



News Digest of the Canadian Association of Geographers

No. 299, April 10, 2014

Compiled by Dan Smith <cag@geog.uvic.ca>

SFU geographer Lance Lesack reveals new twist on Arctic melt in river ice: A new study led by Lance Lesack, a Simon Fraser University geographer and Faculty of Environment professor, has discovered unexpected climate-driven changes in the mighty Mackenzie River's ice breakup. This discovery may help resolve the complex puzzle underlying why Arctic ice is disappearing more rapidly than expected. The goal of the research was to understand how warming global temperatures and the intensifying Arctic hydrological cycle associated with them may be driving increasing water discharges and more rapid ice breakup in the Arctic's great rivers. But the researchers stumbled upon an unexpected phenomenon while trying to figure out why the Mackenzie River's annual ice breakup has been shortening even though its water discharge isn't increasing, as in Russian rivers. Just slightly warmer springs with unexpected snowfall declines — rather than warmer winters or increasing river discharge, as previously suspected — can drive earlier-than-expected ice breakup in great Arctic rivers. The Mackenzie exemplifies this unexpected phenomenon. The researchers discovered this by accessing records dating back to 1958 of the river's water levels, snow depths, air temperatures and times of ice breakup. [redOrbit](#)

U Guelph undergraduate geography superstar Genevieve Lalonde: Geneviève Lalonde is completing her undergraduate degree at the University of Guelph in the BSc. Environmental Sciences major in Geography. She is an Academic All-Canadian and member of the nationally acclaimed varsity cross-country and track and field programs. She has also contributed to various on-campus environmental initiatives including the Environmental Science Symposium and assists with the promotion of youth in sport programs both in Guelph and her hometown of Moncton New Brunswick. In February 2014, under the guidance of Tristan Pearce and Benjamin Bradshaw, Genevieve conducted field research in the Canadian Arctic. Her research addresses community concerns regarding the relevance of formal education for young Inuit and examines perceptions of learning success among Inuit and southern educators. Lalonde and Dr. Pearce worked with community partners to conduct semi-structured interviews with over 35 Inuit students and southern educators to document perceptions of learning success and the tools required to achieve success. [U Guelph People](#)

Nipissing U's Adam Csank receives CFI to establish a light stable isotope mass spectrometry facility: Dr. Adam Csank, Assistant Professor of Geography, received CFI funding to establish a light stable isotope mass spectrometry facility at Nipissing University. The equipment, an Isotope Ratio Mass spectrometer (IRMS), will assist Csank in analyzing tree rings to understand past climate and ecosystem function. The facility will be home to the only isotope measurement facility in Northern Ontario and is intended to become a valuable resource for the Northern Ontario scientific and industrial community, applicable to studying environmental, geological and biological questions. [NU News](#)

U Ottawa's Barry Warner comments on how a long, cruel, Canadian winter is driving some people into a snow rage: Many of us have lamented over the long winter we're now emerging from. But residents of St. John's are suffering from snow rage because finding a patch of clear pavement to walk on this winter has been so difficult, they're staging protests. The city of St. John's is promising a review of its snow clearing practices... but only in time for next winter. Cities across Canada have adopted different punishments to get people to clear their sidewalks of snow. Saskatoon and others have a snitch-line where residents can complain about people who don't clear their sidewalks. But the city of Regina set up an incentive program that hands out an award to a resident who has done exceptional work shoveling snow. Kathy Mohr is the winner of this year's [Snow Buster](#) program. She says she started clearing her neighbour's sidewalks, in addition to her own, when her neighbour got sick. Listen to Barry on CBC's [The Current](#). Click on the "listen" button for the entire story, with Barry's section in the last 8-10 minutes.

