Polar Knowledge Canada

Hudson Bay Consortium Roundtable

Montreal, February 24 - 27, 2025

Polar Knowledge Canada - Mandate

- **Advance knowledge** of the Canadian North to improve:
  1) economic opportunities
  2) environmental stewardship
  3) quality of life of its residents & Canadians

- Promote the development and **dissemination of knowledge** of the other circumpolar regions, including the Antarctic

- Strengthen **Canada's leadership** on Northern issues

- Operate a hub for scientific research at the **Canadian High Arctic Research Station** (CHARS) campus in Cambridge Bay, Nunavut

The operating area for POLAR's research, monitoring and related activities is depicted in orange.

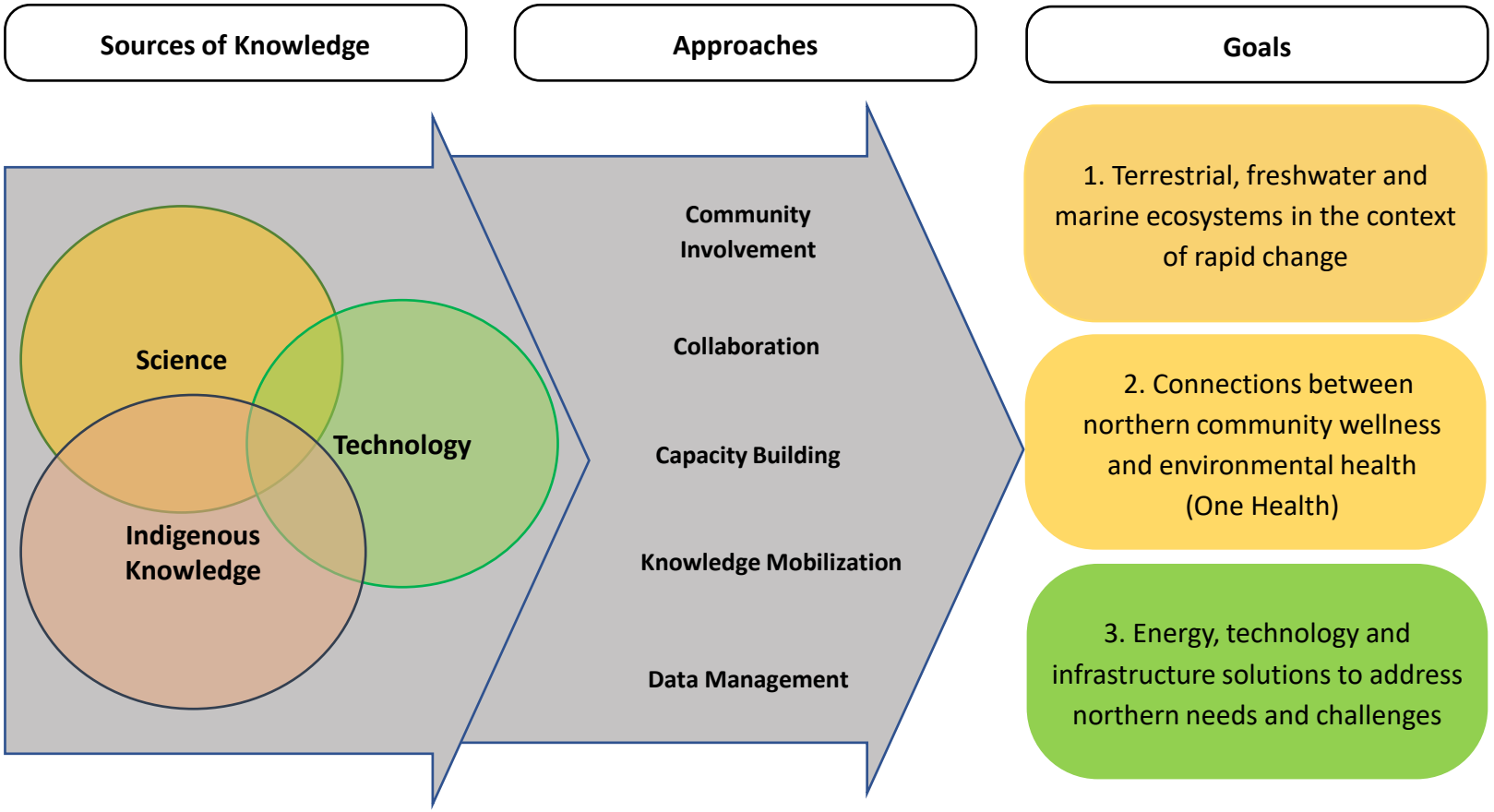
POLAR Science and Technology Framework

POLAR 2020-25 Science and Technology Framework and Strategic Plan

POLAR has recently launched its 2020-25 Science and Technology (S&T) Framework and Strategic Plan. The Strategic Plan will help POLAR align its resources and objectives with its long-term vision, and it provides the context for POLAR's five-year S&T Framework. Read more

- 2020–2025 Science and Technology Framework

Overall Approach to Deliver Science & Technology Goals



POLAR Research and Activities

Science and Technology	**Research and monitoring across Canada's North**
Hub for Research	**Canadian High Arctic Research Station**
Knowledge Mobilization	**Ensuring knowledge and data are publicly available to inform decision making**
Partnership and Coordination	**Working together to address key knowledge gaps**
Capacity Building	**Supporting the development of science capacity**

POLAR is committed to include Indigenous knowledge across all science and research activities

Key Messages – review, update Hudson Bay Consortium priorities for research and monitoring

POLAR previous engagement – to update:

Lands & Resources Priorities

- Marine Traffic
- Changing Land and Climate
- Terrestrial and Marine Mammals
- Fisheries and Marine Ecology
- Contaminants Monitoring
- Food Security
- Promoting Traditional Knowledge in decision making & science
- Developing research-informed policy
- Water management (downstream effects)

Heritage & Culture Priorities

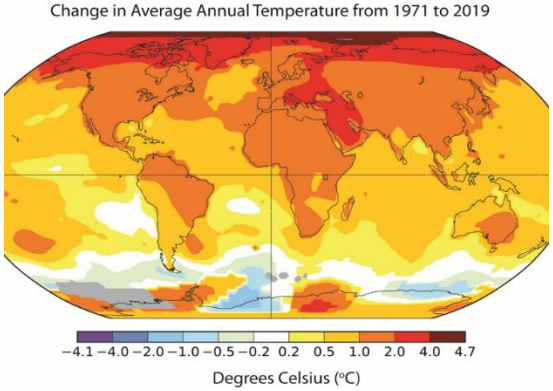
- Archive modernization, digitization
- Traditional Knowledge studies - elder interviews
- Alternative Energy

Data Use/Needs for Land Use Planning & Renewable Resource Management

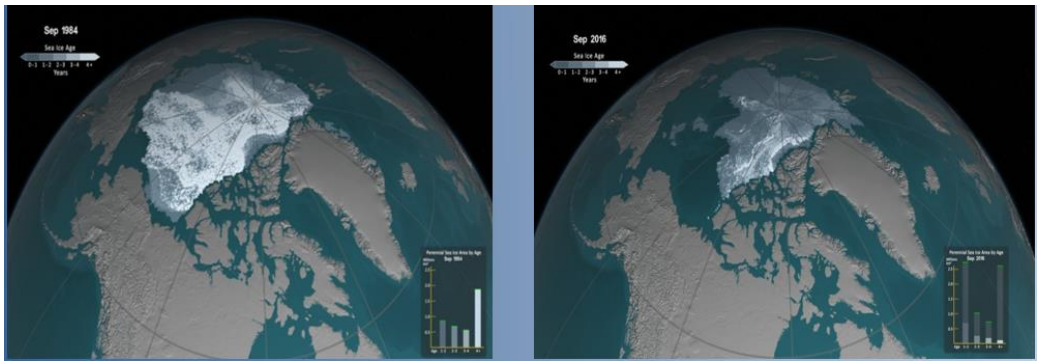
- Better data to populate models
- Watershed & ecoregion mapping (+ ground-truthing)
- Baseline monitoring - water quality, vegetation
- Traditional Knowledge harvest studies and other cultural heritage priorities
- Habitat and ecological assessments
- Data sharing and archive

