



News Digest of the Canadian Association of Geographers

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Wilfrid Laurier U's Mary-Louise Byrne and the curious case of Sable Island: Mary-Louise Byrne of the Department of Geography and Environmental Studies at Wilfrid Laurier University first set foot on Sable Island in 1987. Then a graduate student, Byrne came to Sable, off the coast of Nova Scotia, Canada, to measure some of the 42 kilometers of sand dunes that make up the island. Dragging heavy gear up sandy slopes, Byrne and her colleagues measured cross section profiles of the island's dunes, capturing their shapes and positions in intricate detail. Nearly three decades later, Byrne has traded her handmade measurements for high-resolution aerial photographs and lidar topographic images captured by another scientist, David Colville. Both approaches have allowed her to analyze the details of Sable Island's bumps and valleys. And, after all this time, Byrne has come to realize something surprising: against the odds, some of Sable Island's dunes have barely budged. Understanding what makes Sable Island so different from other barrier islands could yield important clues that may help protect against coastal erosion elsewhere. But to figure that out, scientists need to move quickly. In just the past few years the Government of Canada has started to let tourists explore the sandy island, which is home to a population of wild horses. There is a concern, says Byrne, that all of these extra trampling feet may finally force Sable Island's unusual dunes to shift. Sable Island isn't completely unchanging. The eastern spit of the island, for example, grew five kilometers since 1996, but the sea has since reclaimed most of the new length. Yet according to Byrne's analysis, presented at a scientific conference in Montreal in May, some of the island, and its dunes, were right where she had observed them 28 years before. It would be nice to know what is going on with Sable Island, since sand dunes are an important part of any coastal ecosystem. But for now, the island is refusing to give up its secrets. "I can't explain it, because I really thought we'd see huge differences all over the island," says Byrne. If they can figure it out, however, "[a]ny knowledge of what's going on in the dune system in Sable Island can be transferred to coastal dune systems anywhere." [Hakai Magazine](#)

Distribution of GeogNews is suspended until August.
It is my summer field season and the mountains are calling.

Dan



U Manitoba's Jay Anderson has students hunting down twisters in U.S.: A group of students from the University of Manitoba are spending time south of border to get an up-and-close look at one of Mother Nature's most fearsome creations: tornadoes. Jay Anderson, a retired Environment Canada meteorologist and professor at the school, has taken the students to "Tornado Alley" to learn how to chase storms. The group is currently in Kimball, Neb., and has crossed six states since their departure on June 20. It's all part of the field work aspect of Anderson's course, designed to teach the students how to safely track the weather systems by themselves. Many are set on becoming professional storm chasers. While the work is exhilarating, it's not always easy. Part of the difficulty, Anderson says, is that storm chasers have to learn to use their brains -- not just the technology at their disposal. "You've got to use the old model up in this head and put together all the parameters," said Anderson. Each morning, instructors hand out weather maps for the students to colour code. It is a visual exercise to help them fine tune their minds to spot extreme weather. "You put it all together and you see where the clumps all come together and you say: 'OK, that's where I want to be,'" said Anderson. Then students must find ground zero, using the skills they previously learned in the classroom, alongside websites with real-time information. In less than a week, the group has already observed the devastation of multiple tornados and severe thunderstorms. [CTV News](#)

McMaster U Geography student Ashleigh Patterson's research will shed light on basement apartments, in-law suites and more: Fourth-year Geography and Environmental Science student Ashleigh Patterson is trying to get a handle on just how many rental apartments exist within private Hamilton homes. With the help of a \$6,500 Undergraduate Student Research Award, Patterson will spend the summer quantifying the "secondary housing units" found in the city. These units, considered "secondary" to the primary residence in question, include garage and basement apartments, in-law suites and guesthouses. Not all such units, however, are properly registered, and may not conform to the property's zoning. Some Canadian municipalities allow secondary housing units, while others prohibit them. According to Patterson, research hasn't been done on the issue since the 1980s. She hopes her work will influence change in the city by providing up to date information to suit current circumstances. Patterson, who grew up in a secondary housing unit, hasn't yet begun her work but has already attracted the attention of the City of Hamilton, the Social Planning and Research Council of Hamilton-Wentworth and the Canada Mortgage and Housing Corporation. She hopes to analyze this summer's findings in an independent research course and publish and present the findings this fall. The project will be supervised by Richard Harris, professor of Geography and Earth Science. [McMaster Daily News](#)

U Calgary's Chris Hugenholtz uses drone to reveal how Calgary flood of 2013 rearranged Elbow River: A team led by University of Calgary geographer Chris Hugenholtz captured high-resolution images with the unmanned aerial vehicle that show the 2013 flood carried away the equivalent of nearly 8,000 dump-trucks of stones and gravel and piled another 4,000 loads in other places over a kilometre-long portion of the river. Hugenholtz said the photos also showed the force of the roaring waters moved boulders up to a metre in diameter, armouring the banks adjacent to the Redwood Meadows subdivision upstream of the city against erosion from future flooding. Trees and shrubs were ripped from sandbars and log jams were formed throughout the channel, particularly along the outer bank bends. "It was shocking the magnitude of change we found," he said. "It was really by chance that we were able to capture this because we happened to fly this stretch of the river a year before the disaster as part of an unrelated study of fish habitat." Overall, the mean elevation of the area was lowered by about 24 centimetres as rocks and gravel were shifted downstream. Where the river used to flow in three braids around bars under normal conditions, it's now a single thread. "It used to meander nicely through this area, but now it's straightened the course right out." Hugenholtz said. "All of these changes are going to affect the way the water moves through the area in the future." [Calgary Herald](#)



