



News Digest of the Canadian Association of Geographers

No. 365, July 31, 2015

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

U Waterloo's Paul Parker awarded Green Communities Canada award: Department of Geography and Environmental Management professor, and Faculty of Environment associate dean of graduate studies, Paul Parker has been recognized for his commitment to REEP Green Solutions and for providing exceptional stewardship to the organization with the 2015 Green Communities Canada Award for Outstanding Board Person. "Paul is a co-founder of REEP and its longest serving Board member," said Mary Jane Patterson Executive Director at [REEP Green Solutions](#). "He finds creative ways to weave his personal commitment to energy sustainability and community volunteerism into every aspect of his work. Paul is known for his legendary speaking style, big expansive gestures and infectious enthusiasm." Green Communities Canada is a national association of community organizations working with homeowners, businesses, governments and communities to reduce our impact on the environment. [U Waterloo Environment](#)

U Guelph's Aaron Berg receives Canadian Space Agency grant to study global soil moisture levels: A University of Guelph geography professor using a NASA satellite to study global soil moisture levels has received a grant from the Canadian Space Agency. Aaron Berg and his U of G team are using information gathered by NASA's Soil Moisture Active Passive satellite to help farmers and meteorologists better predict crop yields, floods, droughts and seasonal weather forecasts. The satellite was launched in January and uses passive microwave radiometer and a radar to determine soil moisture levels. It travels from the North Pole to South Pole and covers 600 kilometres at a time, orbiting the Earth every 98 minutes, and looking into the top five centimetres of soil. Berg and his team of students and post-doctoral researchers are interested in the data the satellite is providing on global soil moisture and soil freeze-thaw rates. They are comparing it to information they already have from field sites across Canada, including in Elora, Ont., Saskatchewan and the Northwest Territories. "The SMAP satellite proves an estimate of soil moisture state; our data and work will be to fine tune these models and estimates," said Berg, an expert in soil moisture and modelling. "We're looking at very different sites across Canada, because it wouldn't make sense to base all your calibrations on just one site in Ontario, for example. This gives us a varied picture of what is taking place." The information will especially benefit farmers and forecasters, he said. The global data received will be helpful in refining Canadian agricultural and weather models, Berg added. [U Guelph News](#)

U Calgary's Brian Moorman warns about ancient virus found preserved in frozen caribou dung:

The discovery that a plant virus could be resurrected, after spending 700 years cryogenically preserved in frozen caribou feces, was a revelation both exciting and troubling for University of Calgary geography professor Brian Moorman. On one hand, it was a groundbreaking find. Scientific knowledge of ancient viruses is limited because of their poor preservation in ancient specimens. Therefore, the discovery of viral genomes found in the 700-year-old caribou feces — extracted from layers of ice in the Selwyn Mountains of the Northwest Territories — was invaluable. It showed that cryogenically preserved materials can act as repositories of viral nucleic acids, allowing scientists to regenerate ancient viruses for study. But the discovery has darker implications too, because as global warming continues to melt away the world's ice, there's no telling what sort of unknown viruses could be released into the environment. The project in the Selwyn Mountains began as an archaeological expedition with the goal of finding artifacts preserved in subarctic ice. Using ground-penetrating radar, Moorman imaged the interior structure of the ice patches, determining how they developed and how they were preserved. Coring through the ice patches, he was also able to determine the age of each layer. The subarctic ice patch containing the caribou feces was found to be 4,000 years old. Remarkably, in the three-year period of the study, between 2008 and 2011, that patch melted away. "Think about that," says Moorman, "This ice had been there continuously for 4,000 years, but in a period of only three years it disappeared completely." Despite the concerns [posed by the findings](#), the ability to study cryogenically preserved ancient viruses could have a great benefit in the present, providing insights into how viruses evolve and change over time. [U Calgary News](#)

New in [The Canadian Geographer](#)



Patricia Manuel, Eric Rapaport, Janice Keefe and Tamara Krawchenko. 2015. [Coastal climate change and aging communities in Atlantic Canada: A methodological overview of community asset and social vulnerability mapping](#). The Canadian Geographer / Le Géographe canadien. DOI: 10.1111/cag.12203

Hot Papers by Canadian Geographers

Rheannon Brooks, Trisalyn Nelson, Krista Amolins and G. Brent Hall. 2015. [Semi-automated building footprint extraction from orthophotos](#). Geomatica 69:231-244.

Elena A. Favaro and Scott F. Lamoureux. 2015. [Downstream patterns of suspended sediment transport in a High Arctic river influenced by permafrost disturbance and recent climate change](#). Geomorphology 246:359–369.

Mark W. Horner, Daniel K. Schleith and Michael J. Widener. 2015. [An analysis of the commuting and jobs–housing patterns of older adult workers](#). The Professional Geographer. DOI:10.1080/00330124.2015.1054018

Stephanie Pyne and D.R. Fraser Taylor. 2015. [Cybercartography, transitional justice and the residential schools legacy](#). *Geomatica* 69:173-187.

Delacey Tedesco. 2015. [American foundations in the Great Bear Rainforest: Philanthrocapitalism, governmentality, and democracy](#). *Geoforum* 65:12-24.

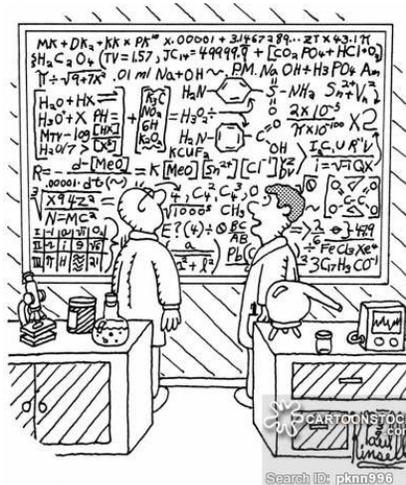
Lanying Wang, Wei Li, Shiqian Wang and Jonathan Li. 2015. [Examining urban expansion in the Greater Toronto Area using Landsat imagery from 1974–2014](#). *Geomatica* 69:161-172.

Other “Geographical” News

Boundaries revealed for Thaidene Nene, new N.W.T. national park: The expected boundaries of a vast new protected area in the Northwest Territories have been revealed. Thaidene Nene, which means Land of the Ancestors in Dene - rationally proposed in the 1970s - is to cover 27,000 square kilometres around the eastern arm of Great Slave Lake. [CBC News](#)

Microbeads ban forthcoming, federal government says: Canada is one micro-step closer to a federal ban on microbeads. The Conservative government said it is proposing to add microbeads to the list of toxic substances under the Canadian Environmental Protection Act. Microbeads are the tiny, plastic pellets that are most commonly found in skin care and exfoliation products. [CBC News](#)

Some not so “Geographical” News



"It wasn't the humidity,
but the heat all along."



The CAG works for geographers on [Twitter](#). Keep up-to-date by following [@CanGeographers](#)
GeogNews Archives: <http://www.geog.uvic.ca/dept/cag/geognews/geognews.html>
[@CanGeographers](#) Weekly: <https://paper.li/CanGeographers/1394987315>