Arctic and Northern Warming - Climate Change

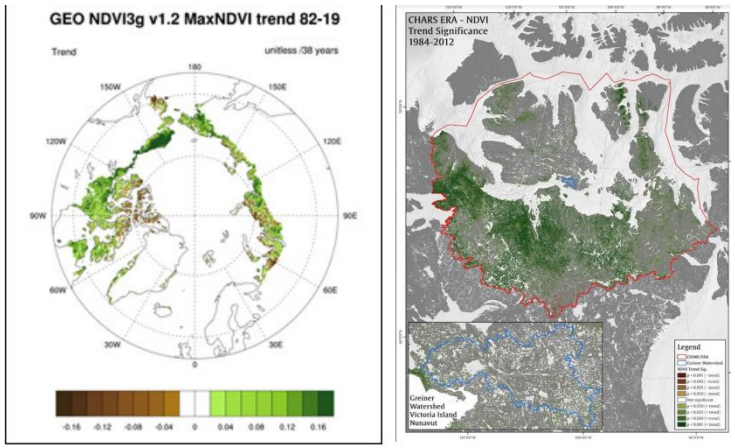
- Canada's Arctic is warming 3–4 times faster than other parts of the globe
- Loss of sea ice weakens polar vortex, affects global weather patterns
- Arctic amplification - less sea ice, warming, solar rays absorbed more on bare ground causing more melting; increased water vapor (GHG) amplifies warming, more moisture, precipitation
- Greening, browning, permafrost thaw, increased water evaporation, water vapor creates more precipitation, insulating snow and earlier spring thaw



Changes in Average Annual temperature from 1971 to 2019. Areas of the planet that have warmed the most are shown in red.



Satellite images of polar ice in Sept. 1984 compared to Sept. 2016, showing extreme loss of sea ice in Beaufort Sea in 2016 (NASA).



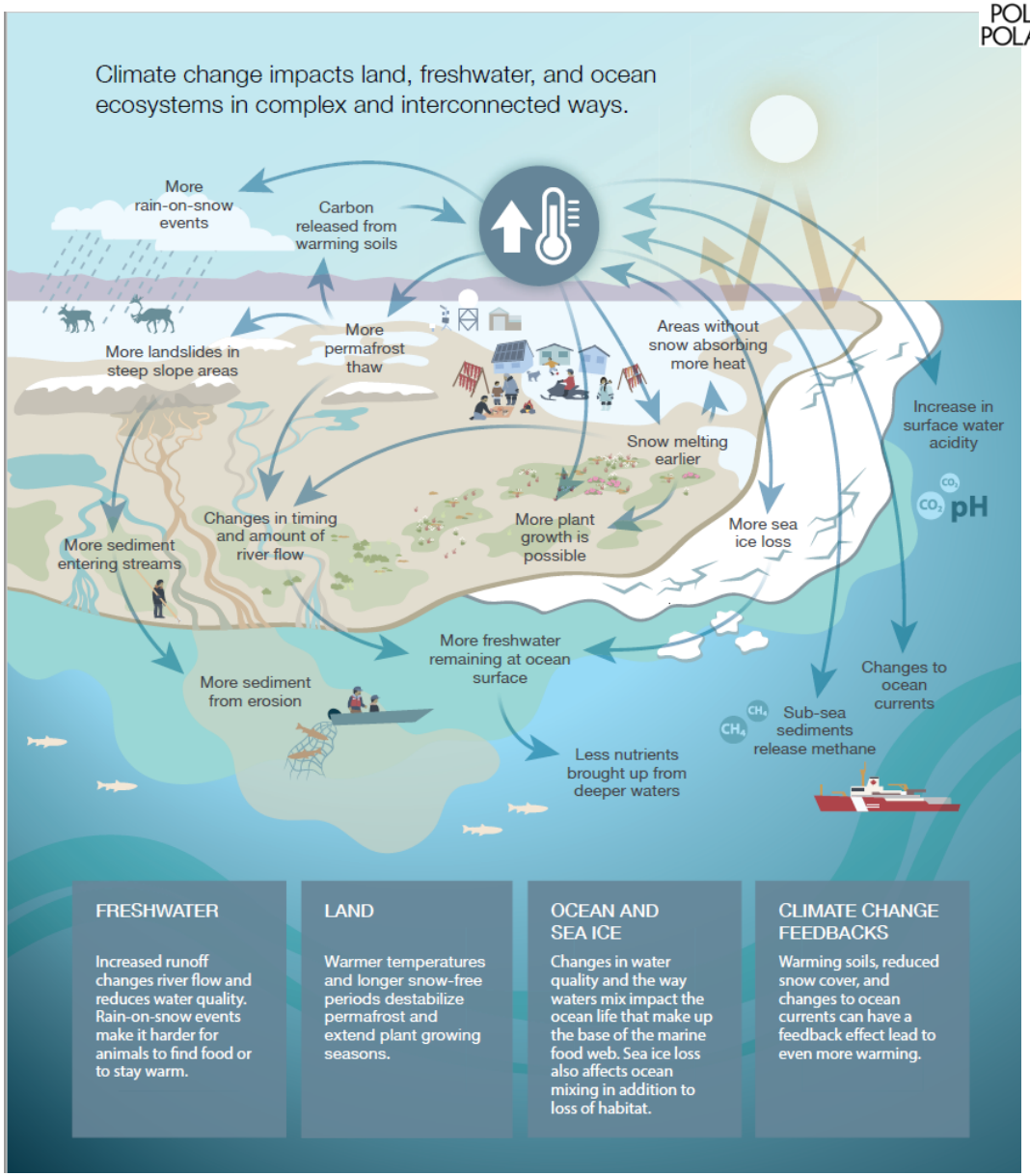
Tundra "greening" measured by satellites for the entire circumpolar area and Canada.

https://www.canada.ca/en/polar-knowledge/publications/aqhaliat/volume-4/environmental-change.html

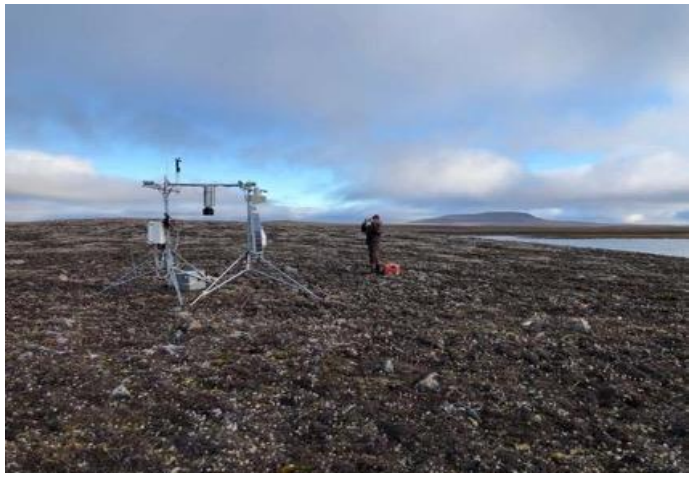
POLAR Working Group - Climate Change

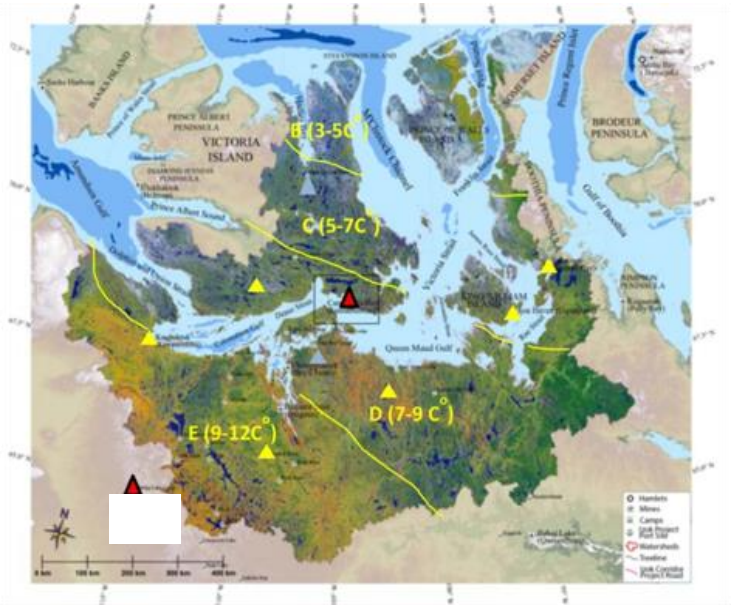
- Collaboration in research
- Science & Indigenous knowledge
- Technical synthesis report
- Infographics
- Accessible, plain language
- Knowledge dissemination (*Aqhaliat*)

https://www.canada.ca/en/polar-knowledge/publications/aqhaliat/volume-4/environmental-change.html



