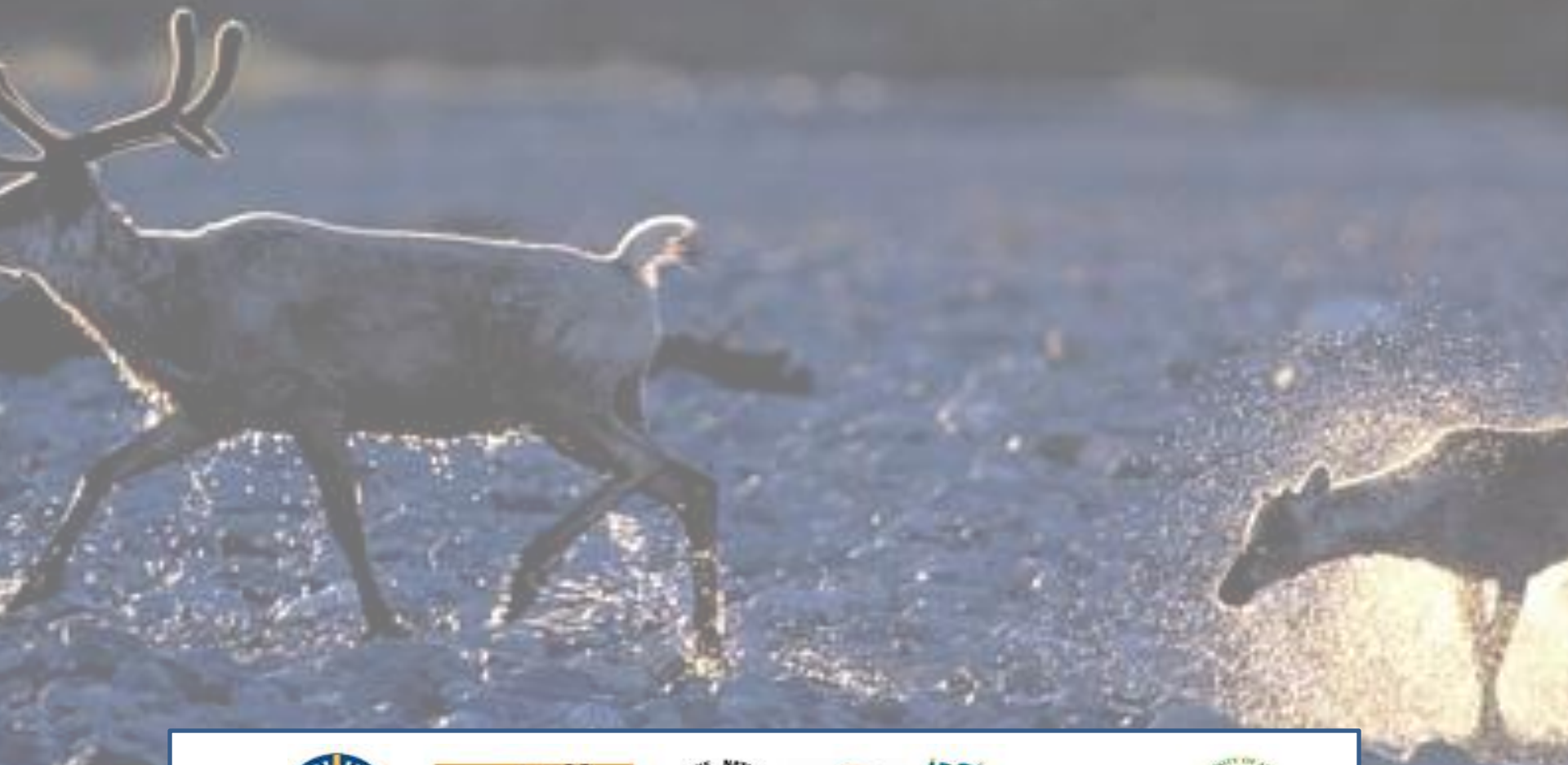


Arctic Peoples, Culture, Resilience and Caribou



Arctic Athabaskan Council

www.arcticathabaskancouncil.com

Gwich'in Council International

www.gwichin.org

Dene Nation

www.denenation.org

Inuit Tapiriit Kanatami

www.itk.com

Inuit Circumpolar Council

www.inuitcircumpolar.com

Dr. Brenda Parlee

Assistant Professor/ Canada

Research Chair

Faculty of Native Studies

Faculty of Agriculture, Life and

Environmental Sciences

University of Alberta

bparlee@ualberta.ca

Dr. Chris Furgal

Associate Professor

Indigenous Environmental

Studies, GCS 303, 1600 West

Bank Dr., Trent University

Peterborough ON, K9J7B8

chrisfurgal@trentu.ca



Communities and Caribou Workshop (March 4-5, 2010)



Collaborative Projects - IPY

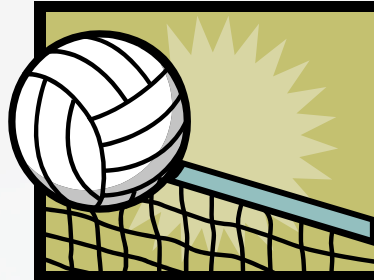
- **Communities and Caribou Workshop (March 4-5, 2010)**
Arctic Athabaskan Council – colleen.henry@cfyn.org
- **Intergenerational Resilience in Aklavik, NWT**
Andrea Rawluk, University of Alberta / Bonnie Koe, Aklavik – ajrawluk@ualberta.ca
- **Perspectives on Caribou Population Change in Tuktoyaktuk**
Raila Salokangas (Raila Dollevoet), University of Alberta - raila.salokangas@gmail.com
- **Archival Record Review on Caribou Management in the NWT (1900-1961)**
Lindsay Lizitsa, Teya McNabb and Frank Tough, University of Alberta – ftough@ualberta.ca
- **Land Use as Management: Re-imagining the Déljne Renewable Resource Council in a Self-Government Era**
Dr. Ken Caine, University of Alberta – kcaine@ualberta.ca
- **Indigenous Peoples and Climate Change**
Ursula King, National Centre for Epidemiology and Population Health, Australian National University, Canberra, ACT. ursulaking@ausdoctors.net

Collaborative Projects – SSHRC, Social Economy Network of the North

- **Caribou Harvesting in Tetlit Zeh (Fort McPherson), NWT**
Kristine Wray – kewray@ualberta.ca
- **Sharing What You Have': the Distribution of Caribou Meat in Fort Good Hope NWT, Canada**
Roger McMillan, University of Alberta – roger3@ualberta.ca
- **Food Security in Paulatuk, NWT**
