Arcticivet PPD%C%DFb DProd%Drc Eastern Arctic Newsletter

Barry Smit

In this issue:

ArcticNet project profile (2008-11) Scientific priority issues





Barry Smit is a Professor of Geography and Canada Research Chair in Global Environmental Change at the University of Guelph.

Community adaptation in a changing Arctic

Summary

Communities across the Canadian Arctic are exposed and sensitive to changes in social, political, cultural environmental and economic systems. Case studies from across the Arctic suggest that community adaptation is already well underway, partially in response to environmental change due to a changing climate.



Hunters taking precautions in **Ulukhaktok**

This project documents the changing physical, biological and socioeconomic conditions that are affecting people in the Arctic and identifies policies and strategies to assist communities in dealing with these changes.

The project builds on previous work on the vulnerabilities of Arctic communities, and it is feasible because of established collaborations with northern people and organizations.



Households stock-piling firewood in **Hopedale**

One main focus of the project involves integrating scientific and traditional knowledge of ice, permafrost, coastal dynamics, marine and terrestrial wildlife with information about community use of these ecosystem services. The other is to identify opportunities in existing policies for adaptation strategies to help communities deal with changing conditions.



Protecting shorelines from erosion in Tuktoyaktuk

Study site locations



Barry Smith is the lead on case studies taking place across the Arctic, including the Eastern Arctic region.

Hopedale, Nunatsiavut; Tuktoyaktuk, Inuvialuit Settlement Region; Ulukhaktok, Inuvialuit Settlement Region; Arctic Bay, Nunavut.

Local collaborations

Collaborations with local government, organizations and stakeholders are critical to undertaking this research. Collaborations have been fostered between the project researchers and the Nunatsiavut Government; the Ulukhaktok Hunters and Trappers Association and the Ulukhaktok Community Corporation.

Questions to Researchers

ArcticNet recognizes the importance of framing climate change issues from various perspectives. Below we are asking a few questions to the project leaders in order to identify scientific priority issues and demonstrate how the research results can be used by policy and decisionsmakers in terms of community and climate change adaptation planning in the Eastern Canadian Arctic.

1) From your own research perspective can you identify and describe the key issues that are (will be?) affecting social, economic or environmental conditions in the Eastern Canadian Arctic?

Communities in the Eastern Arctic are currently experiencing social, cultural economic, political and environmental change and stress. Changing environmental conditions occur together with reduced participation in traditional cultural practices, low employment rates, compromised housing and infrastructure and changing governance systems. Communities in the Eastern Arctic region are highly dependant on natural resources with much of their social, cultural, economic lives integrated with the natural environment. Despite their adaptability, Inuit of this region are particularly sensitive to changes in ice and wildlife.

If trends in environmental conditions continue - including later freeze up and earlier break up of sea and land ice; reduced snow pack; increasing wind strengths; poorer sea ice conditions; and changes in wildlife abundance and species availability, these will further exacerbate existing social, cultural, and economic stresses.

2) How will your ArcticNet project contribute to a better understanding of these issues affecting the Eastern Canadian Arctic?

This project contributes to an understanding of these issues by looking at the change taking place in the Eastern Arctic from the perspective of the community first. Using a vulnerability approach whereby researchers work directly with communities to identify characteristics of environmental change that are important to peoples' livelihoods. This research produces information on the ways in which the community is currently experiencing stresses and how they are dealing with them to understand where policy interventions may be beneficial to enhance adaptive capacity. The second element of this research focuses on the opportunities that may exist within policy making institutions and management organizations to integrate capacity enhancing strategies which are reflective of the needs, values and interests of the communities.

3) Provide an example of how the results of your project may contribute to the decision-making process with respect to these issues.

As a main component of our research program, this research contributes directly to policy-making relating to adaptation to climate and other change. Each case study begins with establishing a partnership with the community and ensuring community and relevant government and decision-maker involvement. Since the community members and institutional representatives responsible for policy development and change are directly involved in the research including research design, data gathering and reporting, insights are taken up directly into decision making processes at multiple levels.

General information

Contact us if you have suggestions, feedback or questions regarding the research project presented in this newsletter.

Project contact information:

Barry Smit

Professor and Canada Research Chair Department of Geography University of Guelph Guelph, ON, N1G 2W1 bsmit@uoguelph.ca www.uoguelph.ca/gecg

ArcticNet IRIS-2 contact

Philippe LeBlanc

ArcticNet IRIS Coordinator Eastern Arctic Region Memorial University of Newfoundland pleblanc@mun.ca

Upcoming Newsletter

Researcher

Dominique Berteaux Gilles Gauthier

Research project Effects of climate change on the Arctic Wildlife