POLAR Science and Technology

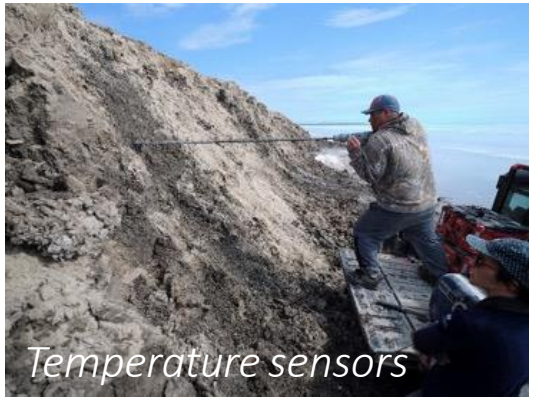


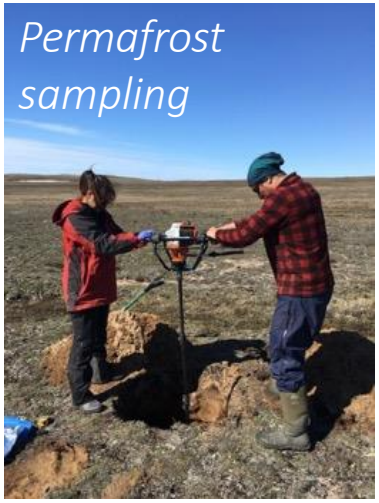


Ecosystems and Climate

- **Collecting baseline information** on terrestrial, freshwater and marine ecosystems, including abiotic elements such as the cryosphere (permafrost, snow and sea ice)
- **Monitoring and integrated modelling** of terrestrial, freshwater and marine ecosystem changes where baselines have been established
- Specific attention to **country foods**, the state of **food webs** and **species of conservation concern**

POLAR Environmental Monitoring





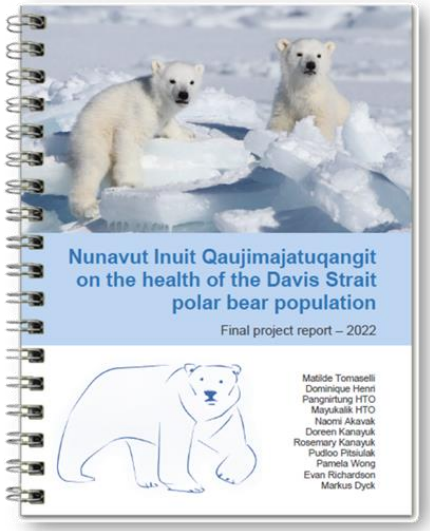
POLAR One Health

Wildlife Health & Food Security

- **Community-led research** (in ecosystems with long-term datasets) **on abundance and diversity** of country foods and their predators, including their habitats and how these changes affect food security and wellness
- **Enhancing knowledge of diseases** in northern wildlife, including impacts on country foods
- **Better understanding of the effects of environmental change** on community wellness
- **Community-led food production options**, including greenhouses and country food distribution

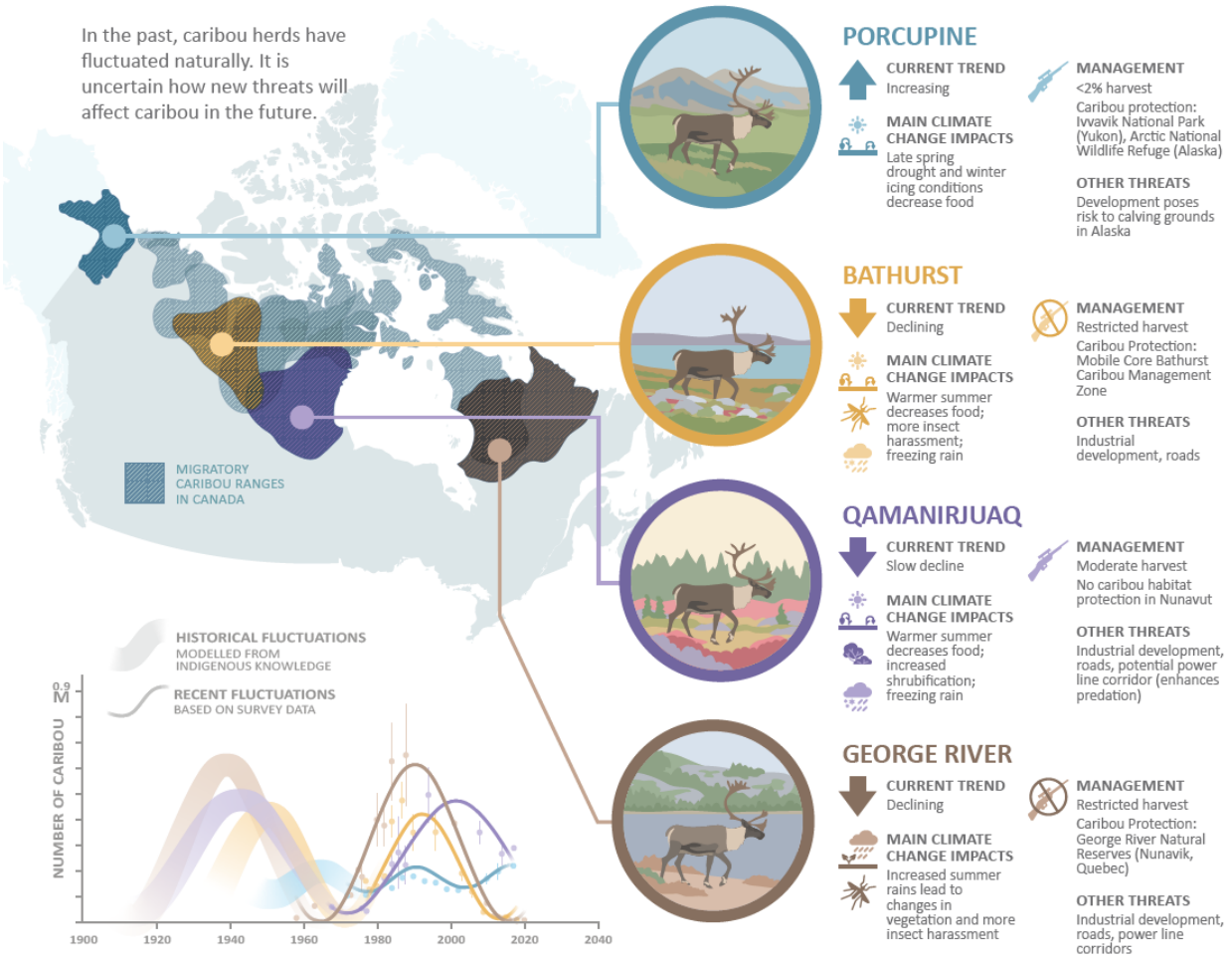
Nunavut *Inuit Qaujimajatuqangit* on the health of Davis Strait polar bear population

- Partnership between Government of Canada (POLAR, ECCC), Government of Nunavut (DOE) and HTOs of Pangnirtung and Kimmirut in the Qikiqtani region of Nunavut
- Objective: Gathering and documenting ***Inuit Qaujimajatuqangit*** on polar bear health around the communities of Kimmirut and Pangnirtung, Nunavut, **to support management decisions** for the Davis Strait polar bear subpopulation
- Report is publicly available: https://www.nwmb.com/en/conservation-education/list-all-documents/docs-for-articles/inuit-qaujimajatuqangit-documents/9383-nunavut-iq-polar-bear-report-davis-strait-june-2022-eng/file