Zoe Todd – zoe.todd@gmail.com
- **The Meaning of Education in Tuktoyaktuk**
Raila Salokangas (Raila Dollevoet), University of Alberta - raila.salokangas@gmail.com
- **Our Elders are Our Scientists: A Discourse Analysis of Western Scientific and Dene Language in the Transcripts of the Sahtu Renewable Resources Board Hearings on the Bluenose West/East Caribou Herds (2009)**
Robert Bechtel – rbechtel@ualberta.ca
- **Trends in Dietary Behaviour in Boom-Bust Resource Communities in the NWT**
Angie Chiu - angie.chiu@ualberta.ca

What is resilience?

*Bouncing
Back*



Local Meanings

- *Gihhàhtaii* (to be strong)
- *Qapinnailaq* (to never give up)

interdisciplinary (health sciences, sociology, ecology)

Ability to respond, cope, mitigate, manage and/or adapt to stress;

- Recognize the nature of the stress perceived and/or presented to community;
- Identify what resources and capabilities that are available at different scales (individual, community, regional, etc.);
- Consider social and ecological implications (feedback within the social-ecological system)

Dealing with Variability and Change

Resources / Capacities

- Positive outlook on life
- Self-efficacy and 'mastery'
- Income (employment)
- Education
- Strong social networks
- Cultural Continuity (cultural practices)
- Strong spiritual beliefs – connection to the land;
- Self-Determination, Responsive and participatory systems of governance

Communities and Caribou Workshop (March 4-5, 2010)

- Hunters, elders, resource managers, and youth from **16 communities in Nunavut, Northwest Territories and Yukon** participated in the meetings. Other participants included resource people from partner organizations, biologists, graduate students and researchers from the University of Alberta and Trent University, University of Manitoba and Environment Canada/Parks Canada. The workshop revealed similarities and differences in community knowledge, perceptions and responses to both the biophysical and governance dimensions of caribou population change in relation to more than **14 caribou herds**.

