

Minary Workshop Summary

IASC Human-*Rangifer* Systems Program

Background on the Minary Workshop

Twenty-one researchers and reindeer/caribou users met at Dartmouth College's Minary Center in Holderness, New Hampshire on January 31 to February 4, 2001. This workshop, organized by the Institute of Arctic Studies, furthered the work begun in Rovaniemi, Finland in 1999 at the Human Role in Reindeer/Caribou Systems Research Planning Workshop. The Research Plan and papers from the Rovaniemi meeting were published in Polar Research Vol. 19, No. 1 pp 3-21 (2000). As a result of new contacts and ideas that emerged at the Rovaniemi workshop, participants initiated a number of regionally based research projects addressing Human-*Rangifer* Systems. The purpose of the Minary Workshop was to gather people involved in these projects to discuss how to advance the HRS Project to a circumpolar scale. More specifically, the objectives of the Minary were to:

- 1) Launch a Circumpolar HRS Monitoring Network.
- 2) Evaluate the status of the "Profile of Herds" initiative
- 3) Define the objectives of one or more interdisciplinary circumpolar HRS research projects
- 4) Address organizational issues of the HRS Program.

The HRS Program is an endorsed project of the International Arctic Science Committee (IASC). Additional funds for the Minary workshop came from the Trust for Mutual Understanding, the John D. and Catherine T. MacArthur Foundation, and the Walter and Duncan Gordon Foundation of Canada. A number of individual participants of the workshop obtained their own travel grants from their home institutions or other funding sources.

This document provides a brief summary of the Minary Human-*Rangifer* Workshop and a list of its participants.

Establishing a Monitoring Network

The idea for a Human-*Rangifer* Systems (HRS) Monitoring Network arose after an Arctic Council ministers meeting in Iqaluit in 1998. The ministers directed - the Committee for the Conservation of Arctic Flora and Fauna to identify elements of a program to monitor circumpolar biodiversity and to assess the effects of climate change on Arctic ecosystems. Following that meeting, CAFF country representatives gathered in Iceland (2000) to develop a framework for a circumpolar biodiversity monitoring program, specifying an approach and key parameters against which national and international monitoring programs can be

evaluated and linked. The CAFF representatives identified *Rangifer* as one of six components of the CAFF monitoring program.

Monitoring discussions at the Minary workshop focused on current systems for reporting data relevant to HRS in various countries. Breakout groups selected an initial set of indicators of change and addressed the prospects of establishing a monitoring network that linked regions. Presentations by several participants to the group highlighted the rich baseline data available, as well as the current need for metadatabase organization. .

The group agreed that a Human-*Rangifer* Systems Monitoring Network should include local knowledge as well as science-based indicators, and facilitate the on-going contributions, sharing of data, and communications of findings among users, managers, and researchers. Country leaders were selected for the purpose of launching the network and maintaining communication among interested players, and the initial set of indicators was evaluated. Don Russell, who heads the HRS Monitoring Network has prepared an initial document summarizing the key discussion points from the Minary meeting and listing the indicators generated at Minary. This document about the HRS Monitoring Network is currently being circulated to Minary meeting participants and country leaders. It will soon be posted on www.rangifer.net . Don Russell (don.Russell@ec.gc.ca) of Environment Canada's Canadian Wildlife Service is serving as "net master" of the HRS Monitoring Network.

Profile of Herds Initiative

The "Profile of Herds" initiative aims to provide a multi-disciplinary and comparative status report on Human-*Rangifer* Systems of different regions. Participants recognized the links between the Profile of Herds Initiative of www.rangifer.net and the monitoring network, since the Profile initiative is a vehicle for reporting on monitoring. With funding received from the MacArthur Foundation, individuals from the meeting will begin the work of organizing information for review and posting on the www.rangifer.net website.

Formulation of a Circumpolar Research Project

Considerable time was spent discussing the needs and opportunities for circumpolar research that focuses on the sustainability of and changes in human-reindeer/caribou systems. We began these discussions with reports by members of currently funded large-scale research projects. They presented their projects' objectives to the group, and the group identified project commonalities. The projects discussed were:

- The European Union's Challenges of Modernity to Reindeer Management Project (presented by Bruce Forbes and other members of his research team). This project starts with local knowledge to determine grazing land quality, and uses remote imagery to assess better the value of reindeer habitat. Socio-cultural aspects of the project are included, as are biophysical dimensions of the problem.