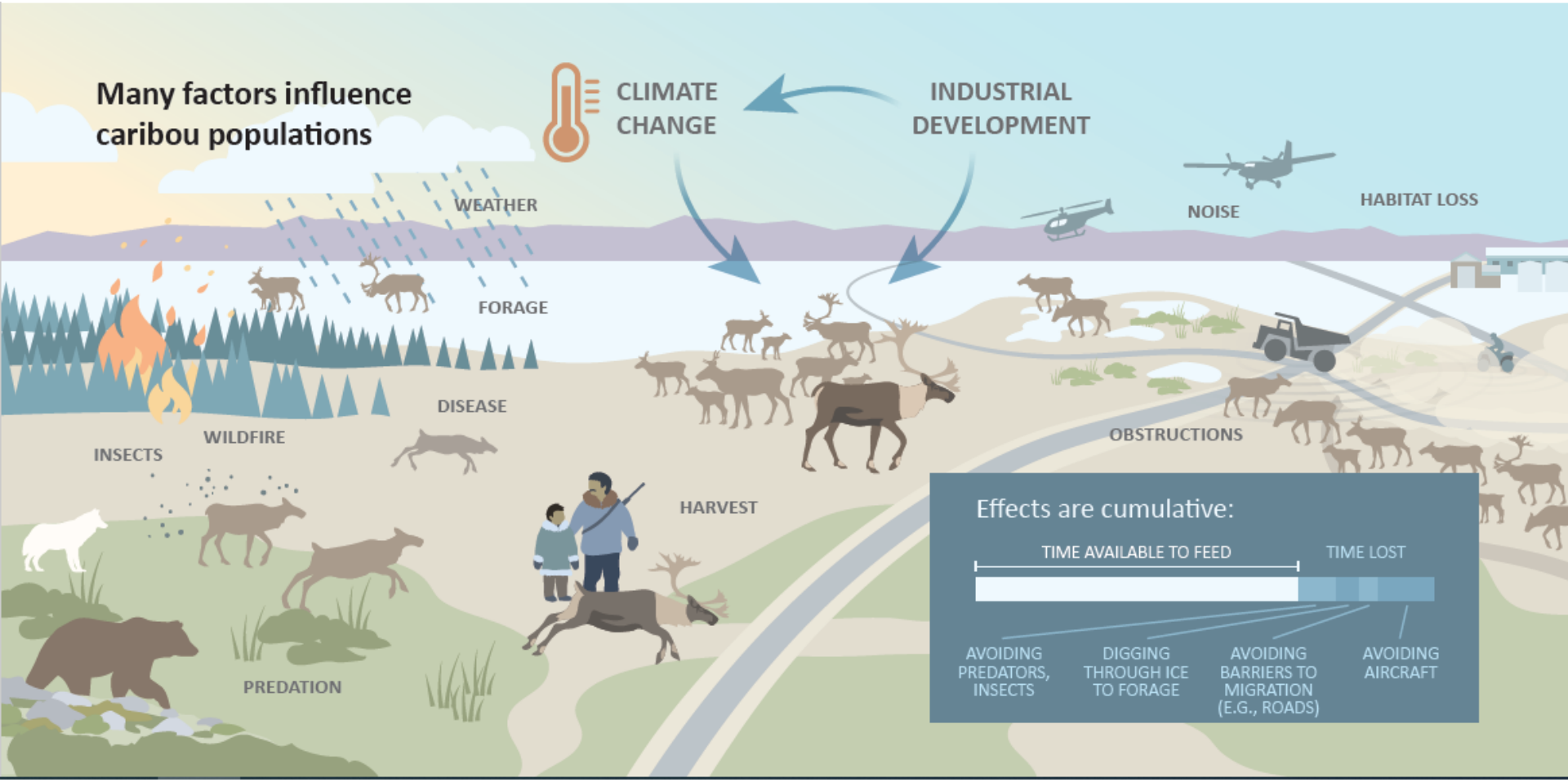
Polar Knowledge Canada | Savoir polaire Canada
Environment and Climate Change Canada | Environnement et Changement climatique Canada

POLAR Caribou Working Group – Caribou Population Dynamics



https://www.canada.ca/en/polar-knowledge/infographics/caribou-abundance-and-migration.html

Caribou Cumulative Effects and *Inuit Qaujimajatuqangit*



Health and Food Security Working Group

- Ongoing POLAR participation and support for workshops at CHARS and next phases of implementation; POLAR support in developing:

✓ **Community Freezer sea can** – renewable energy pilot

✓ **Community Greenhouse project** – growth chamber, greenhouse dome at CHARS; wireless data monitoring for cold frames

✓ **Farm bot** – innovation and technology pilot

✓ **Arctic Marine Fisheries Workshop** – preliminary plans for joint DFO-POLAR workshop at CHARS

✓ **Avian Influenza** monitoring and collaboration

✓ **Northern Contaminants Program collaboration** and exploring feasibility at CHARS for country food monitoring – laboratory opportunities to scale up

Niqihaqut - A new country food cut-and-wrap facility is coming to Taloyoak. *Niqihaqut* aims to provide affordable healthy food, preserve traditional knowledge, get people out on the land to hone their skills and learn new skills, foster a country food-based economy, and create new jobs for Inuit. *(Screenshot from Arctic Inspiration Prize broadcast/APTN)*

Avian influenza in Arctic Canada

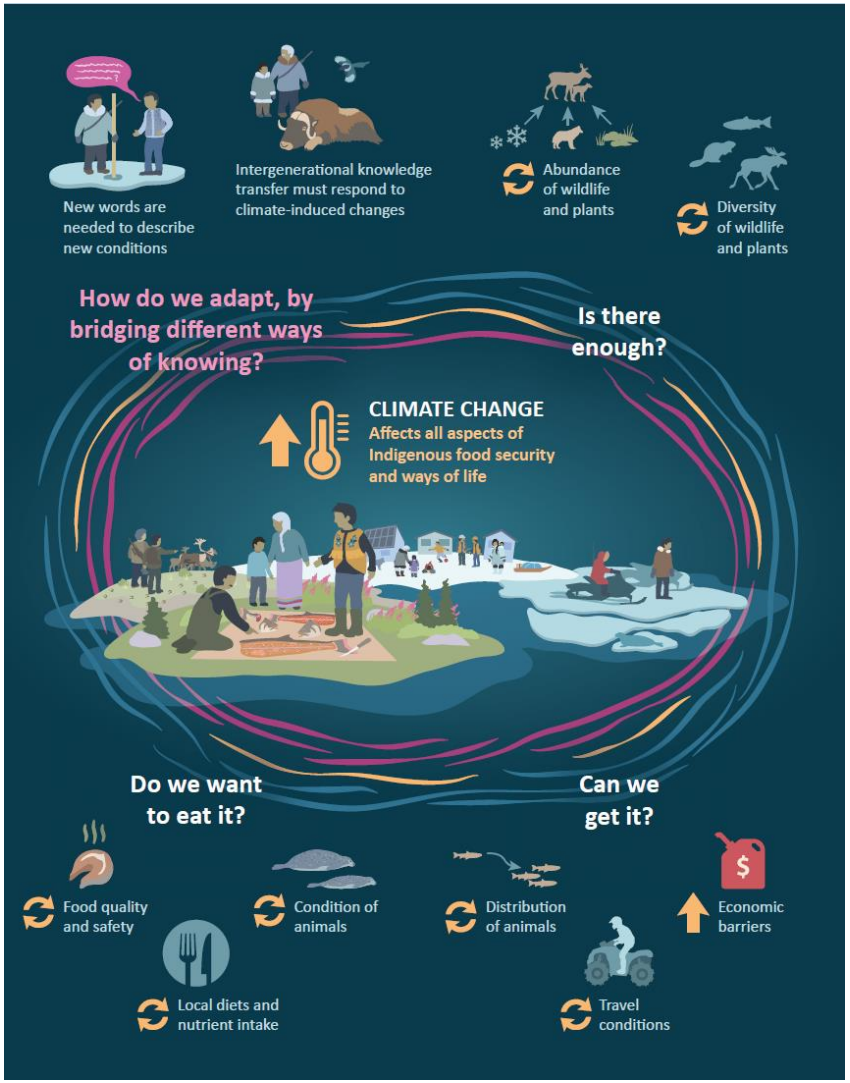
— Polar Knowledge Canada

POLAR Climate Change Working Group

Climate Change affects Indigenous Food Security

- Infographics
- Collaborative synthesis report

https://www.canada.ca/en/polar-knowledge/infographics/climate-change-research-and-monitoring.html