What are the experiences of caribou population variability and change across these regions?

What are the socio-economic, cultural impacts of variability/change?

How are individuals, households, communities dealing with these effects?

Perspectives on Caribou Population Change

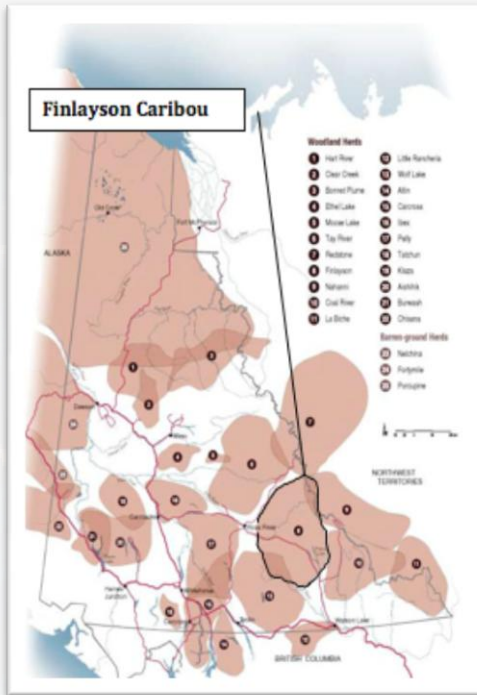


Photo: P.A.A.

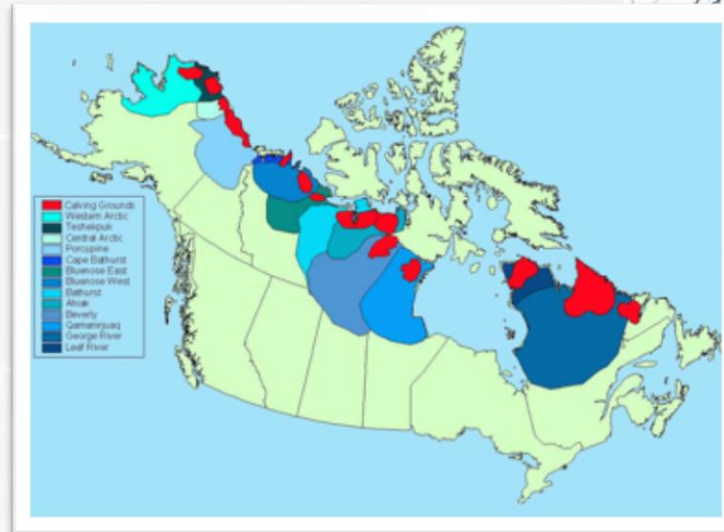


**What are the experiences of caribou
population variability and change
across these regions?**

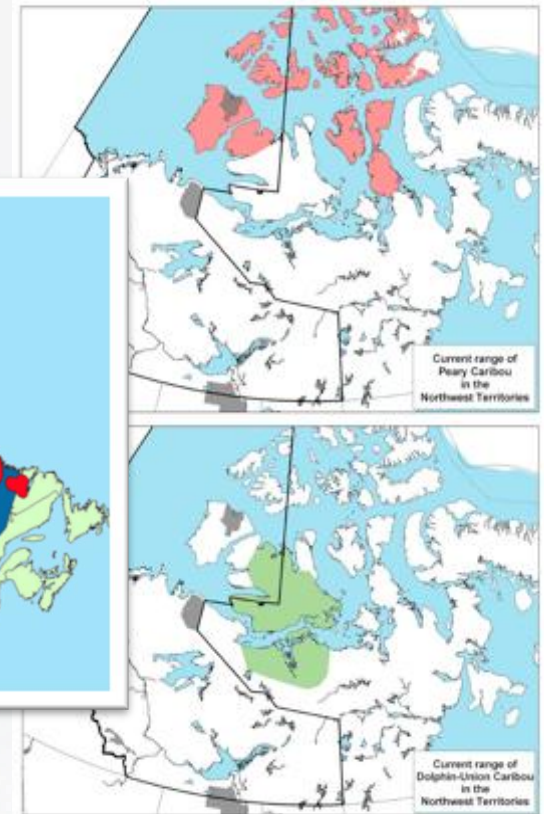
Perspectives on Caribou Population Variability /Change