Wilfrid Laurier U's Christopher Lemieux, along with colleagues at the University of Waterloo and the Churchill Northern Studies Centre, received SSHRC funding to look at ways to enhance environmental education across Canada through experiential learning. With a focus on citizen science, Lemieux's project will address how to change environmental education experiences to help Canadians better understand and act on the growing challenges of climate change. The team will collect examples of citizen science initiatives from across Canada and evaluate the collective action outcomes of citizen science projects to assess the effectiveness of this work. [WLU News](#)

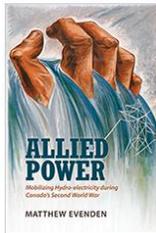
U Northern British Columbia BA Geography alumna Jen Adomeit uses Etsy shop to present some amazing maps that started out as part of a UNBC class project. [View at Etsy](#)

Recent Theses and Dissertations

Md Abdur Rashid. 2015. Gendered violence in gender-based development projects: conditional cash transfer programs and women's 'empowerment' and 'development' in Bangladesh." MA thesis in MA International Studies (International Development), University of Northern British Columbia, Prince George, BC. Supervisor: Catherine Nolin.

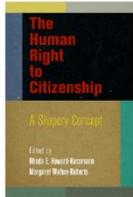
New Book

Matthew Evenden. 2015. [Allied Power: Mobilizing Hydro-Electricity during Canada's Second World War](#). Toronto: University of Toronto Press.



Canada emerged from the Second World War as a hydro-electric superpower. Only the United States generated more hydro power than Canada and only Norway generated more per capita. *Allied Power* is about how this came to be: the mobilization of Canadian hydro-electricity during the war and the impact of that wartime expansion on Canada's power systems, rivers, and politics. Matthew Evenden argues that the wartime power crisis facilitated an unprecedented expansion of state control over hydro-electric development, boosting the country's generating capacity and making an important material contribution to the Allied war effort at the same time as it exacerbated regional disparities, transformed rivers through dam construction, and changed public attitudes to electricity through power conservation programs. An important contribution to the political, environmental, and economic history of wartime Canada, [Allied Power](#) is an innovative examination of a little-known aspect of Canada's Second World War experience.

Rhoda E. Howard-Hassmann and Margaret Walton-Roberts, Editors. 2015. [The Human Right to Citizenship. The Human Right to Citizenship: A Slippery Concept](#). Penn Press. 288 p.



[The Human Right to Citizenship](#) provides an accessible overview of citizenship regimes around the globe, focusing on empirical cases of denied or weakened legal rights. Exploring the legal and social implications of specific national contexts, contributors examine the status of labor migrants in the United States and Canada, the changing definition of citizenship in Nigeria, Germany, India, and Brazil, and the rights of ethnic groups including Palestinians, Rohingya refugees in Bangladesh, Bangladeshi migrants to India, and Roma in Europe. Other chapters consider children's rights to citizenship, multiple citizenships, and unwanted citizenships. With a broad geographical scope, this volume provides a wide-ranging theoretical and legal framework to understand the particular ambiguities, paradoxes, and evolutions of citizenship regimes in the twenty-first century.

Hot Papers by Canadian Geographers

Abderrazak Bannari, Karl Staenz, Catherine Champagne and K. Shahid Khurshi. [Spatial variability mapping of crop residue using Hyperion \(EO-1\) hyperspectral data](#). Remote Sensing 7:8107-8127.

Corin de Freitas, Andrea J. Marston and Karen Bakker. 2015. [Not-quite-neoliberal natures in Latin America: An introduction](#). Geoforum. DOI: 10.1016/j.geoforum.2015.05.021

Norma Froelich, Holly Croft, Jing M. Chen, Alemu Gonsamo and Ralf M. Staebler. 2015. [Trends of carbon fluxes and climate over a mixed temperate–boreal transition forest in southern Ontario, Canada](#). Agricultural and Forest Meteorology 211–212:72–84.

Nathalie Gravel and Hector José Martínez Arboleya. 2015. [A social partnership for peace building in Mexico: examples from the states of Nuevo León and Sonora](#). Canadian Journal of Latin American and Caribbean Studies/Revue canadienne des études latino-américaines et caraïbes. DOI:10.1080/08263663.2015.1044719

K.J. Hokanson, M.C. Lukenbach, K.J. Devito, N. Kettridge, R.M. Petrone and J.M. Waddington. 2015. [Groundwater connectivity controls peat burn severity in the Boreal Plains](#). Ecohydrology. DOI:10.1002/eco.1657

Calvin Lakhan. 2015. [A comparison of single and multi-stream recycling systems in Ontario, Canada](#). Resources 4:384-397.