U Guelph geography students write about research in AAG Animal Geography News: Animal geographers are well aware that human-animal relations are far more complex than we may initially perceive them to be. Valli-L. Fraser-Celin, a PhD geography student at the University of Guelph, is focused on research looking at human-African wild dog relations in Botswana where she will examine the ways in which different stakeholder groups think and feel about, interact with, and position wild dogs. Allie Mayberry, an MA student, is examining the links between the well-being of humans and free-ranging African savannah elephants using a One Health perspective. Lauren Van Patter, an MA student, is explore the conflicts surrounding domesticated cats and wildlife under the supervision of Alice Hovorka. [Animal Geography Specialty Group Newsletter](#)

U Calgary's Brian Moorman teaches on Norwegian island in Arctic Ocean: Fly to a remote island in the Arctic Ocean, teach students from as far afield as Africa, Ireland and the United States, and train them to measure what's going on with the world's permafrost and glaciers – all part of the job for Brian Moorman. In late March, Moorman – a University of Calgary geographer studying permafrost and glaciers – was in Svalbard on Norway's Spitsbergen Island investigating a research project on permafrost hydrology and delivering guest lectures at the university there. "Norway has a university there that attracts students from around the world, including Canadians. The funny thing is, I ended up traveling 5,000 kilometres to teach my own graduate student," he says with a smile. Students from Ghana, Russia, Norway, Ireland, the U.S., Denmark, France and many other countries also attend The University Centre in Svalbard (UNIS) to further their northern studies. While most in the course were graduate students enrolled in geography or environmental science, one was a northern archaeologist learning how permafrost preserves artifacts. Moorman, who is associate dean of research and infrastructure in the Faculty of Arts, is funded by NSERC to examine the hydrological interactions between glaciers and permafrost in the eastern Canadian Arctic, and is part of a SSHRC-funded project to study archaeological sites at risk in the western Arctic due to coastal retreat and permafrost degradation. As part of his research on how accelerated warming is changing Canada's North, he also looks at the effects on the terrestrial and aquatic landscapes. [Calgary UToday](#)

U Waterloo geographers Peter Johnson and Derek Robinson receive Early Researcher Awards: As part of the province of Ontario's Early Researcher Awards program and Ontario Research Fund – Research Infrastructure program, two members of the Department of Geography and Environmental Management have been awarded funding for their work. Recognized was Peter Johnson, who is conducting research on location-based applications for mobile devices, and Derek Robinson, who is using unmanned aerial vehicles and simulator models to study land management techniques and the resulting impact on agriculture in Ontario. The Early Researcher Awards Program helps promising and recently appointed researchers make new discoveries while creating jobs for graduate and undergraduate students, postdoctoral fellows and research assistants. [UW Environment News](#)

U Guelph graduate student Naomi Horst recognized for research paper: Not only did University of Guelph graduate Naomi Horst publish, but her paper in *The International Journal of Sustainability in Higher Education* has been selected by the journal's Editorial Team as a Highly Commended Paper of 2013. "The *The International Journal of Sustainability in Higher Education* Editorial Team were asked to nominate an Outstanding Paper and up to three Highly Commended Papers. ['Exploring the ambiguity: what faculty leaders really think of sustainability in higher education'](#) was chosen as a Highly Commended Paper winner as it is one of the most impressive pieces of work the team has seen throughout 2013." (Emma Hollindrake, Emerald Publishing Ltd.).

U Western geography graduate students are global ambassadors: Geography graduate students Kevin Vuong, Sepehr Pashang and Joseph Kangmennaang are true global ambassadors for Western. The trio burst onto the campus sustainability scene at Western International's *World's Challenge Challenge*, where the group took home top prize for its inexpensive solar cook stoves. This award encouraged the team to compete in the provincial Social Venture Challenge (SVC) hosted by Social Spark, an early incubator for global social enterprises. SVC enabled them to cofound the social enterprise, rePurpose for Change. Currently, rePurpose for Change is developing inexpensive and safe alternatives to cooking using solar energy, beginning first in Ghana, with the aim of extending the solution to the rest of Africa and the developing world. The team has also been involved in other sustainability efforts on campus. "Whether it is developing an innovative solution for a world challenge, sharing research and expertise at a global conference or implementing best practices here on campus," one nominator wrote, "rePurpose for Change has shown they are champions of sustainability. They are role models for those around them, inspiring others to follow in their leadership of enacting real, positive environmental outcomes." [Western News](#)

Hot Papers by Canadian Geographers

Margaret E. Andrew, Michael A. Wulder and Trisalyn A. Nelson. 2014. [Potential contributions of remote sensing to ecosystem service assessments](#). *Progress in Physical Geography*. doi:10.1177/0309133314528942