Boreal Caribou



Barren Ground Caribou

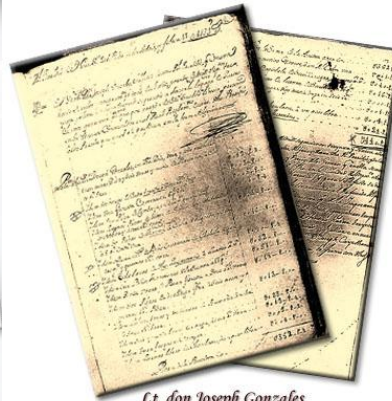


**High Arctic /
Peary Caribou**

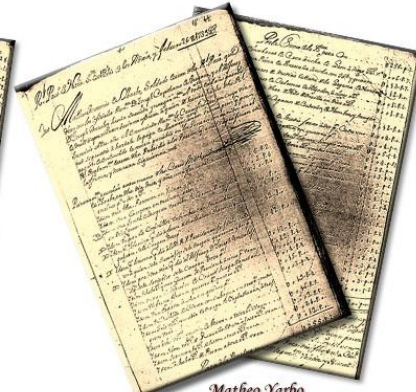
Perspectives on Caribou Population Variability /Change

Two ways of Gathering Community Knowledge

Oral Histories



Lt. don Joseph Gonzales



Mattheo Yarbo

Perspectives on Caribou Population Variability /Change

Two ways of Gathering Community Knowledge

Hunting Area	Number of Trips to Area in Fall/Winter	Number of Trips to Area in Spring	Nearest Landmark to Hunting Area and Place name	Total Nights Stayed	Number of years hunting in this area	Total number of days (column 2 + column 4)
Area 1						1
Area 2						2
Area 3						3
Area 4						4
Area 5						5

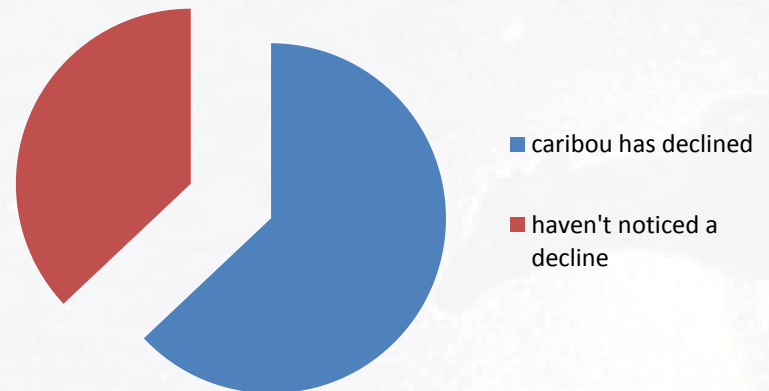
Where and how many caribou have you harvested in the last six months, year?

What are the perceptions of caribou health?

What kinds of changes (trends) have you observed in caribou population in recent years?

What factors influence population change?

What rules for respecting caribou do you follow when hunting?