POLAR Science and Technology - Advance Energy, Technology and Infrastructure Solutions for Sustainable Northern Communities

- Use of CHARS Campus in partnership with communities to to test and demonstrate innovative northern technologies
  - Renewable Energy – wind, solar, biofuels, geothermal
  - Smart-grids, Electric vehicles
  - Waste and Waste Management
  - Water and Wastewater Treatment
  - Northern Infrastructure

- Understanding Stakeholder Needs Across the North
  - Co-development of projects/objectives
- Collaborations
  - Indigenous Partners
  - Federal and Territorial Governments
  - Industry and Academia

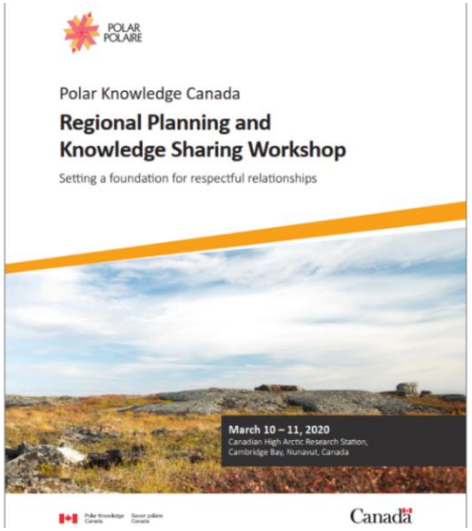
- Capacity Building – Arctic Remote Energy Network Academy

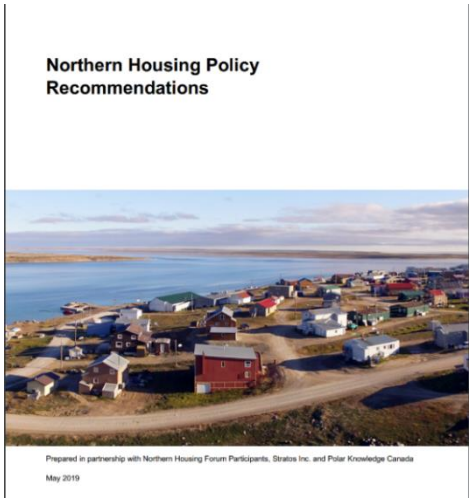
POLAR Research Funding – select funded projects relevant to Hudson Bay Region

- Inuit Qaujisarnirmut Pilirijjutit on Arctic Shipping Risks in Inuit Nunangat - *University of Ottawa*
- Using Non-invasive Approaches to study Polar Bears: A Community-based Monitoring Network – *McGill University*
- Carving and Climate Testimony – Inuit Youth, Wellness, and Environmental Stewardship - *University of Saskatchewan*
- SmartICE - Empowering our communities to map rough ice and slush for safer travel in Inuit Nunangat - *Memorial University*
- Coastal Restoration Nunavut: Understanding the impacts of rapid ecosystem change on northern communities – *Government of Nunavut*
- Inuit Food heritage for Food Sovereignty in Nunavik – *York University*
- Fostering and Strengthening Capacity Among Nunavummiut to Conduct and Lead Northern Research – *Qaujigiaratiit Health Research Centre*
- Arctic Community Ocean Plastics Initiative - *Ocean Wise Conservation Association*
- Healthy Animals, Healthy Communities: Using complementary knowledge systems to promote wildlife sustainability - *University of Calgary*
- Vulnerability of northern drinking water sources to environmental change - *Institut National de la Recherche Scientifique*
- Building capacities to enhance local efforts in a sustainable wildlife health monitoring system in Nunavik – *Makivvik Corporation*
- Arctic Char Migrations in a Changing Arctic - *Université Laval*
- Arctic Homes of the Future: Renewable Energy Technologies and Energy-efficiency - *Illu Inc.*

POLAR Knowledge Management and Engagement - Knowledge Mobilization

- **POLAR Speaker Series** - Canadian High Arctic Research Station (CHARS)
- **Synthesis Technical Reports** – collaborative science, technology and Indigenous knowledge integrative reports on key topics
- **Infographics** on topics of northern relevance and global significance
- ***Aqhaliat*** – knowledge dissemination, POLAR's on-line journal
- **Infosheets** – key research results, published collaborative knowledge syntheses (one-pager)
- **Knowledge Sharing Workshops** – codevelop knowledge sharing fora with key Indigenous governance organizations and others (science, Indigenous knowledge); northern and Arctic regional focus
- **Policy Recommendations Papers, Focus Groups** – policy analysis recommendations on topics of northern relevance e.g., Northern Housing Policy Recommendations





POLAR Speaker Series - Knowledge Mobilization at CHARS

Permafrost coastal changes in the western Kitikmeot

Université du Québec à Rimouski, Polar Knowledge Canada, Institut National de la recherche scientifique and Dalhousie University

Thursday, July 27, 2023 from 6:30 PM to 7:30 PM

Continuous shuttle between CHARS and the high school starting at 3:20 PM

Climate change is thawing permafrost and bringing bigger storms. What does that mean for coastal Arctic communities like Cambridge Bay? POLAR and its partners are studying shorelines near Cambridge Bay and Kugluktuk to find out. They are monitoring coastlines and permafrost so they can assess how the coasts are going to change, especially around communities -- because communities need to know what changes to expect so they can plan how to adapt.

Talks will feature:

- David Didier, professor in Coastal Geomorphology, UQAR
- Stéphanie Coulombe, Permafrost scientist, POLAR
- Gwenaëlle Chaillou, professor in Chemical Oceanography, UQAR-ISMER

For more information, write to communications@polar-polaire.gc.ca

UQAR INRS DALHOUSIE UNIVERSITY

Polar Knowledge Canada Savoir polaire Canada Canada

From Hand-lenses to eDNA and Drones - Tundra Plant monitoring in the 21st Century!

Polar Knowledge Canada, Swiss Polar Institute, University of Zurich, and Simon Fraser University

Thursday, July 27 from 6:30 to 8:30 PM
at the Canadian High Arctic Research Station (CHARS) campus

Continuous shuttle between CHARS and the high school starting at 6:15 PM

The community of Cambridge Bay is invited to come share their knowledge and learn about new and wonderful techniques for studying Arctic plant biodiversity— from eDNA to drones!

Arctic tundra biodiversity is currently experiencing threats from rapid climate change. Current plant studies around Cambridge Bay, Nunavut, seek to develop a protocol that uses small fragments of the plants' genetic code found in soil, so called "eDNA", to rapidly detect different plant species in Arctic tundra landscapes. Come share your knowledge about tundra plants and mosses using *Inuit Qaujimajatuqangit* and local knowledge with science to enhance our understanding.

How do changes in climate and land influence life in Arctic lakes?

Polar Knowledge Canada and Université du Québec à Chicoutimi

Monday, August 28 from 6:30 to 8:30 PM
at the Canadian High Arctic Research Station (CHARS)

Continuous shuttle between CHARS and the high school starting at 6:15 PM

Climate change brings warmer and snowier winters and longer summers in the Arctic. People, land, aquatic animals and plants are forced to adapt. As permafrost (frozen ground) thaws, it slowly releases elements from the ground into rivers, lakes and the sea, affecting all life.

Bacteria, algae and other microorganisms are the first to react to such changes, followed by tiny aquatic animals (zooplankton), the main food for fish. Everything in the land is connected - if microorganisms and zooplankton are affected, so are fish, and finally people.

