Master of Arts Research Project, McMaster University

**Project Title:** Mapping Sanikiluarmiut Knowledge for Qikiqtait Protected Area Development

**Research Partners:** The Arctic Eider Society, the Qikiqtait Protected Area Committee, SIKU, and the Sanikiluaq Hunters and Trappers Association

**Research Topics:** Inuit-led and managed conservation, linking conservation and technology with Sanikiluarmiut knowledge, community-driven research

**Research Goals:** The goal of this project is to assess the capacity of SIKU (the Indigenous Knowledge Social Network) data to support Inuit-led protected area design. This is an important part of understanding the influence of Sanikiluarmiut (people of Sanikiluaq) knowledge on shaping protected area design and implementation. This project will also investigate how Sanikiluarmiut monitoring data can be used to meet the Qikiqtait Protected Area Committee priorities.

**Project Overview:** Conservation programs have often excluded Indigenous knowledge, management, and priorities. However, the importance of Indigenous protected areas and the incorporation of Indigenous knowledge in management strategies is being increasingly recognized. The Belcher Islands Archipelago in southern Nunavut are culturally, ecologically, and biologically important islands. The Qikiqtait Protected Area project is a conservation program that aims to protect the Belcher Islands and build capacity for a conservation economy in the community of Sanikiluaq, Nunavut. Since 2019, Sanikiluarmiut hunters, harvesters, and environmental monitors have been collecting data on important species on the islands through SIKU. The Qikiqtait Protected Area project represents the first time the SIKU mobile app and web platform has been used in protected area development.

This research project will involve mapping and analyzing data from the SIKU app to address Qikiqtait Committee priorities. The primary goal is to assist the planning and implementation of the Qikiqtait Protected Area by developing a baseline Qikiqtait resource inventory. To contribute to this inventory, maps and graphs showing the distribution, abundance, and seasonality of harvesting in the Belcher Islands will be produced. An analysis of trips, including catch per unit effort and travel type, will also be completed using GIS (Geographic Information Systems) and statistical software. This research is important to learn about the advantages and challenges of using community monitoring data to produce conservation management strategies. The results of this analysis will help to create a process for using SIKU data to support the establishment of future Inuit-led conservation initiatives and economies. The analysis will be conducted by Regena Sinclair, a graduate student at McMaster University supervised by Gita Ljubicic. The Qikiqtait Protected Area Committee will oversee Regena’s research, and all results will be provided to the committee and shared in SIKU. Results will also be included in Regena’s Master of Arts thesis and related publications and presentations.
Proposed Research Objectives: This project will work under the guidance of the Arctic Eider Society (AES) and QPA Steering Committee to:

1. Contribute to the QPA resource inventory by mapping distribution, abundance, and richness of key species and areas according to hunter and environmental monitor data;
2. Compare how the resource inventory data aligns with, and can support, QPA management priorities;
3. Compare the resource inventory data to other sources such as the Nunavut Coastal Resources Inventory participatory mapping project; and,
4. Assess the capacity of SIKU as a tool to contribute to a community approach to Inuit-led protected area development and ongoing management.

Research Significance: This research project will contribute to efforts to improve collaborative and Inuit-driven approaches to developing protected areas by:

- Examining the potential for new technology to support Indigenous governance and conservation initiatives;
- Exploring methods of weaving Inuit and scientific knowledge together in conservation planning following Inuit methodologies; and,
- Supporting Inuit self-determination in conservation projects.

Privacy and Opt-out: All SIKU posts tagged to the Qikiqtait Project will be included in this research, according to a research agreement with the Arctic Eider Society, the Qikiqtait Protected Area Committee, and McMaster University. This project will not use or disclose any personal information relating to the SIKU posts. Names will be removed from SIKU posts prior to analysis. Post photos will be examined to verify species information, and photos containing persons will not be downloaded from the SIKU platform. If you do not wish your SIKU posts to be used for this project, please contact our research team by May 31, 2022, to opt-out of this analysis (see below).

Ethics and Licensing:

McMaster Research Ethics Board
Phone: (905) 525-9140 ext. 23142
Email: ethicsoffice@mcmaster.ca
McMaster Research Ethics application number: 5233
McMaster Research Ethics approval date: October 25, 2021

Nunavut Research Institute
Phone: (867) 979-7280
Nunavut Research Institute license number: 01 007 21R-M
**Project Contacts:** For further information, please feel free to contact us!

Dr. Gita Ljubicic  
Associate Professor  
School of Earth, Environment and Society, McMaster University  
Canada Research Chair in Community-Engaged Research for Northern Sustainability  
Phone: (289) 659-2074  
Email: gita.ljubicic@mcmaster.ca  
Facebook: Gita Ljubicic  
Twitter: @straightupnorth  
Website: [https://straightupnorth.ca/gita-ljubicic/](https://straightupnorth.ca/gita-ljubicic/)

Regena Sinclair  
Master of Arts Student  
School of Earth, Environment and Society, McMaster University  
Phone: (705) 341-1635  
Email: sinclr6@mcmaster.ca  
Facebook: Regena.Sinclair.GIS  
Twitter: @Regena_Sinclair  
Website: [https://straightupnorth.ca/regena-sinclair/](https://straightupnorth.ca/regena-sinclair/)