



# Vuntut Gwitchin Climate Change and Health Research in Northern Yukon: What Do Our Changing Homelands Mean for Our Health?

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## Introduction & Background

- Vuntut Gwitchin First Nation (VGFN) Elders of Old Crow, Yukon Territory, Canada, have been advising the community for many years that hard times are coming and that it is time to plan for long-term changes related to food security.
- Old Crow is the northernmost community in Yukon Territory and is a fly-in community, 800km north of Yukon's capital city, Whitehorse.
- The Vuntut Gwitchin, the "People of the Lakes", are named after part of their traditional territory, Old Crow Flats.
- Old Crow Flats is an important wetland complex and has been considered a 'bank' for traditional foods for many generations.
- In 2007, Zelma Lake, an important traditional area for families in Old Crow, drained overnight. This was a devastating event that has affected the community's access to some traditional food species and has had impact on people's cultural and mental well-being (See also *Our Changing Homelands Our Changing Lives* documentary [www.aicbr.ca](http://www.aicbr.ca)).
- Market food costs are quite high. In 2008, the Northern food basket, cost \$496 in Old Crow; compared to \$207 in Whitehorse.
- In 2007, the Arctic Institute of Community-Based Research was invited to work with the community of Old Crow, on climate change and food security issues. In partnership with VGFN, AICBR worked alongside the IPY research initiative "Yeendoo Nanh Nakhweenjit K'atr'ahanahyaa: Environmental Change and Traditional Use in the Old Crow Flats, Yukon", a series of research projects focused on studying the effects of climate change on VGFN lands.
- The three-year initiative grew from the Elder's advice and the outcomes of IPY-related activities.

## Methods

This project was a community-based, participatory research project, involving youth, Elders and other members of the community directly in the research process.

### What is Community-Based Participatory Research?

- Grounded in collaborative, equitable partnerships, sharing responsibility, and building capacity from within;<sup>1,2</sup>
- End goal of change and positive action based on research outcomes;<sup>2,3</sup>
- Research is relevant, accessible, and accountable;<sup>1,3</sup>

The project involved three phases.

- PHASE I (2008-2009):** In January 2009, we hosted a gathering in Old Crow where the youth participated in climate change workshops with IPY researchers to learn about environmental changes in the Old Crow area. At this meeting Elders shared valuable traditional knowledge with the youth, and many people shared thoughtful wisdom and advice. From this gathering, there was a strong recommendation from the community that the research continue, and so AICBR and VGFN developed a proposal for Phase II.
- PHASE II (2009-2010):** This involved research focused on learning what food security adaptation strategies the community has been doing and could do in the future to help cope with climate change. This phase involved training youth to develop their researching skills; and three youth interviewed 35 members of their community. In addition, four youth were trained in film production and developed their own trailers about food security in their community, which they posted on YouTube. They also assisted in the production of a full-length film documentary, 'Our Changing Homelands Our Changing Lives' that highlights the rapid changes to VGFN traditional land and illustrates how the changes are impacting the people and their traditional ways of life.
- PHASE III (2010-2011):** Phase III focused on assisting and facilitating the community in determining how Old Crow could implement their recommendations from Phase II and put them into action. Three focus groups were held and brought together different knowledge holders and specialists in the community. The meetings included discussions on creating a long-term storage facility for dry goods and emergency supplies; exploring the possibilities of animal farming; developing land-based and cultural skills in youth; and surveying and documenting local areas for fish and small animal populations.

## Research Question

*How do the Vuntut Gwitchin adapt to changing food security conditions and maintain their health, in the face of declining traditional food species and changing environmental conditions?*

## Objectives

**Goal:** To support, research, and facilitate in the assessment of implementing community recommendations for coping with food security issues, as a result of a changing climate and environment.

**Long-term Objective:** To ensure that Vuntut Gwitchin people have ready access to a nutritionally, culturally, and economically satisfactory diet in the face of the many aspects of climate change that they are now and may continue to experience in the near and distant future.

## Results & Discussion

From Phase II, key results from 35 interviews, included the following key recommendations:

- Investigate long-term storage facility for dry goods and emergency supplies;
- Provide opportunities to develop gardening skills;
- Explore the possibilities of animal farming;
- Determine local areas for fish and small animal populations;
- Promote traditional value systems of sharing;
- Increase education on healthy diet;
- Develop land-based and cultural skills in the youth.



## Results & Discussion

Three focus groups were held during Phase III, with specific focus on four of the recommendations. The following are the key results/ recommendations from those discussions.

### Long-Term Storage Facility

- A committee be formed to develop and be responsible for the storage facility.
- Start small and initially run the facility as a short-term pilot project (e.g. two years) to work out the most sustainable approach.
- Do more research and look to other examples in the circumpolar North (including within the Yukon) for ideas.
- Encourage families to have personal caches and emergency stashes in addition to a community storage facility.
- Consider the location of the facility very carefully, looking at factors such as security, accessibility, safety, and reliability, particularly in relation to changes on the land from global warming.

### Animal Farming

- Look into educational opportunities in order to learn from others who have experience in the animal farming field-consider doing an exchange with another community in the North.
- Consider reintroducing/relocating new species into areas where they were once found as an alternative food source (e.g. ground squirrels, reindeer farming, local fish species).
- Start small and pilot farming projects, focusing on local sustainability and the use of local resources to raise the animals.

### Land-based Skills Training and Other Education

- Form policies to ensure land-based skills training is a substantial part of the youth's education and that there are ample opportunities for the community/individuals to gain experience on the land.
- Consider implementing "flex-time" for employees in order for them to participate in traditional pursuits.
- Encourage community and family excursions on the land and hold community events where traditional land-based skills can be practiced.

### Fish and Wildlife Surveys

- A collaborative approach between VG Natural Resources, VG Heritage, Renewable Resource Council, Vuntut Hunters & Trappers, and the community as a whole will help to ensure that surveying is done thoroughly and accurately.
- Steps are taken to encourage community members volunteer, report and share their knowledge for this initiative.
- Research is done to determine what knowledge and historical data already exists at the VG Heritage office.
- The use of multiple approaches to determine fish and small animal populations and locations, including interviews, historical research, and physical sampling will help to create a more complete picture for the community of its resources.

## Conclusions

Recommendations from this project will inform VGFN policy and activities specific to addressing food security issues in the community of Old Crow. Of highest relevance was the importance of traditional foods to the physical, emotional, cultural and mental well-being of the Vuntut Gwitchin people and the drastic changes to the land that may impact the continued availability of these species. Overall, the project supports the objective of ensuring that Old Crow citizens have access to a nutritionally, culturally, and economically satisfactory lifestyle in the face of the many impacts of climate change that they are now and may well continue to experience in the near and distant future. This project emphasizes the need for ongoing research and monitoring of climate changes that can shape and inform global policies.