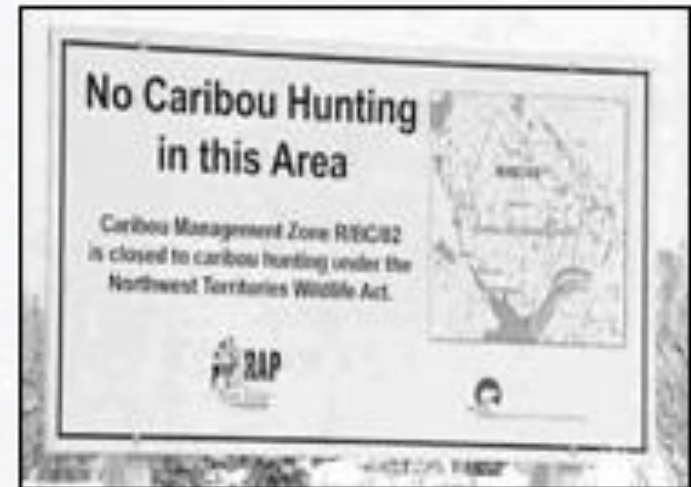
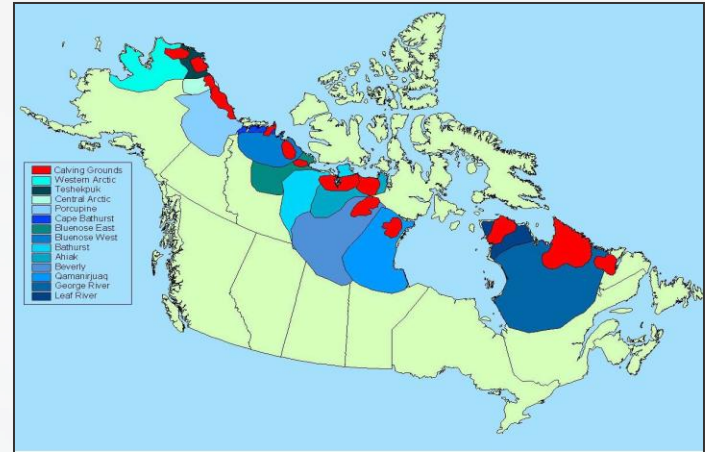


**What are the effects of declining
caribou?**

What are the impacts of declining availability and access to caribou?

Relationship to the Land

- Greater uncertainty about harvesting – no longer find caribou in the same places (e.g. working harder for caribou – focusing on other kinds of traditional foods);
- Politicized landscape
 - thinking about/across land claim and territorial boundaries;
 - new boundaries – e.g. ‘no hunting zones’);
 - critically reflect on boundaries given to specific herds (e.g. fixed versus dynamic herd structure);