Caitlin Henry. 2014. [Time and the social reproduction of American health care](#). *Women's Studies International Forum*. doi.org/10.1016/j.wsif.2014.02.013

A. Nicault, E. Boucher, C. Bégin, J. Guiot, J. Marion, L. Perreault, R. Roy, M.M. Savard and Y. Bégin. 2014. [Hydrological reconstruction from tree-ring multi-proxies over the last two centuries at the Caniapiscou Reservoir, northern Québec, Canada](#). *Journal of Hydrology*. doi.org/10.1016/j.jhydrol.2014.03.054

P. Roy-Léveillé, C.R. Burn and I.D.McDonald. 2014. [Vegetation-permafrost relations within the forest-tundra ecotone near Old Crow, Northern Yukon, Canada](#). *Permafrost and Periglacial Processes*. DOI:10.1002/ppp.1805

Marc Tadaki and Ian C. Fuller. 2014. [Freshwater geographies: Prospects for an engaged institutional project?](#) *New Zealand Geographer* 70:1–6.

Y. Liu, W. Yang, Z. Yu, I. Lung, J. Yarotski, J. Elliott and K. Tiessen, K. 2014. [Assessing the effects of small dams on stream flow and water quality in an agricultural watershed](#). *Journal of Hydrologic Engineering*. DOI:10.1061/(ASCE)HE.1943-5584.0001005

Other “Geographical” News

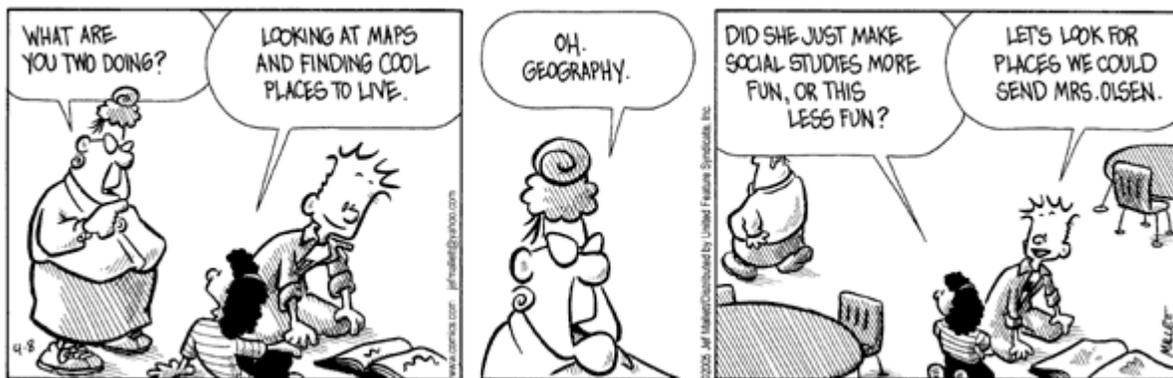
Geography research could improve the effectiveness of hospital patient transport services:

Geographical research is offering hospitals and trauma centers a unique, accurate and scientific approach to making decisions about transporting critical-care patients by air or by ambulance. The research uses analysis by Geographic Information Systems (GIS) technology to provide information on whether patient transport would be more successful by ambulance or medical helicopter in terms of cost as well as patient care. Early results indicate GIS technology is both accurate and successful in providing estimated transport times to trauma centers. The study focuses on travel time equal to or less than 60 minutes, the so-called “golden hour” of getting critical-care patients to treatment. [RedOrbit](#)

Geographer to conduct moonshine study: Moonshine has been a part of eastern Kentucky culture for many years and a way of livelihood for generations. Geographers from Kentucky State are investigating the nature of moonshine production in the region, focusing on the early 20th century when national prohibition was in effect. [Harlandaily.com](#)

The city is dying: Turns out, there is a geography to peak urbanization. On one hand, the big loser from urbanization are country towns and villages (even small cities). In the developing world, that trend is going full bore. In developed countries rural communities have found a sustainable ground floor. That is, until now. [Pacific Standard](#)

Some not so “Geographical” News



The CAG now works for geographers on [Twitter](#). Keep up-to-date by following [@CanGeographers](#)

GeogNews Archives: <http://www.geog.uvic.ca/dept/cag/geognews/geognews.html>
