responses on the westcoast of Vancouver Island, BC***

**Derek Heathfield's** project looks to understand regional extreme weather events and local landscape responses, specifically erosion and accretion of sandy beach-dune systems, on the west coast of Vancouver Island. A 10 km stretch of sandy shoreline within Pacific Rim National Park Reserve is subject to erosive periods associated with regional high-energy storms. As manifestations of these storms, dominant mechanisms of local erosion (e.g., tide, surge, and wave energy) are identified and used to characterize the local erosive water level regime. Understanding the forcing of erosion is only half the story, so historical variations in shoreline position and beach volume are analyzed using aerial photos and LiDAR-generated DEMs in a GIS. This is an exciting project, and as you can see, at a dynamic and active study site. In certain areas, the shoreline is retreating at -1.3 m/year while a directly adjacent shoreline is advancing seaward at 0.4 m/year.



**Heathfield, DK, Walker, IJ, Atkinson, D (2012).** Erosive water level regime and climate variability forcing on southwestern Vancouver Island, British Columbia, Canada. **Earth Surface Processes & Landforms** (DOI: 10.1002/esp.3350)

### ***World Water Day***

World Water Day was celebrated with success at the University of Victoria last month on March 22<sup>nd</sup>. A lunch and learn was organized by several of UVic's Geography graduate students featuring talks from professors, students, and industry. An estimated sixty attendees came to learn and network about current research and events involving atmospheric, freshwater, and fisheries projects. Featured speakers included Jesse Baltutis, researcher for the POLIS Water Sustainability Project, John Volpe, Professor, UVic Environmental Studies, and



Areliia Werner, hydrologist at PCIC. All speakers did a great job highlighting crucial global and local water issues, identifying areas for future research, and suggesting areas for change. Water was defiantly the theme of the day as the UVic African Awareness Club presented two afternoon documentaries, “Crisis on Tap” and “Last Call at the Oasis.” The celebrations continued with a Blue Drinks network session at the campus pub. This lunch and learn was made possible by the Canadian Water Network, UVic’s WIGG Lab, POLIS, and UVic’s Geography graduates Amy Vallarino, Rosanna Breiddal, Kathryn Tebbutt, and Jason Walters. Looking forward to next year’s World Water Day!

### ***Climate Change, Harbour Resilience and Community Engagement at UVic***

This term, instructors in UVic’s Geography and Environmental Studies departments partnered with the Capital Regional District’s (CRD) Harbour Program. The region was interested in student engagement as part of a larger public consultation and awareness building process around developing water quality objectives and plans and visions for the future of Victoria’s harbour areas. In **Dr. Cam Owens’** Geography 355 – Coastal Communities class, the students developed videos and photo essays bringing to life the history of particular sites around Victoria’s main harbour and investigating the vulnerabilities and opportunities of these places in the face of rapid climate change and other potential threats. (see: [http://mapping.uvic.ca/geog355\\_2013](http://mapping.uvic.ca/geog355_2013) ). **Dr. Michele-Lee Moore’s** Geography 371 – Water Management class investigated similar concerns with respect to three of the region’s watersheds and developed innovative proposals for responding to these threats. **Jonaki Bhattacharyya’s** Environmental Studies 481 – Applied Ethnoecological Research class undertook a variety of creative projects exploring dimensions of local sense of place around the Gorge Waterway area. The instructors and CRD planners are thrilled with the efforts the students invested and look forward to more collaboration over the next few years.

### ***New Lab: Water, Innovation and Global Governance Lab (WIGGLab)***

The newly launched Water, Innovation and Global Governance Lab (WIGGLab) lead by **Michele-Lee Moore** has had a productive first year! Honours student **Sarah Marshall** successfully completed her thesis on the role of public participation in collaborative water governance in the Cowichan Basin on Vancouver Island. MA student **Rosanna Breiddal**, with the support of the Fort Nelson First Nation Lands Department and a grant from the Water, Economics, Policy and Governance Network (WEPGN) is embarking on a study of social learning processes in water governance with the Fort Nelson First Nation. The Fort Nelson First Nation’s traditional territory is located in the Horn River Basin, the site of rapid shale gas development and “fracking” activity. The WIGGLab is also partnering with UVic’s POLIS Water Sustainability Project on launching a watershed governance skills building forum to be held in early 2014. Additionally, the WIGGLab grad students, along with

the Canadian Water Network Student & Young Professionals representative, and the POLIS Water Sustainability Project hosted a successful World Water Day speed talk session on March 22<sup>nd</sup> to showcase the diversity of water research across campus.