- The UNEP Taimyr Reindeer Project (presented by Leonid Baskin). This project examines approaches for sustaining herds and herding in an area that currently faces rapid industrial development. The project is now entering its second phase of funding.
- Sustainable Reindeer Husbandry (Johnny-Leo L. Jernsletten) This project works with herders to define sustainability, identify the national-level research questions and select indicators of change in reindeer husbandry. The Arctic Council has endorsed the project. The final product will be a report to policy makers. For details see www.sustainability-husbandry.uit.no
- The National Science Foundation Sustainability of Arctic Communities Project (presented by Don Russell and Gary Kofinas). In its first phase, this project used simulation modeling to examine the possible effects of climate change, oil development, and tourism on caribou user communities of the range of the Porcupine Herd. The second phase of the study broadens the scope to include other herds of North America. For details see www.taiga.net/sustain
- The Legal Landscape of Reindeer Herding (Gail Fondahl, Gail Osherenko, and Natalia Novikova) This project is in the initial stages of development (not yet funded) and was offered for consideration to Minary meeting participants. The emphasis of the proposed work is on informal or customary law of herding peoples, the interaction of formal and informal governance systems, and the implications for cultural resilience.

After discussing the approaches and benefits of comparative circumpolar studies, the group identified and discussed in detail three possible research foci that show potential for development into full-blown proposals. It is likely that funding for these projects will be pursued separately, although the group did recognize the overlap between them and with currently funded regional projects. There is a need to establish strong linkages among existing and future projects.

- 1) The Effects of Global Change in Three Large and Complex Systems
Participants recommended that comparative research focus on the Western Arctic (~430k), George River (~800k), and Taimyr Herds (~1000k). These three systems constitute the largest populations of wild *Rangifer*, with each having a substantial and diverse set of indigenous user communities. It is anticipated that each of these three systems is likely to be affected differently by climate change. All three are also undergoing dramatic socio-cultural change. Several research questions might include the likely effects of habitat loss and fragmentation on herd productivity and behavior, the transformation of herders to hunters and hunters to herders, and the institutional capacity of management to address cumulative effects of global change. Participants suggested that the proposed study be participatory with a strong educational component, that the approach be highly interdisciplinary, that it draw on simulation modeling, remote sensing, and available socio-economic datasets as a means of comparing systems.

- 2) Institutional Drivers and their Effects on Herding Systems - Workshop participants formulated a second research focus that centers on the cultural systems of herders and the effects of institutions as drivers of change. At the heart of this research are problems associated with the lack of existing laws, the limited implementation and enforcement of existing laws with respect to rights of indigenous peoples to participate in decision-making on development, and the problems of rapid privatization of industrial herds. A key question of this project would be how laws and management systems are driving change with respect to the extent and quality of pastures, access to pastures, and the ability of herders to continue a herding-based lifestyle and economy. As with the large herd research described above, this project would examine the capacity of management arrangements to respond to changes, specifically to climate change and industrial development.
- 3) Video Ethnography: The Natives-Study-Natives Project Three anthropologists, two of whom are highly experienced video ethnographers, formulated this project concept. Video ethnography is a method of study that can be used in either of the two projects described above. A central dimension of this proposed project is the shift in research roles, from local people as "objects of research" to local people as researchers themselves. The role of the academic researchers here is not as passive observers, but as active facilitators of learning. Working with anthropologists, local indigenous students will select variables of culture change that they perceive as critical to understanding the dynamics of their system. They will also receive training in the use and creation of video ethnography as a research method. In the first phase of the project, local students conduct inter-generational video interviews within their own communities (for example, youth interviewing elders about how young people's and elders' lives differ), and use this material as the basis of analysis. Each student would film and edit a video to be shared with his/her community as well as with the HRS research community. In phase two, the student researchers would compare contexts through interactions with students and faculty conducting similar research in other regions. (For example, students from Kotzebue would have an opportunity to compare what they see as difference with the Kola Peninsula.) The program would culminate in a traveling northern film festival. The process could be ongoing, and thus would create a video archive of synchronic studies by indigenous researchers on change in human-*rangifer* systems linked to the central research questions of the HRS Program.