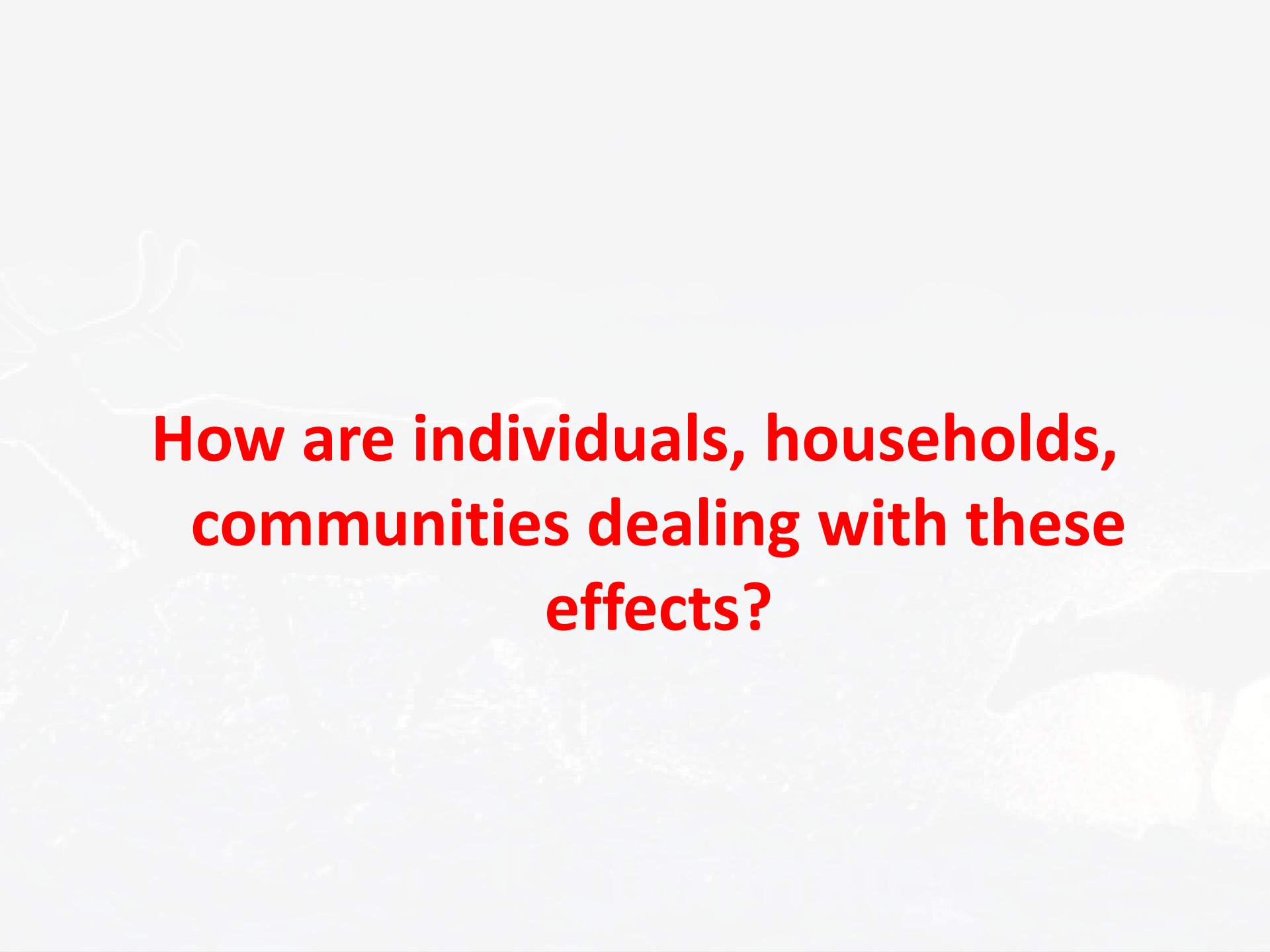


What are the impacts of declining availability and access to caribou?

Food security and Health

- what are the alternatives when caribou is not available for the table?
 - other traditional foods;
 - food from the store;
- individual decision-making (socio-economic versus nutritional tradeoffs);
- community/regional government influences - (contradictions/confusion between conservationist versus health promotion ideology);