Come share *Inuit Qaujimajatuqangit* and local knowledge on how climate change is affecting permafrost, tundra vegetation, and Arctic lakes— from changes in chemical composition to its effect on all living organisms around Cambridge Bay and Nunavut.

Speakers: Dr. Milla Rautio (Canada Research Chair in Boreal and Polar Aquatic Ecology), Dr. Vilmantas Preskienis (postdoctoral researcher), Université du Québec à Chicoutimi

For more information, write to communications@polar-polaire.gc.ca

UQAC Université du Québec à Chicoutimi

Polar Knowledge Canada Savoir polaire Canada Canada

Light Goose Banding in the Central Arctic

Polar Knowledge Canada and Canadian Wildlife Service, Environment and Climate Change Canada

Thursday, August 10 from 6:30 to 7:30 PM
at the Canadian High Arctic Research Station (CHARS)

Continuous shuttle between CHARS and the high school starting at 6:15 PM

The Arctic Goose Banding Program is a multi-partner initiative coordinated by the Canadian Wildlife Service. The program bands 5 species of Arctic-nesting geese across 6 locations in Arctic Canada each year. Banding provides information on goose abundance and population status (harvest, survival rates) and is the basis for population management, and international regulatory decisions. Status of goose populations and their relationship with Arctic habitat is of interest in northern communities, where there are strong cultural ties to geese through hunting and collection of eggs and down. Canadian Wildlife Service is banding snow geese at Anderson Bay, Nunavut.

ᓄᓇᕗᑦ – Nunavut – Our Land – Nunakput

Polar Knowledge Canada and the University Centre of the Westfjords in affiliation with University of Akureyri (Iceland)

Thursday, November 23 from 6:30 to 7:30PM
at the Canadian High Arctic Research Station (CHARS)

Continuous shuttle between CHARS and the high school starting at 6:00 PM

The housing crisis in Nunavut has been at critical levels for a long time, and this needs to change in order to build healthy communities. While policies and programs have been created to help build more housing, the issues surrounding overcrowding, poor health, and the need to integrate *Inuit Qaujimajatuqangit* also need to be addressed. Come hear interview results from Cambridge Bay about future solutions for Nunavut's housing which include new directions for policies and programs, and share your ideas!

Speaker: Arina Nikolaeva (M.A. University Centre of the Westfjords and Polar Knowledge Canada)

For more information, write to communications@polar-polaire.gc.ca.

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Permafrost thaw and the role of microorganisms in a warming Arctic

Polar Knowledge Canada and National Centre for Polar and Ocean Research (NCPOR), India

Monday, August 28 from 6:30 to 8:30 PM
at the Canadian High Arctic Research Station (CHARS) campus

Continuous shuttle between CHARS and the high school, starting at 6:15 PM

Are you curious about the role of microbial communities in the Arctic?

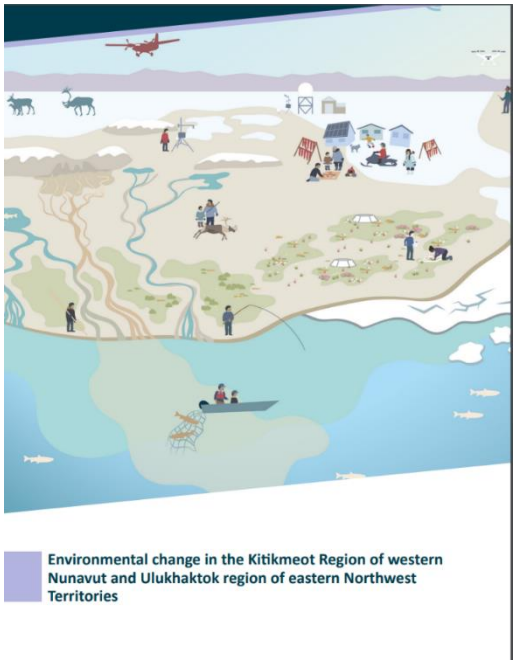
These tiny organisms play a fascinating role in the context of climate change. Microbes in the Arctic are responsible for both producing and consuming significant greenhouse gases like carbon dioxide, methane, and nitrous oxide. Additionally, certain types of microbes are known to cause diseases in humans, animals, and plants, and these health issues can potentially worsen due to the effects of climate change.

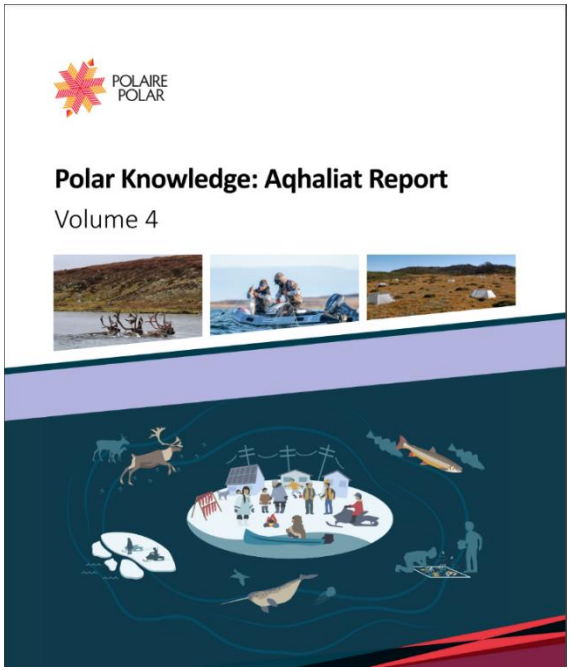
Knowledge Management – POLAR Speaker Series

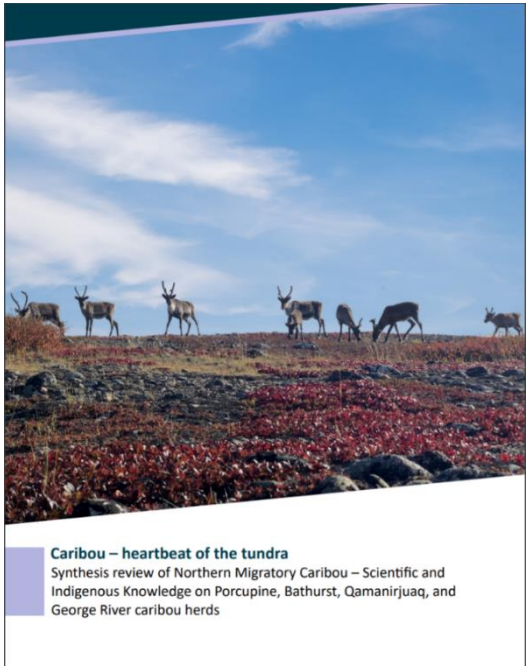
- **Canadian High Arctic Research Station (CHARS)** – Strategic, targeted knowledge management to collaborate, engage and mobilize knowledge from visiting domestic and international researchers

  - ***Tundra ecosystem change and impact on berries*** (Sentinelle Nord, University of Laval, Agricultural University of Iceland)
  - ***From hand-lenses to eDNA and drones – tundra plant monitoring in the 21st century*** (Swiss Polar Institute, University of Zurich, Simon Fraser University)
  - ***Permafrost coastal changes in the western Kitikmeot*** (Université du Québec à Rimouski, Polar Knowledge Canada, Institut National de la researche scientifique, and Dalhousie University)
  - ***Light Goose Banding in the Central Arctic*** (Canadian Wildlife Service, Environment and Climate Change Canada)
  - ***Understanding Arctic aerosols and their climatic impacts*** (National Centre for Polar & Ocean Research (NCPOR), India)
  - ***Diversity of marine and freshwater fishes, Cambridge Bay*** (Canadian Museum of Nature and University of Toronto)
  - ***How do changes in climate and land influence life in Arctic lakes?*** (Université du Québec à Chicoutimi)
  - ***Permafrost thaw and the role of microorganisms in a warming Arctic*** (NCPOR, India)
  - ***Nunavut – Our Land – Nunakput and Housing Issues*** (University Centre of Westfjords, Iceland, and POLAR)
  - ***Real Ice: new, innovative green technology to strengthen and maintain sea ice?*** (Real Ice, Cambridge University (UK) and Arctic Reflections)

POLAR Synthesis Technical Reports – Knowledge, science, synthesis and collaboration







https://www.canada.ca/en/polar-knowledge/publications/aqhaliat/volume-4.html

Knowledge Mobilization: *Aqhaliat* Report –

POLAR Infosheets: science, syntheses and collaboration

POLAR POLAIRE

Research Results: **Climate Change Monitoring**

High Arctic Plants and Methane

How do Arctic ecosystems absorb or release greenhouse

Key Messages

- Understanding how arctic ecosystems absorb and release greenhouse gases helps researchers predict the effects of climate change.
- Soil moisture and temperature influence how greenhouse gases are absorbed or released by arctic soils.
- Dry polar deserts are a **methane sink**, meaning they absorb more methane than they release. In contrast, wet soils are a source of methane. Drier sites released less carbon dioxide than wetter sites.
- Past studies likely underestimated how much methane is absorbed by Arctic soils because most studies take measurements in wetter ecosystems.