Organization of the HRS Program

The closing discussions of the meeting focused on the goals of the HRS Program, the need for an HRS Program "steering committee," and possible future direction for the program. Several points raised by the group are:

- The HSR Program could help coordinate one or more interdisciplinary, international research projects.
- The Committee need not develop a single research project; but ideally a complex network of projects.
- The goals of the program are not achieved easily, yet it would be wise to capitalize on the effort to date.
- The current organization should remain informal at present
- The group needs a coordinating center: for now, that anchor would be at the Institute of Arctic Studies at Dartmouth College.
- The Association of World Reindeer Herders (WRH) lacks a sound financial basis and scientific support; the HRS steering committee should contact the WRH to offer its support and explore ways to work together.
- A striking and unique feature of the HSR Program is the involvement and collaboration of indigenous users (hunters, herders, and indigenous leaders). Their involvement should be encouraged and expanded.
- A program of this kind can facilitate the gathering of groups of people at key times to deal with important topics.
- The program could also provide a research and educational model building process for others to follow

The meeting closed with an agreement that the participants of the Minary Workshop would serve as members of the HRS Program Steering Committee, and that the process would be open to others interested in joining. Participants also agreed that individuals would develop the three project ideas listed above into full proposals, and that the group would continue to explore additional ways of collaborating and to make the work of existing and future human-*Rangifer* research international and circumpolar.

For more information contact:

Gary Kofinas

gary.kofinas@dartmouth.edu

Meeting Participants

Leonid	Baskin	Institute of Ecology and Evolution Moscow, Russian Federation
Hugh	Beach	Cultural Anthropology, Uppsala University Sweden
Gail	Fondahl	University of Northern British Columbia Canada Visiting scholar, Scott Polar Research Institute, Cambridge, UK
Bruce	Forbes	Arctic Centre, University of Lapland Rovaniemi, Finland
Andrei	Golovnev	Institute of History and Archeology Ekaterinburg, Russian Federation
Johnny-Leo L	Jernsletten	Centre for Saami Studies, University of Tromsø, N-9307, Norway
Sakari	Kankaanp	Association of Reindeer Herders Finnish Forest Research Institute Rovaniemi, Finland
Anne	Kendrick	Ph.D. Candidate, University of Manitoba Canada <i>Workshop Rapporteur</i>
David	Klein	Institute of Arctic Biology, University of Alaska Fairbanks, AK, USA
Konstantin	Klokov	Institute of Geography, St. Petersburg University St. Petersburg, Russian Federation
Gary	Kofinas	Institute of Arctic Studies, Dartmouth College Hanover, NH/ Institute of Social and Economic Research/University of Alaska Anchorage, Anchorage, AK, USA
Yulian	Konstantinov	Institute for Anthropological Field Research New Bulgarian University, Sofia, Bulgaria
Margarita	Magomedov a	Institute of Plant and Animal Biology Ekaterinburg, Russian Federation
Natalia	Novikova	Institute of Ethnology and Anthropology Moscow, Russian Federation Legal Center "RODNIK"
Gail	Osherenko	Institute of Arctic Studies, Dartmouth College, Hanover, NH, USA
Don	Russell	Canadian Wildlife Service, Yukon Region Whitehorse, Yukon, Canada
Elena	Saenko	Graduate Student [Master of Liberal Arts] Dartmouth College, Hanover, NH <i>Workshop Russian-English Translator</i>
Vladimir F.	Sirota	Head of SHPK "Tundra" Lovozero, Murmansk, Russian Federation
Raymond	Stoney	Western Arctic Herd Co-Management Working Group Alaska, USA
Joe	Tetlich	Porcupine Caribou Management Board Old Crow, Yukon, Canada
Nicholas	Tyler	Department of Biology, Tromsø University N-9037 Tromsø, Norway

