

Who's who in the CGU Hydrology Section?

CHERIE WESTBROOK

Member since 1997



What was your academic journey?

Even as a youngster I was fascinated by water, but I had no role models for women in science careers. Somehow, I found myself completing an honours BSc in Environmental Science at University of Toronto. I was fortunate to convince Dr. Kevin Devito to let me volunteer on his peatland hydro-biogeochemistry research projects in my second year. He hired me as a research assistant the following year, and he served as my supervisor for my honours project, and also my MSc at University of Alberta. While I thought I wanted to complete a PhD, I wanted to explore my career options first. {read: I was broke}. So, I took up hydrochemistry research-type work with a variety of organizations – Alberta Research Council, Syncrude Canada Ltd., and Alberta Agriculture. They were enriching experiences that helped me realize that I truly did want to pursue a PhD. I convinced Dr. David Cooper at Colorado State University to take me on, and I spent a fantastic three years earning an ecohydrology doctoral degree, studying how beaver create and maintain wetlands along the headwaters of the Colorado River. I was (and still am) an ambitious type, and so landed myself a faculty position at University of Saskatchewan where I've been ever since. I recently up-leveled my skills via completing an academic leadership certificate at Dalhousie University.

What is/are your proudest academic accomplishment(s)?

For a decade I aspired to carry out a research project in Tierra del Fuego (Argentina). Beavers were introduced there as an exotic species in 1946. I wanted to understand how invasive beavers had altered the physical landscape of Tierra del Fuego, and identify what landscape features and biota needed to be restored. In 2013 my dream came to fruition and I spent a memorable five weeks there collecting field data with an outstanding team of Argentine researchers, two of my recently graduated master's students, my postdoc and a US colleague. It was truly one of the brightest field adventures of my career.

What advice would you give students launching a career in hydrology?

Put work into building relationships over the long term, not just when you need something.

Can you give a quick overview of any current research projects?

Our research group is currently advancing knowledge in three theme areas. One theme is exploring how beavers 'engineer' key ecosystem-forming processes that regulate the downstream flow of water, sediment, nutrients and biota in order to support beaver-based ecological restoration and holistic water management. I am particularly excited to be part of a collaborative of researchers, policy-makers, resource managers and non-profit practitioners that are conducting a viability study of beaver-based ecological restoration of the headwaters of the Colorado River. A second theme is assessing how the ecohydrological function of peatlands varies across mountain ranges and evolves under climate change. As our team is inspired to have social context for our research, a third theme involves evaluating the degree to which wetland functions are prioritized in the practice of environmental assessment.

What are your favourite activities / hobbies / interests?

My favourite thing to do is spend time with my family at the cabin on the Canadian Shield canoeing, blueberry picking, fishing, swimming and watching sunsets. When at home, you'll find me tending my rather large garden in summer, canning in fall, and cross-country skiing in winter.

What are you reading right now (could be either/both academically and leisurely)?

Reading has been one of my hobbies since about grade 2. You'll always find a stack of books piled haphazardly on my nightstand. I toggle between fiction and non-fiction from night to night depending on how intellectually draining the day was. The two books I'm currently reading are: 1) Beaver, Bison, Horse by R. Grace Morgan, and 2) The Fate of the Dwarves by Markus Heitz.