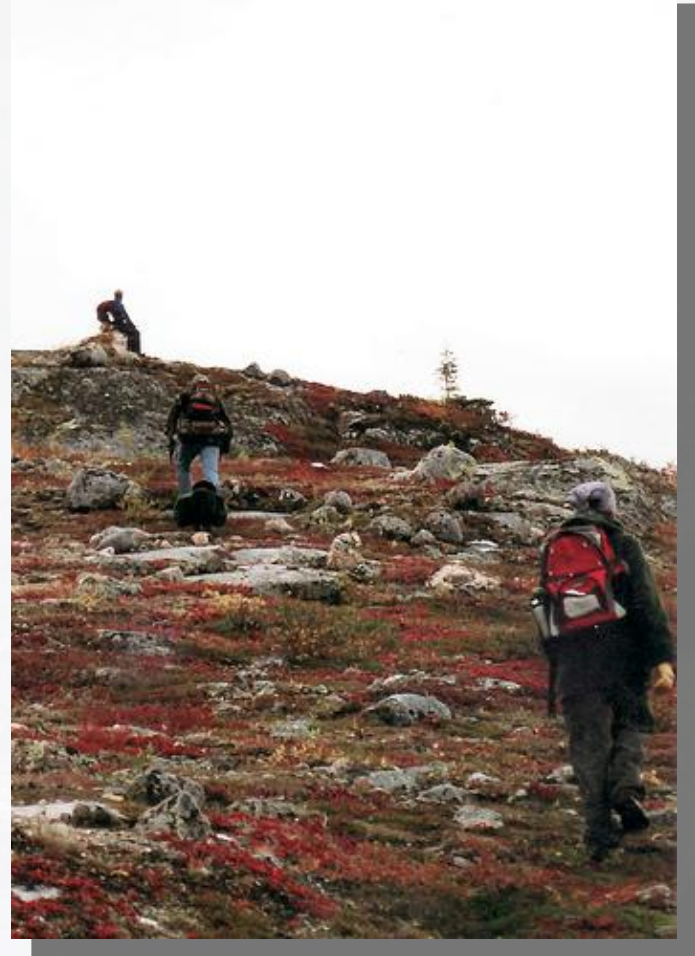


**How are individuals, households,
communities dealing with these
effects?**

Dealing with Variability and Change

Community Elders, Adults and Youth

- Youth, adults and elders have similar degrees of employment (income), education and social support but differ in terms of spiritual beliefs and traditional knowledge;
- traditional knowledge – positively related to age (elders self-identify as TK holders more so than adults, youth);
- number of days on the land – negatively related to age (youth and young adults spend more time on the land than elders);



Dealing with Variability and Change

- **Changing harvesting patterns**
 - Changing locations (going further);
 - Seeking alternate foods (e.g. fish, moose, whale);
 - Developing new/old harvesting strategies (e.g. community hunt, hunting more cooperatively);



Dealing with Variability and Change

Sharing networks and supports;

- Community addressing the needs of vulnerable members of the community;
- barter and trade between households/communities;



Dealing with Variability and Change

- **Management - Exercising versus defending Aboriginal rights to harvest;**
 - roles and responsibilities of government and co-management boards
 - critical reflections on co-management;
- **Precautionary Principle for Harvesting but not Resource Development**

Overemphasis on Harvesting as Problem and Solution

Harvesting

- economically rational behaviour (given limited availability of healthy, affordable other foods);
- traditional activity that serves other kinds of socio-economic, cultural purposes;

Rules known and followed by younger hunters?

- The most well known rules are those defined as “traditional rules” by elders; (i.e. youth were not able to communicate about territorial regulations/ management board guidelines as clearly as those defined by elders;

Rules of Harvesting: Many of the norms / rules governing harvesting behaviour in place at the local level are similar to those of management boards;

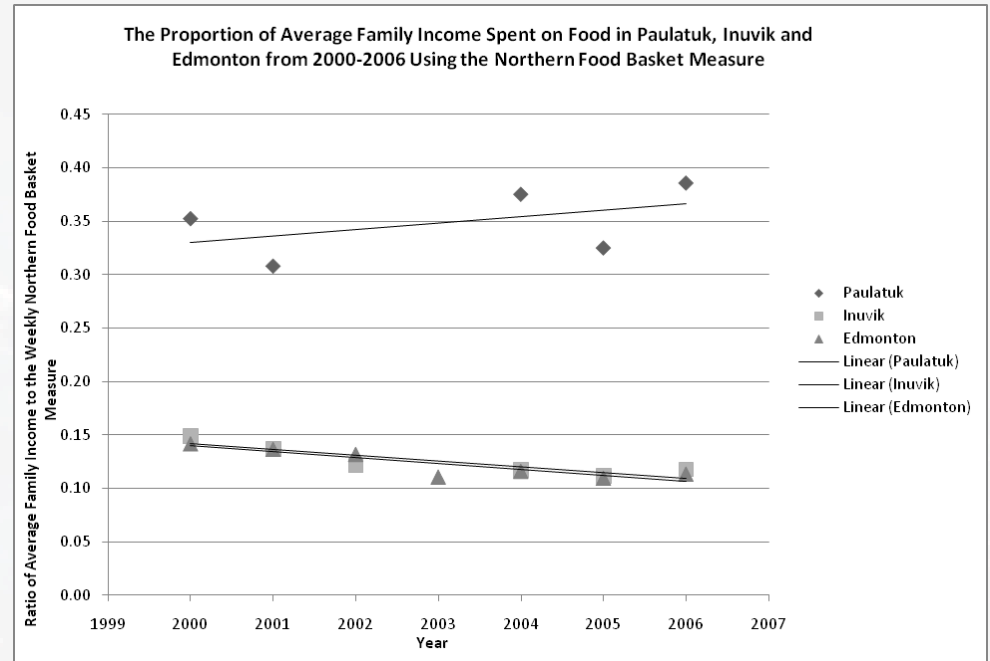
- Conflict between communities, governments are less about the substance of rules as they are about the degree of **autonomy** granted to the harvester in interpreting the rules depending on such factors as need, ecological conditions etc.;