Research Summary

The research team studied the relationship between moisture, ecosystems, and greenhouse gases in Arctic environments.

At their study site at Cape Bounty on Melville Island, NU, the research team measured greenhouse gases in ecosystems across sites with differing levels of soil moisture. From driest to wettest, their sites included dry polar desert, mesic tundra, and wet sedge meadow (wetland) ecosystems.

The team measured three greenhouse gases: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Methane and nitrous oxide are less abundant than carbon dioxide, but they all have powerful warming effects.

POLAR scientist Johann Wagner measures the flows of greenhouse gases in the mesic tundra at Cape Bounty, Melville Island: Johann Wagner

Project leader*: Neal Scott, Queens University, Kingston ON

Read the full research results in the Arctic Journal
https://www.nrcresearchpress.com/doi/pdf/10.1139/ as-2018-0018

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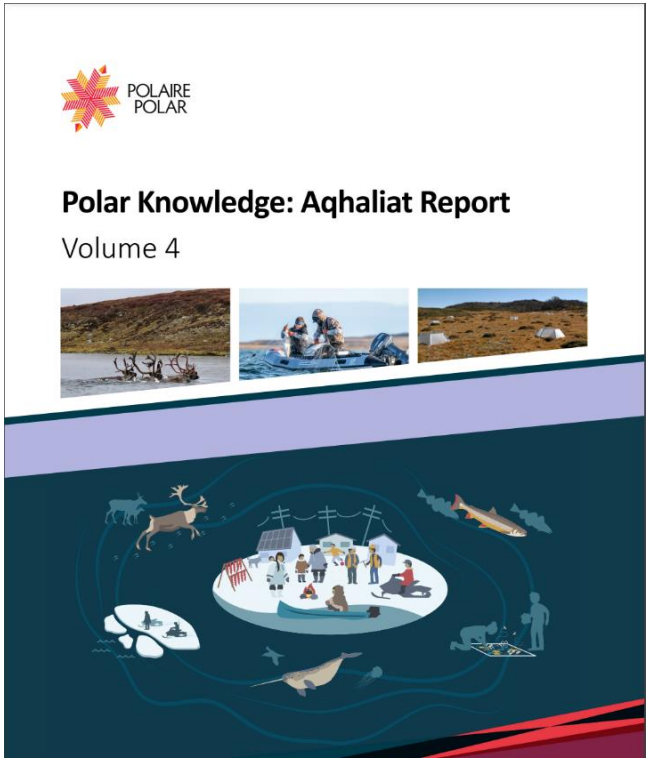

POLAIRE POLAR

Polar Knowledge: Aqhaliat Report

Volume 4

POLAR POLAIRE

Research Results: **Fish and Wildlife**

Kitikmeot wolverine non-invasive and community-based monitoring

How many wolverines are in the Kitikmeot region?

Key messages

- Wolverines in the Kitikmeot region exist at low densities and are being exposed to increasing levels of human activity.
- Knowing the density of the wolverine population in the region can inform future sustainable harvest limits and could support input to impact review processes. This information can also help inform predator research for caribou management.
- This collaborative research project between the Government of Nunavut and the Kugluktuk HTO provided training and employment to HTO members. It also demonstrates the efficiency of joint research projects to inform wildlife management.

Project summary

In 2018 and 2019, Government of Nunavut biologists collaborated with the Kugluktuk Angoniatit Association (Kugluktuk HTO), to estimate the density of the region's wolverine population. This project supports long-term regional monitoring by establishing **baseline information** on the number and density of wolverines in the region.

This research informs predator research for caribou management and could also be used to establish future sustainable harvest limits and support input to Nunavut Impact Review Board review processes.

The research team used non-invasive methods to collect wolverine fur samples northwest of Napaktulik Lake. They placed 154 hair-snag posts, baited with caribou, muskox legs, and scent lures, in a grid across the tundra.

Project leader:
Malik Awan, Department of Environment, Government of Nunavut,
mawan@gov.nu.ca

A wolverine: Thomas Kitchin & Victoria Hurst.

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https://www.canada.ca/en/polar-knowledge/publications/aqhaliat/volume-4.html

Youth Science & Technology Career Camps – Canadian High Arctic Research Station (CHARS)

- Through partnerships, Polar Knowledge Canada hosts Science Career Camps for Indigenous youth, annually, at CHARS

- 3-day camp focuses on Indigenous youth leadership development, exposure to science-based careers and exploring the world of science through interactive hands-on activities

Youth Science & Technology Career Camp - Canadian High Arctic Research Station

Regional Knowledge Sharing Workshops

Science and Indigenous Knowledge, 2024 - 2025

1) Anguvigaq (RNUK) Research Workshop, Nunavik

- POLAR sponsorship, collaboration and presentation in inaugural Anguvigaq Nunavik Research Workshop with Regional Wildlife Organization Board (RNUK)

- Nunavik regional priorities for research and monitoring, with research activities and proposals from ~20 southern academic researchers, federal government (POLAR, ECCC-CWS, DFO, Parks Canada), and Makivvik Corporation (Fig. 1)

2) POLAR – Regional Climate Change Workshop

- POLAR partnership with Gwich'in Tribal Council on Climate Change Workshop; POLAR sponsorship of co-developed key-note speaker on megafires forest ecology during a time of climate change (Fig. 2)

3) POLAR collaboration, GNWT-led – Landscape Carbon Workshop

- National and international scientists, policy makers, Indigenous community leaders and climate change monitors worked together to develop next steps towards a Government of the Northwest Territories (GNWT) Action Plan on Landscape Carbon, with discussions including Indigenous Protected and Conserved Areas (IPCAs) and the importance of carbon sinks in peatlands, wetlands, permafrost, boreal forest and watersheds.

Ecosystems services accounting and carbon accounting considerations were emphasized for sustainable development planning, Northwest Territories (Fig. 3)

Knowledge Management and Northern Engagement

- Listen, inform and communicate with knowledge stakeholders on research priorities and concerns for POLAR knowledge creation, syntheses, and activities
- Canadian pan-northern and Arctic regions
- Relationship-building with Indigenous governance bodies, communities, territorial and provincial governments, academia, industry, educators and other stakeholders; supports implementation of land claims agreements
- Develop collaborative research partnerships
- Science, technology, Indigenous knowledge
- Knowledge exchange, different ways of knowing; enhance collaboration and engagement at the Canadian High Arctic Research Station (e.g. Canada-Japan Workshop (Fig. 1))
- Apply knowledge management in strategic, targeted research collaborations to fill knowledge gaps on key topics of northern relevance and global significance

POLAR Funding - Transfer Payment Program Grants and Contributions

- $7.8 million annually
- POLAR is responsible for the management of two transfer payment programs:

1. Grants to individuals, Organizations, Associations and Institutions to Support Research and Activities Relating to the Polar Regions

   *To foster and encourage activities and events that promote **greater awareness of and increase knowledge about polar regions**. Attract, inform and inspire new generations to carry on Canada's increasing activities in polar affairs.*

   *Expected results include **increased scientific information and knowledge about polar issues**.*

2. Grants and Contributions to Support the Advancement of Northern Science and Technology.

   To fund science and technology activities in line with POLAR's Science and Technology Goals
   2020–2025 Science and Technology Framework

POLAR Funding and Award Programs, 2025-26

Polar Knowledge Canada (POLAR) offers funding and award programs for research and projects focused on the circumpolar regions.