Andrew Leung and William Gough. 2015. [Air mass distribution and the heterogeneity of the climate change signal in the Hudson Bay/Foxe Basin region, Canada](#). Theoretical and Applied Climatology. DOI:10.1007/s00704-015-1523-x

Duncan McLaren, Daryl Fedje, Murray B. Hay, Quentin Mackie, Ian J. Walker, Dan H. Shugar, Jordan B.R. Eamer, Olav B. Lian and Christina Neudorf. 2015. [A post-glacial sea level hinge on the central Pacific coast of Canada](#). Quaternary Science Reviews 97:148–169.

T.H. Oiamo, J. Baxter, A. Grgicak-Mannion, X. Xu, and I.L. Luginaah. 2015. [Place effects on noise annoyance: Cumulative exposures, odour annoyance and noise sensitivity as mediators of environmental context](#). Atmospheric Environment. DOI: 10.1016/j.atmosenv.2015.06.024

David Sauchyn, Barrie Bonsal, Stefan W. Kienzle, Jeannine-Marie St. Jacques, Jessica Vanstone and Elaine Wheaton. 2015. [Adaptation according to mode of climate variability: a case study from Canada's Western Interior](#). In: Handbook of Climate Change Adaptation. Edited by: Walter Leal Filho. Springer Berlin Heidelberg. 1353-1379.

J.N. Serran and I.F. Creed. 2015. [New mapping techniques to estimate the preferential loss of small wetlands on prairie landscapes](#). Hydrological Processes. DOI:10.1002/hyp.10582

David Wheeler, Margo MacGregor, Frank Atherton, Kevin Christmas, Shawn Dalton, Maurice Dusseault, Graham Gagnon, Brad Hayes, Constance MacIntosh, Ian Mauro and Ray Ritcey. 2015. [Hydraulic fracturing – Integrating public participation with an independent review of the risks and benefits](#). Energy Policy 85:299–308.

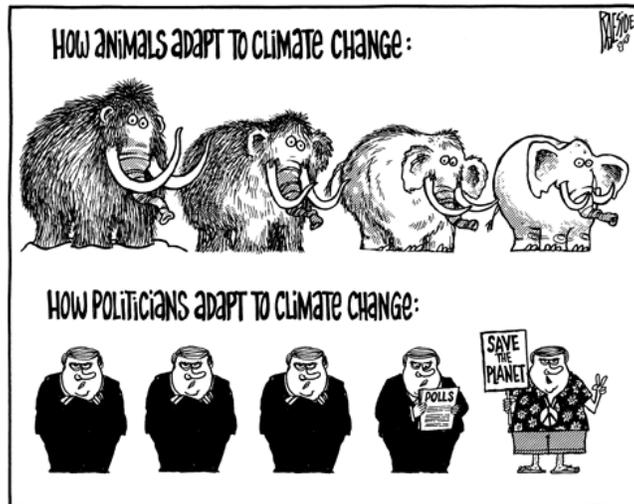
Other “Geographical” News

The Canadian geography of coffee: The Canadian geography of coffee map visualizes the competition between Canada's two largest coffee shops: Starbucks and Tim Hortons. Using hexagon bins instead of trade areas, municipalities and administrative boundaries, the location-point data of these stores are aggregated into organized areas. Overall, it appears Starbucks has more locations in the West and Tim Hortons dominates everywhere else. [Toronto Star](#)

Canada's newest national park is cloaked in near-perpetual darkness: For several months each year, Bathurst Island is cloaked in perpetual darkness. The sun simply doesn't breach the horizon. Until the summer, that is, when the balance shifts and the island is bathed in light for 24 hour days. There aren't many places like this on earth, and it just so happens that this unique environment in Canada's high arctic is now the site of Qausuittuq, Canada's newest national park. Pronounced "Qow-soo-ee-tooq," it's not quite the most northern national park in the country, but it's close—beat only by Quttinirpaaq National Park on Ellesmere Island, near the world's most northern settlement of Alert. The creation of the park not only provides a sanctuary for the endangered Peary caribou, but ensures Inuit will be able to continue their subsistence hunts within the park. And the hope is it will become a viable destination for tourism, too. [Motherboard](#)

What's wrong with academics making friends with students? The standard university human resources guidance, where it exists, states that the teaching relationship is reliant upon mutual trust and confidence and this “may be put at risk when a personal relationship is formed”. The mollycoddling of students is reaching an excessive level at universities and lecturers are now increasingly expected to treat them like schoolchildren, by heavily monitoring attendance and providing more and more contact time rather than encouraging independent learning and a sense of personal responsibility. This is seeping into attitudes around staff-student relationships. I'd favour taking a common sense approach and trusting that staff are grown up enough to avoid favouritism and use the moderation process effectively. [The Guardian](#)

Some not so “Geographical” News



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