At the undergraduate level, engagement with water practitioners in course work continues. Students in the Water Resources Management course (300- level) were asked to resolve real challenges being faced in local watersheds in the Capital Regional District and the Cowichan Basin on Vancouver Island. In a case study competition format, students presented their best strategy for resolving the watershed issue and were evaluated by guest judges from the Cowichan Basin Water Board and the Capital Regional District Stormwater, Harbours, and Watersheds Program. Students developed real-world problem solving skills and technical knowledge about water management issues, and staff from the CRD and Cowichan were pleased to take back creative student ideas to their watersheds!

#### Recent Grad Profile

**Rheannon Brooks** is a recent MSc. graduate of the UVic Geography department. Defended June 2012. "Quantifying Peak Freshwater Ice across the Northern Hemisphere using a Regionally Defined Degree-day Ice-growth Model"

Abstract:

"Freshwater ice (river and lake ice), a key component of the cryosphere, plays a dominant role in the hydrology of northern climates. Although freshwater ice has been modelled at small geographic scales, it remains the only major unquantified component of the cryosphere. To address this gap, peak freshwater ice was quantified across the Northern Hemisphere using a regionally defined degree-day ice-growth model. Using a degree-day ice-growth model, ice-growth coefficients were defined by hydro-climatic region, and validated using maximum observed seasonal ice thickness values from across the Northern Hemisphere. The maximum seasonal extent of freshwater ice was then estimated over a 44-year temporal period (1958-2002) and the areal extent and volume of freshwater ice quantified."

Sessional Instructor (Spring 2013) for Geog 328 - GIS Analysis

Recent publications: **Brooks, R.N.**, Prowse, T.D., and O'Connell, I.J. 2013. Quantifying Northern Hemisphere Freshwater Ice. GRL, VOL. 40, 1-4, doi:10.1002/GRL.50238. (Published online February 26, 2013)

<http://onlinelibrary.wiley.com/doi/10.1002/grl.50238/pdf>

Specialized online course to expand your geography studies

*Population Health and GIS – May to August 2013*

Learn about the geographic nature of population and public health; how geographic data are incorporated into health research; key considerations in spatial analysis; and the applications of Geographic Information Systems (GIS) to health research and population and public health. Throughout the course, students will gain hands-on experience working with a wide range of spatial data and analysis methods using ArcGIS. This course is offered on-line over 12 weeks. It is part of a Professional Specialization Certificate in Population Health Data Analysis developed by Population Data BC in partnership with the Division of Continuing Studies and Department of Geography, University of Victoria.

Topics include:

- Spatial thinking in Population Health
- Introduction to Spatial Data
- Key Concepts in Spatial Data Analysis
- Mapping health data and health determinants
- Use of spatial data in health policy
- Siting health facilities and estimating geographic access
- Incorporating spatial data and methods into surveillance and disease control
- Modeling environmental pollutants and conducting spatial exposure assessments
- Examining the built and social environments and health using GIS
- Exploring future advances in the use of GIS for population and public health
- Conducting a final project that applies GIS to a health question of your choosing

*Program Details can be found at: <http://www.popdata.bc.ca/etu/PHDA>*

*Interested? Ask about our special course rates for graduate students*

**For more information or to register contact:**

Maxine Reitsma, Program Coordinator, UVic Division of Continuing Studies, Phone: 250 721 6477

## Graduate Students

*Completing this term:*

**Bruce Sanderson**, MSc "Damaging Earthquakes and Their Implications for the Transfusion Medicine Function of the Health Care System on Vancouver Island, BC"

**Brian Tucker**, MA "Inventing the Salish Sea: Exploring the Performative Act of Place Naming off the Pacific Coast of North America"

**Steve Deschenes**, MSc "Modeling Heavy Metals in Soil Using Spatial Regression Analysis"

*Completed graduate students: January to December 2012*

**Bills, Kathryn**, MA (May 2012) Just a Walk in the Park, Or Is It? A Case Study Analysis of a Seniors Community Park in Oak Bay, British Columbia

