



Institut nordique
du Québec

MCGILL CHAIR IN NORTHERN RESEARCH – WILDLIFE CONSERVATION AND TRADITIONAL FOOD SECURITY

Department of Natural Resource Sciences

MISSION

The Institut nordique du Québec (INQ) McGill Chair in Northern Research - Wildlife conservation and Traditional Food Security will focus on the protection and sustainable development of northern Quebec's natural resources. In particular, research will focus on how resource development and other forms of environmental change impact the abundance and health of northern wildlife populations and their contribution to traditional food security.

CHAIR CREATION: July 2016

CONTEXT

Wildlife research is in the midst of a revolution, driven by the rapidly advancing field of biologging, which refers to the use of miniaturized animal-attached tags for logging and/or relaying of data about an animal's movements, behaviour, physiology and/or environment. There is an opportunity to drastically improve how we assess, monitor, and mitigate the impacts of resource development on wildlife, by capitalizing on new biologging technology to document wildlife movement, diet, nutrition, and demographics before and after (as well as in proximity to and distant from) resource development. This research will focus on the wildlife species that are key sources of traditional food for northern communities and the environmental impacts that threaten these species.

The major advance and innovation offered by this proposed research arises from the new technology, which for the first time enables direct and continuous time and space documentation of the physiological, behavioural, and population impacts of development on wildlife, and embedding the new technology within applied research partnerships focused on sustainable development and food security.

CHAIRHOLDER

Murray Humphries is a leading Canadian wildlife researcher, whose work has made successful links between fundamental ecological research and the needs and contributions of indigenous communities in Canada's North. His research explores how environment, physiology, and behaviour influence the abundance, distribution, and coexistence of mammal populations. His research also focuses on wildlife and environmental contributions to the traditional food systems of Indigenous Peoples. He is an Associate Professor in the Department of Natural Resource Sciences at McGill University. From 2006-2012 he was an NSERC Northern Research Chair in Wildlife Biology and Traditional Food Security in Canada's Changing North. In 2013 he was awarded an NSERC Discovery Grant and Discovery Accelerator, as well as a \$1.65 million NSERC CREATE grant for Enhancing Canada's Prosperity Through Innovative Environmental Assessment, Monitoring, and Management (2014-2020). Since 2010, Prof. Humphries has served as academic director of McGill's Centre for Indigenous Peoples' Nutrition and Environment, an inter-disciplinary research centre dedicated to community-based research on food and the environment.



McGill



OBJECTIVES

The Chair's objectives are to partner with local communities, government and the private sector to assess and mitigate the impacts of resource development on wildlife populations and traditional food security.

Research pursued under the McGill Chair in Northern Research - Wildlife conservation and Traditional Food Security will focus on the protection and sustainable development of northern Quebec's natural resources. In particular, research will focus on how resource development and other forms of environmental change impact the abundance and health of northern wildlife populations and their contribution to traditional food security. This will be problem- and action-oriented research, focused on the problem of protecting lands, wildlife, and traditional food security in an era of rapid environmental change and seeking to identify and implement effective, innovative measures that optimize and balance northern economic development, environmental protection, and wildlife conservation.

PARTNERS

The Chair currently leads two parallel lines of research, which will be integrated and expanded within the INQ Northern Research Chair. The first is the NSERC CREATE for Enhancing Canada's Prosperity Through Innovative Environmental Assessment, Monitoring, and Management (2014-2020), is a training program involving more than 30 partners from northern industry, government and indigenous communities. The second is the NSERC Discovery and Discovery Accelerator for Climate and the Ecological Energetics of Interacting Species (2013-2017), and The research conducted under the Chair will synergize and expand these two research and training programs to assess how resource development and other forms of environmental change impact the abundance and health of northern wildlife populations and their contribution to traditional food security.

OUTCOMES

- > Achieve food security and wildlife conservation through economic development
- > Increase awareness and documentation of local food knowledge and traditional ecological knowledge
- > Refine community-based research approaches to achieve to knowledge co-production and ensure policy relevance.



CONTACT

Murray Humphries
Department of Natural Resource Sciences
McGill University
MacDonald-Stewart Building
Room MS3-040
21 - 111 Lakeshore Road
Sainte-Anne-de-Bellevue, Québec
H9X 3V9
Tel.: 514 398-7885
Fax: 514 398-7990
Email: murray.humphries@mcgill.ca