- **Polar Knowledge Canada's Science and Technology Program**
  Major Contribution Funding ($6M) to support research, training and capacity building
- **Polar Regional Research and Activities Grants**
  Up to $50,000 for research and activities to advance knowledge in the polar regions
- **Northern Science Award**
  Individual/team contributing to advancing knowledge in Canada's North
- **Northern Scientific Training Program**
  Undergraduate, Masters, and PhD
- **Northern Resident Award**
  $5,000 to undergraduate Northern students
- **Northern Resident Scholarship**
  $10,000 to graduate Northern students
- **Antarctic Scholarship**
  $10,000 to graduate student
- **POLAR Scholarship**
  $10,000 to outstanding PhD
- **POLAR Fellowship**
  $50,000 awards available to post-doctoral researchers and visiting scholars

More information
canada.ca/polar-funding

ARCTIC PULSE

CANADA 2024-28

A NEW CANADIAN-LED INTERNATIONAL SCIENCE INITIATIVE:

Addressing globally relevant questions with locally relevant consequences

ArcticNet
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Polar Knowledge Canada | Savoir polaire Canada

Canada | ArcticNet ᐅᑭᐅᖅᑕᖅᑐᑦ ᑐᑭᓯᓂᐊᖅᑎᑦᑕ | UNIVERSITÉ LAVAL | uOttawa | Polar Knowledge Canada | Savoir polaire Canada

ARCTIC PULSE

CANADA 2024-28

Linking Recently Funded and Upcoming Arctic Funding Programs:

- ***Qannataq Clean Shipping***
- ***Transforming Climate Action***
- ***Arctic COLOURS***
- ***NordForsk Arctic call***
- ***Polar Knowledge Canada***
- ***ArcticNet CFPs***
- ***Others***

Arctic Pulse will **coordinate and leverage** scientific activities to study the changing Arctic and its implications for the region and the world using assets ranging from outer space to the deep sea, from in-land to coasts, and across major knowledge disciplines and systems.

The research plan will be co-designed in ways that advance discovery-based science and Indigenous self-determination in research.

Welcoming international partners.

Canada ArcticNet ᐅᑭᐅᖅᑕᖅᑐᑦ ᑐᑭᓯᓂᐊᖅᑎᑦᑕ Université Laval uOttawa Polar Knowledge Canada Savoir polaire Canada

POLAR's International Connections

Arctic Council	- operationalize and promote the *Agreement on Enhancing International Arctic Scientific Cooperation* - lead Canadian activity on the Sustaining Arctic Observing Networks (SAON) Board
Arctic Science Ministerial	- support coordination efforts for Canada's participation in the ASM and Arctic Science Funders Forum
International Arctic Science Committee (IASC)	- support effective Canadian representation in Working Groups and other initiatives - promote Arctic Science Summit Week as a venue for knowledge exchange and networking
University of the Arctic	- support other Canadian postsecondary members and promote circumpolar collaboration
International Network for Terrestrial Research & Monitoring in the Arctic (INTERACT)	- networking with other Arctic research stations, sharing best practices - participate in Transnational Access exchange program
Forum of Arctic Research Operators (FARO)	- ensure Canadian research interests, facilities and expertise are promoted

additionally, a number of MOUs and Letters of Understanding with other international programs

Antarctic Treaty Consultative Meetings	- facilitate bilateral research partnerships with Antarctic Treaty members - support Canada in making positive contributions to the Antarctic Treaty Consultative Party meetings - support Canadian delegation at ATCM/CEP meetings
Scientific Committee on Antarctic Research	- support effective Canadian representation within Antarctic scientific community and promote Canadian research interests within SCAR Science Groups
Council of Managers of National Antarctic Programs	- coordinate and leverage polar research infrastructure, technology and practices, and to advance shared scientific objectives within COMNAP Expert Groups

Looking Ahead and Working Together

POLAR invites input on:

- New ideas that will shape local, regional and national priorities and that could be incorporated into POLAR's Science and Technology Framework and Knowledge Management & Engagement activities
- POLAR is anticipating a new Call for Proposals in 2025-26 – science, Indigenous knowledge and technology research funding opportunities

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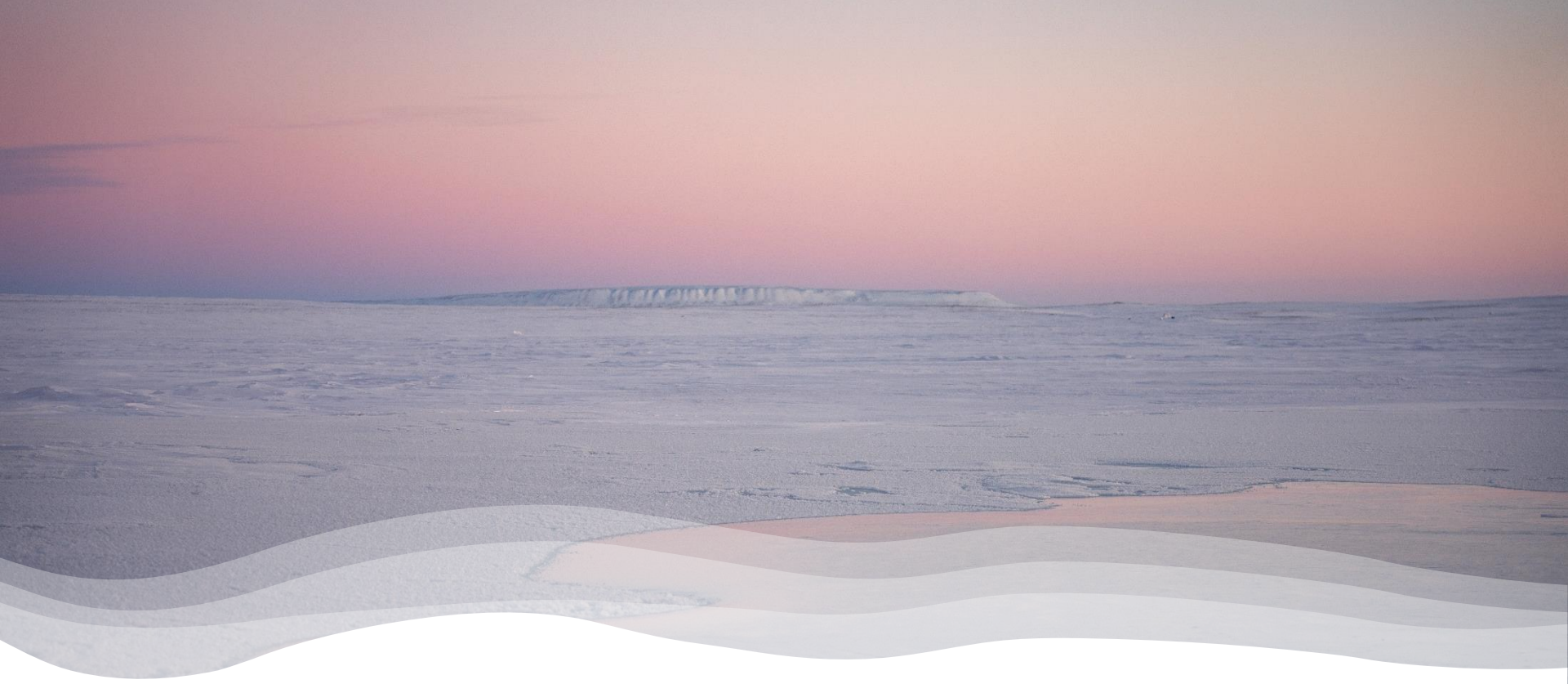

Mîkwêc • Thank you
Merci • Nakurmiik • Qujannamiik