**Binion, Eric**, MA (March 2012) Informal Recycling and the Perception of Health in Buenos Aires, Argentina

**Blasco, Nathan**, MSc (May 2012) Kelp Culture in Integrated Multi-Trophic Aquaculture: Expanding the Temporal Limitations

**Bogle, Timothy**, PhD (November 2012) Timber Supply on Public Land in Response to Catastrophic Natural Disturbance: A Principal-Agent Problem

**Brooks, Rheannon**, MSc (2012) Quantifying Peak Freshwater Ice Across the Northern Hemisphere Using a Regionally Defined Degree-day Ice-growth Model

**Buchanan, Sarah**, MSc (September 2012) Spanish Influenza in the City of Vancouver, British Columbia, 1918-1919

**Burnham, Rianna**, MSc (July 2012) The Importance of the Mid-Trophic Layers in Ecosystem Structure, Process and Function: The Relationship Between the Eastern Pacific Gray Whale (*Eschrichtius robustus*) and Mysids (order *Mysidacea*) in Clayoquot Sound

**Chafey, Adam**, MA (April 2012) Impacts of Protected Areas on Adjacent Communities: An Examination of Attitudes and Perceptions Towards Pacific Rim National Park Reserve

**Craig, Jessica**, MSc (December 2012) Late Holocene Glacial History of Scimitar Glacier, Mt. Waddington Area, British Columbia Coast Mountains, Canada

- Eamer, Jordan B.R.**, MSc (April 2012) Utilizing Geo- and Spatial-Statistical Thresholds for Detecting Geomorphic and Sediment Volume Responses of a Coastal Dune Complex to Invasive Vegetation Removal: Wickaninnish Dunes, Pacific Rim National Park Reserve, British Columbia
- Edwards, Courtney D.**, MSc (August, 2012) Biofouling in Salmon Aquaculture: The Effectiveness of Alternative Netting Materials and Coatings in Coastal British Columbia
- Fitterer, Jessica**, MSc (June 2012) Modelling British Columbia's Ecosystems and Avian Richness Using Landscape-Scale Indirect Indicators of Biodiversity
- Holmes, Keith**, MSc (December 2012) Forecasting Impacts of Climate Change on Indicators of British Columbia's Biodiversity
- Jaswal, Harpreet K.**, MSc (May 2012) Seismic Preparedness of Hospitals in Victoria BC, Canada
- Jensen, Christopher A.**, MSc (August 2012) A Hydrologic Assessment of Using Low Impact Development to Mitigate the Impacts of Climate Change in Victoria, BC, Canada
- Jose, Edson**, MSc (November 2012) Effects of Climate Change on Coastal Aquaculture in British Columbia: An Examination of Anticipated Impacts in the Strait of Georgia
- King, Megan**, MA (March, 2012) Evaluating the Contribution of Cooperative Sector Recycling to the Reduction of Greenhouse Gas Emissions
- Macek, Ian**, MSc (November 2012) Utilizing User-Centered Design for the University of Victoria's International Connections Mapping Application
- Orr, Lindsay**, MSc (December 2012) Co-Culture of Invertebrates with Sablefish (*Anoplopoma fimbria*) in IMTA in British Columbia: Use of Laboratory Feeding Trials to Assess Organic Extractive Potential of Various Candidate Species
- Prussin, Emrys**, MSc (May 2012) Spatial Distribution of the Nutrient Plume Emanating From an Integrated Multi-Trophic Aquaculture (IMTA) Farm in British Columbia: Use of an 'in-situ' Kelp Bioassay
- Roessingh, Krista**, MSc (August 2012) Nesting Habitate and Diet Studies of Sandhill Cranes (*Grus Canadensis*) from the Central and North Coast of British Columbia
- Seemann, Mark**, PhD (December 2012) A Disaster Risk Management Approach to Seismic Risk on Vancouver Island, British Columbia

**Sopinka, Amy**, PhD (November 2012) Assessing the Impacts of Wind Integration in the Western Provinces

**Wood, Lisa June**, PhD (February 2012) Wood fibre Properties and Their Application to Tree-Ring Studies in British Columbia

Honours Presentations April 2013

The following undergraduate Honours students will be presenting details of their projects throughout April.

