

The Arctic Borderlands Ecological Knowledge Co-op: Issues of data management and data access in an arctic long-term community-based monitoring systems.

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The Arctic Borderlands Ecological Knowledge Co-op (ABEKC) was created in 1994 when representatives from First Nations, Inuvialuit, government agencies, scientists and co-management groups met in Dawson city to start an ecological monitoring program within the range of the Porcupine Caribou Herd, which roams in parts of Alaska, the Yukon and Northwest Territories. Three main issues were identified in 1994 as being central to the program: climate change, contaminants, and regional development. Formally, the goals of the ABEKC are to: a) monitor and assess ecosystem changes in the range of the Porcupine Caribou Herd and adjacent areas; b) encourage the use of both science-based studies and studies based on local and traditional knowledge in ecological monitoring and ecosystem management; c) improve communications and understanding among governments, aboriginal and non-aboriginal communities and scientists with regard to ecosystem knowledge and management; and d) foster capacity-building and training opportunities in northern communities in the context of the above-listed goals.

The ecological monitoring program of the ABEKC includes two aspects. First, it developed a database of 65 scientific indicators, updated annually, that cover a wide range of topics including weather, bird abundance, etc. Second, the ABEKC, via community researchers, runs an annual community-based monitoring program during which an average of 17 local experts per community are interviewed each year on topics including: weather, caribou, fish, etc. At the beginning of the ABEKC, four communities participated to this monitoring program, and included Aklavik, Old Crow, Fort McPherson and Arctic Village. Since 2003, the ABEKC expanded to include: Inuvik, Kaktovik, Tuktoyaktuk and Tsiigehtchic.

As of 2008, 1190 interviews have been conducted by the ABEKC. Dealing with this amount of information has raised several challenges and questions related to data management and access. Some of these challenges include the fact that numerous people are/have been involved in the ABEKC process of data collection, storage and organization over the years, so that very few people are knowledgeable about the overall process. The consequence is that few people are actually knowledgeable enough to easily extract information from the database, which may impede data interpretation and access. Changes in questionnaires and codification of data over the years have also challenged the capacity of the ABEKC to analyse time series information. Moreover, the creation of a large database have raised the question of how to capture the information from multiple interviews without running the risk of compartmentalizing the information to the point that the subtleties and context of LTK are lost in the process. These challenges and questions, as well as others, will be discussed in this presentation.

Today, the Coop has just completed a survey redesign in collaboration with program partners and decision making bodies. The new questionnaire plays the strengths of both community based monitoring capacity (simple and repeatable) and are linked to decision making information needs (wildlife status and trends). This improved model aims to demonstrate a viable local based knowledge framework/ operation that informs decision maker needs once collected, while still providing the long term context and information for communities and land users to learn more about their environments.

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