Wray, K. (2010) *Ways we Respect Caribou: Hunting in Tetlit Zheh*. (Unpublished MSc). Edmonton: University of Alberta.

No Precautionary Principle for Resource Development

Does it improve Food Security?

- traditional food consumption is lower in boom economy communities (i.e. mining and oil and gas activity);
- consumption of high carbohydrate foods (junk food) increases in 'boom' economy communities presenting problems of increased risk of chronic health diseases (e.g. diabetes);



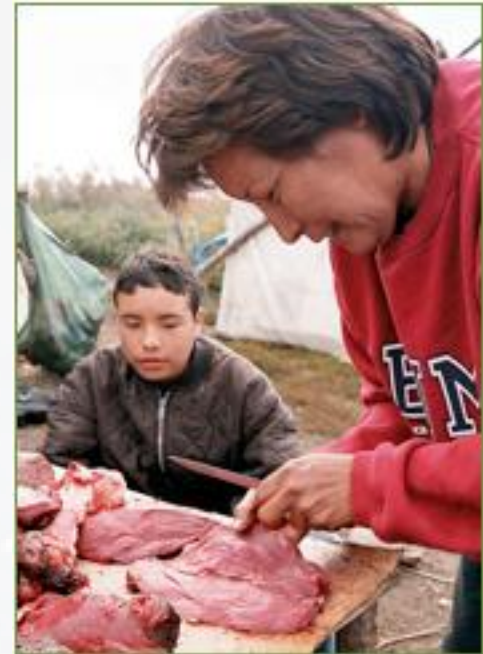
Comparison of the proportion of average family income spent on food in Paulatuk, Inuvik and Edmonton from 2000-2006 using the Northern Food Basket Measure

Todd, Zoe. (2010). *Food Security in Paulatuk, NT – Opportunities and Challenges of a Changing Community Economy*. MSc thesis, University of Alberta, Edmonton.

Dealing with Variability and Change

Teaching and learning

- ‘Scarcity’ and ‘working harder’ created new opportunities for teaching about what it means to respect caribou and the land;
- Challenges facing youth;
 - Not all youth have the same kinds of opportunities;
 - There is an unevenness of learning opportunities attributed to individual choice and aptitude, family, kinship and community influences, and an increasingly globalised society.



Salokangas, Raila and Brenda Parlee (2009) “The influence of family history on learning opportunities of Inuvialuit youth” *Inuit Studies* 33(1-2): 191-207.

Ecological Crisis or Constructed Crisis

- Are the kinds of concerns about caribou numbers warranted given what science and oral histories tell us about historic variabilities?
- Is the lack of availability / access to caribou a small issue when compared to the other kinds of stresses experienced by communities?



Meanings and Implications for Resilience and Well-being

- Individuals/ Communities have a strong base of knowledge, local resources/capabilities and local systems of management that are key to their resilience to stress of caribou population change;
- To what extent do management / policy regimes facilitate or work at cross purposes to building / sustaining these aspects of resilience;

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- Bridget Larocque – GCI
- Lee Mandeville – Dene Nation
- Eric Loring - ITK
- Stephanie Meakin - ICC

Community Researchers

Raila Salokangas
Zoe Todd
Andrea Rawluk
Roger McMillan
Kristine Wray

Community Researchers

Anne Thrasher, Paulatuk
Boogie Pokiak, Charles Pokiak, Tuktoyaktuk
Velma Illisiak, Bonnie Koe, Aklavik
Christine Firth – Fort McPherson
Walter Alexie Snr., - Fort McPherson
Anne Marie Jackson - Fort Good Hope
Walter Bayha – Deline

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CBC News