**Sarah Marshall** – “Collaborative Water Governance in the Cowichan Basin: Examining the Role of Public Participation in Effective Watershed Governance”

**Georgia Clyde** – “Regulating Run-of-River Hydroelectricity in B.C”

**Jenn Giesbrecht** – “Uptown as a Transit Oriented Development? A Mixed-Methods Approach to Evaluating Transportation Practices and their Geographical Effects”

**Jean Sargeant** – “Comparing the Engagement of Indigenous Peoples in the Co-management of Canadian National Parks with Respect to Benefit Sharing and the Application of Traditional Ecologic Knowledge”

**Lily Jackson** – “Understanding the Opportunities and Challenges of Using the Arts as a Tool in Canadian National Parks”

**Frances Ankenman** – “Integrating Dispersal Constraints into Species Distribution Modeling: Forecasting the Spread of *Nuttallia Obscurata* along the Pacific Coast”

**Kayla Cheeke** – “Defending the Caves at SPAET: Conflict and Ecological Citizenship in the Post-Democratic Growth Machine”

**Nicole Macdonald** – “Discrimination, Exploitation, and Oppression: A Discourse Analysis of Neoliberal Policing in the Favelas of Rio de Janeiro, Brazil”

**Louise Wilkin** – “An Integrated Earthquake Vulnerability Assessment in the Capital Regional District, BC Canada”

**Kayla Glynn** - TBA

**Lauren Law** – “A Governance Assessment for LLEBM in the Muskwa-Kechika Management Area”

**Rosie Child** – “Assessing Motivations of Trophy Hunters: Insight from Hunting Photographs in Social Media”

*Submitted by Kinga Menu*

## NEWS FROM VANCOUVER ISLAND UNIVERSITY

### Program News

In March 2013 a new program, the BSc Geoscience Major, was granted approval by the Ministry of Advanced Education. This is a joint program with the Department of Earth Sciences and essentially combines the existing BSc Minors in Geography and Earth Science. The BSc Minor in Geography has seen the strongest growth of all programs in the last few years and we anticipate many students will transfer to the Major. This new program has been articulated with the Association of Professional Engineers and Geoscientists of BC and with careful course selection can be used to satisfy the educational requirements for registration as a Professional Geoscientist.

The Department also offers a BA Major and Minor in Geography, which continue to have strong enrollments. The BA Major has three streams: General, Natural Resource Management and Urban and Regional Management.

The Department is working on two applied Master's program proposals, a Master's of GIS Applications and a Master's in Community Planning. Both are at Stage 2 in the process, which is developing the full program proposal. The MGIS will be thesis based and given over one year, with entrance requirements of a Bachelor's degree and an Advanced Diploma in GIS Applications (or equivalent). The MCP will be a two year program, with course work in the first year and a thesis or major project and additional courses in the second year with a targeted start date of September 2014. The MGIS will be taught online and the MCP will be given in a traditional face-to-face delivery format.

The Advanced Diploma in GIS Applications offered by the Department has strong enrollments, and many students are interested in the upcoming MGIS. Employment in the GIS sector is very strong at the moment and most graduates get employment within a short period of graduating.

### Faculty News

**Dave Cake**, who teaches in the Advanced Diploma in GIS Applications is on an assisted leave in spring 2013 this year, and is working on GIS projects in northern Canada and in Peru. **Alan Gilchrist** and **Michael Govorov** have been granted assisted leaves for next year, both in spring 2014. Temporary Instructors will be hired in 2013/14 to cover the courses normally delivered by Alan and Michael.

**Jeff Lewis** continues as a faculty Advisor for ACER, "Awareness of Climate Change through Education and Research", which is funded by SSHRC.

