

Megan Watters, RPBio, PBiol, MSc

Ecosystem Biologist, Ministry of Forests, Lands & Natural Resource Operations, Fort St. John



To what do you attribute your interest in biology, and when did you first become aware of your interest in the discipline?

As the offspring of a geologist and a marine geophysicist, I suppose I was bound to become a scientist of some variety, either by nature or nurture. Much to my geologist fathers' disappointment, I found rocks rather boring (I recall moaning as a child that "rocks don't do anything!"), and since I grew up in Saskatchewan, had little use for marine geophysics. For a number of years I wanted to be a physician and took the requisite courses, but eventually realized that I lacked the emotional tenacity to be an effective doctor. It wasn't until I enrolled in Dr. Mark Brigham's animal behaviour course at the University of Regina that I found my calling; Mark's enthusiasm about biology inspired me to pursue a career in the discipline.

What is your academic background?

I earned my Bachelor of Science degree with honours at the University of Regina, under the tutelage of Mark Brigham. I was fortunate to have the opportunity to study endangered Greater Sage-Grouse for my honours project, which first sparked my interest in species at risk. I then pursued a Master's of Science degree in environmental biology at the University of Alberta with Dr. Evelyn Merrill, for which I researched the effects of elk grazing on grasslands in Jasper National Park. Aside from getting to spend six months of the year for several years in Jasper, I had the opportunity to round out my knowledge base with an improved understanding of ecology.

What do you do on the job and what are your favourite aspects of the work?

My job as an Ecosystems Biologist with the Ministry of Forests, Lands and Natural Resource Operations has provided many opportunities to grow professionally and personally. As a public servant, one of my responsibilities is to provide the public with information on ecosystem values and measures to protect these values. I consider myself fortunate to specialize in caribou, a species that has long fascinated me. As the regional representative on the BC Research and Effectiveness Monitoring Board (the government and industry group tasked with implementing management actions for boreal caribou), I am involved in the direction of many research projects that are improving our understanding of BC's boreal caribou populations and how these animals use their landscape. I am also part of the team applying the information gained from research to develop management

plans and strategies for recovering boreal caribou in BC. As an Ecosystems Biologist in the northeast region of BC, I am also involved in the management of northern caribou, including monitoring; establishing Ungulate Winter Ranges and Wildlife Habitat Areas, which provide a measure of protection for caribou and other species of interest; mitigation and offset of industrial impacts to caribou; and sharing information on northern caribou with stakeholders. My job has also afforded me the chance to contribute to the ever-growing body of literature on caribou.

My favourite aspect of my work is, without a doubt, being involved in caribou research and management. Anyone who has worked with me will attest to the fact that I'm passionate about caribou, and it means the world to me to be a part of the "caribou story". I also enjoy sharing the caribou story in the hopes that others will be as captivated by this charismatic species as I am.

Which practice area is beyond the scope of your current work that you would most like to become involved in or what would your ideal biology-related job or project be?

My job as an Ecosystems Biologist is the culmination of many years of searching for that "perfect" job, which would provide opportunities to conduct meaningful work that I am passionate about. I have found my niche in the wide and wonderful world of biology; it just doesn't get much better than that! I hope to continue working on caribou and other species at risk, and sharing their stories with biologists and non-biologists alike. 

Rebecca Mersereau, RPBio, MSc

Sustainability Specialist, Econics, Victoria



To what do you attribute your interest in biology, and when did you become aware of your interest in the discipline?

My summer job experiences in New Brunswick and an unapologetically geeky but passionate grade 12 biology teacher are responsible for my initial interest in biology. At age 14, I began working at a conservation centre for Atlantic salmon, *Salmo salar* ('the leaper'), educating tourists about their plight. I then spent many summers throughout high school and university working at a commercial salmon hatchery and occasionally on sea cages, having decided I liked working with fish. During my time in the aquaculture sector, I also acquired an interest in water quality and the push/pull of competing resource management objectives, particularly in rural communities.

What is your academic background?

I completed an undergraduate degree in biology at Dalhousie University in Halifax, with a focus on marine sciences and ecology. I subsequently received a Bachelor of Education degree from St. Thomas University in Fredericton and a Master's in Water Resources Management from the University of the West Indies in Barbados. Well-known fisheries scientist, and recent science advocate, Dr. Jeff Hutchings was my most memorable professor; I recall being struck by his principled decision to part ways with the federal government after his advice to reduce cod quotas in Newfoundland was ignored, which had implications that we are all unfortunately familiar with.

What do you do on the job?

After several years of management and administration jobs in the environmental non-profit sector – including most recently at the College – I decided to pursue a position that would allow me to apply my academic background more directly and acquire some expertise. I recently started working for a small consulting firm in Victoria that specializes in sustainable management of water supply systems – both in financial and environmental terms.

While I'm currently busy trying to wrap my head around some incredibly complex spreadsheets to help re-design water rates and infrastructure replacement schedules, I'm looking forward to being involved in water source protection planning and community engagement, particularly in the context of BC's recently enacted *Water Sustainability Act*.

On the *Water Sustainability Act*

The *Water Sustainability Act* is a long-overdue attempt to catch up with other jurisdictions in some regards, such as regulating groundwater. However, it also contains promising provisions for engaging local stakeholders in watershed planning and protecting environmental flows in particular. Under the new *Act*, environmental flows must be considered in water licensing decisions in BC, and importantly the new provisions prioritize minimum flow needs of streams and connected aquifers when water shortages exist. The new *Act* and accompanying regulations will have implications for those working in and around streams, and those currently seeking to divert surface water or access ground water, both of which are now subject to licensing and reporting requirements. The *Water Sustainability Act* and regulations can be accessed here: <https://engage.gov.bc.ca/watersustainabilityact/>. 