

Project Dashboard

Understanding the impacts of climate change on Arctic nesting geese – a key towards Inuit food sovereignty in Arviat, Nunavut (149689)

Proposal Status: Conformity Determination Issued

Project Overview

Type of application: **New**

Proponent name:	Shirley Tagalik
Company:	Aqqiumavvik Society

Schedule:

Start Date:	2022-05-01
End Date:	2026-08-30
Operation Type:	Seasonal

Project Description:

The Aqqiumavvik Society has brought together a team of experts to investigate the dynamics of climate-food-health from a food sovereignty perspective based on the experiences of Arviarmiut in relation to light goose harvesting and consumption. Our research builds on insights gained from the Kangut Project (2016-2020) that identified Arviarmiut priorities related to light goose management and research. The goal of our project is to assess the viability of an increased harvest of geese and eggs in a changing climate, to contribute to food security in Arviat. Our work contributes to community efforts to restore Inuit relationships with geese, address food sovereignty issues, promote climate change awareness and action in Arviat, and restore nutritionally rich diet options within the community and across Nunavut. As part of these goals, we propose to gather information on geese with the nearby Kuugaajuk Migratory Bird Sanctuary. Proposed work that will take place within the sanctuary includes: 1. Mapping current goose nesting locations and estimating abundance through systematic nest plot surveys (a grid of sample plots where numbers of nests inside a 30 m radius are counted, and eggs are measured to determine species; details provided below). 2. Goose population health monitoring: collect a sample of 50 adult snow and 50 adult Ross's geese to assess cotemporary pathogens, plastic pollution, contaminant, and pre-breeding nutrient levels (note: some of these birds may be collected outside the MBS). 3. Banding a representative sample of snow and Ross's geese to determine current harvest and survival rates, which will guide local harvesting thresholds (note: some banding may occur outside the MBS).

Personnel:

Persons:	6
Days:	40

Project Map

List of all project geometries:

ID	Geometry	Location Name
8483	point	Kuugaarjuq Migratory Bird Sanctuary

Planning Regions:

Kitikmeot

Affected Areas and Land Types

Settlement Area

Keewatin Planning Region

Keewatin Migratory Bird Sanctuary

Project Land Use and Authorizations

Project Land Use

Scientific Research
 Scientific Research

Licensing Agencies

CWS: Migratory Bird Sanctuary permit under the Migratory Bird Sanctuary Regulations

NIRB: 0

NRI: Scientific Research Licence

Other Licensing Requirements

No data found.

Material Use**Equipment**

Type	Quantity	Size	Use
ATV	8	4x4	We will use ATVs to enter and traverse the MBS for field work. ATVs will be used to transport crew to the edge of the nesting colony, but the colony itself will be accessed on foot during the nesting period. When using ATVs, we intend to stay on established routes in the intertidal zone, and avoid sensitive habitats where ATVs may cause damage. During the approximate 1 week of banding, we will establish a mobile base camp in, or within close proximity to the nesting area (perhaps on an esker?).

Fuel Use

Type	Container(s)	Capacity	UOM	Use
Gasoline	4	10	Gallons	Resupply of equipment as needed.

Hazardous Material and Chemical Use

Type	Container(s)	Capacity	UOM	Use
propane stove	2	2	Gallons	Shelter and cooking during monitoring activities

Water Consumption

Daily Amount (m ³)	Retrieval Method	Retrieval Location
0		

Waste and Impacts

Environmental Impacts

Some impacts to land through use of ATVs. We will use existing routes and tide flats to avoid additional impact.

Waste Management

Waste Type	Quantity Generated	Treatment Method	Disposal Method
No data found.			