**Pam Shaw** is involved in a number of initiatives:

1. *Toquaht Nation* – Comprehensive Community Plan. Work is wrapping up on a Comprehensive Community Plan which will address land use, health, governance, environment, culture and social issues, economic development, communications, climate change, and sustainability. Geog 322: Geographic Communications is completing the public consultation design and initiating a series of three meetings in Fall 2012. In April 2013, Geog 342 will complete the draft of the Plan for presentation to Chief and Council.
2. *Brazil* - Currently developing a cross-research partnership with Dr. Maria Ines Paes Ferreira from IF Fluminense – Campus Macae. Dr. Ferreira was at VIU for one month in Fall and engaged in community based participatory research program to gain an understanding of practices on Vancouver Island and bring expertise from Brazil into research on fragile ecosystems. Pam Shaw was the keynote speaker at and also served as a member of the Scientific Committee for SRHIDRO 2012 – III Regional Seminar on Water Resource Management: Water, Life and Technology. Presented on socio-ecological challenges in the Nanaimo River Estuary.
3. *Nanaimo River Estuary* - Activities for 2012 include the development of a 10-15 year mapping program for eelgrass (including student employment) and a pilot test of eelgrass planting on a key site as well as the development and staffing of a display at Aboriginal Days in Nanaimo BC.

#### Conferences & Meetings

**Alan Gilchrist** presented a paper at the BC Branch Conference of the Canadian Water Resources Association, Vancouver in March 2013, entitled: “Using Intrinsic Aquifer Vulnerability Maps to Help Protect Groundwater: A Case Study From Vancouver Island, BC”.

#### Faculty Publications

**Don Alexander** published “Say Goodbye to Small Retail: Should We Care?” with **Pam Shaw** in the Summer issue of *Plan Canada*, and is awaiting publication of a chapter (with Bernie Jones), “Rural Sustainability and the ‘Lenses’ of Place,” in a volume being published by the University of Alberta on rural sustainability, which in turn was based on a symposium held in 2010. He has published several book reviews – including of *Seven Rules for Sustainable Communities*, *Common Ground in a Liquid City*, *The Geography of Happiness* and a suite of books on social change – and two articles in planning journals on the historical fate of the Habitat ’76 conference in Vancouver. Don continues work on a book manuscript for UBC Press, *Place: Reweaving the Fabric of Human Experience*.

**Alexander D.** and **P. Shaw** (2012) Say goodbye to small retail: should we care? *Plan Canada* 52 ( 2) 2012, p. 26-



**Shaw, P.** and K. McDougall (2013) Mt. Arrowsmith Biosphere Strategy and Action Plan 2012 to 2018. Prepared for UNESCO on behalf of the Mt. Arrowsmith Biosphere Foundation.

**Shaw, P.** and Yuułuʔiłʔatḥ Citizens (2013) Yuułuʔiłʔatḥ First Nation Official Community Plan.

#### Departmental Events

The annual Urban Issues Film Festival In November 2012 was a great success and was organized by **Pam Shaw** and **Don Alexander**. The fourth annual symposium on Climate Change: Science, Politics and Society is being co-organized by **Jeff Lewis** and will occur in April 2013.

#### Student Accomplishments and Activities

Several graduates have been accepted into Master's programs during the last year including **Kelsey Chandler** to Dalhousie University, **Rebecca Augustyn** to Ryerson University, **Angelica Nielsen** to York University, **Katelyn McDougall** to Simon Fraser University and **Warrick Baijius** to the University of Saskatchewan. Kelsey Chandler and Rebecca Augustyn were awarded highly prestigious SSHRC Joseph-Armand Bombardier Canada Graduate Scholarships to pursue their studies. Warrick Baijius has been awarded a full Dean's Scholarship to study in Saskatchewan.

#### Field Schools

Geog 488: Field School San Francisco in February 2012. Nine VIU students attended, with activities focusing on urban design and architecture, terrain analysis, and street systems.

For further information on the Geography and GIS programs at Vancouver Island University visit our websites at: <http://www.viu.ca/geography/> and <http://www.viu.ca/adgisa/>

*Submitted by Alan Gilchrist*

## MESSAGE FROM THE EDITOR

Thanks to all WDCAG Geographers and associated departments who submitted news items for this edition of the WDCAG newsletter. The WDCAG newsletter is published in the Spring and Fall of each year and aims to provide WDCAG members and the broader geographical community with updates from Geography departments within the region. For an archive of previous newsletters, please visit

<http://www.geog.uvic.ca/dept/wcag/publications.htm> .

The newsletter serves you, the members, so if you have any suggestions, ideas or news items, please contact **Claire Beaney**, WDCAG Newsletter Editor ([claire.beaney@ufv.ca](mailto:claire.beaney@ufv.ca)).



**Wapiti National Monument, Arizona**