

## **THE HERD'S CALENDAR:**

### **Following the annual trek-route of a reindeer herd in the Kola Peninsula, NW Russia**

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#### **Background and Objectives**

Our multidisciplinary international team propose a year-round Arctic expedition within the International Polar Year 2007-2008. The objective of this tundra fieldwork is to identify and understand patterns of change in the circumpolar North by following an annual migration of a reindeer herd from the central part of the Kola Peninsula to the Barents Sea Coast and back. This is a special cross-cutting activity between two fieldwork teams: it will be the follow-up of both IAFR (Yulian Konstantinov, Vladislava Vladimirova) long-term involvement in the Western Russian Arctic and Dessislav Sabev's SSHRC post-doctoral appointment in the Department of Geography at McGill University (with Ludger Müller-Wille, supervisor, 2004-2006). Thus, it is Canada-based initiative with the strong co-operation with Bulgarian and other European partners.

Close observation of herd migration has not been carried out in this area to this day. While observations on climate change have been analysed and eventually systemised in some parts of the circumpolar world, the impact of social change on animal migration and on human-animal relationship has been much less studied. Since the dissolution of the Soviet Sovkhoz system in 1991-92, the reindeer herds have been subject to an ever-decreasing human care. Large-scale mixing with wild herds has occurred, trek-routes have taken new courses, social and economic conditions for the herding crews have undergone profound changes. The expedition aims to bring back detailed knowledge of the process in its current dynamics.

A unique aspect of this expedition is the choice of the vantage point. So far, researchers have predominantly worked in village centres, the great majority of such research being carried out in the agrocentre of Lovozero. A less visited terrain has been the work of reindeer-crews in actual tundra conditions and here the IAFR team has been a leader since 1994. Studying population dynamics throughout the annual migration from the vantage point of the herd itself has, however, never been attempted before. Thus, the proposed field-research shall establish a precedent through its integration within IPY. Among knowledge on change, it hopes to gather, choosing this particular angle of observation, new information about strategies of migration, the growing pressure on herds by predators, poachers and change of pastures.

The project is to be carried out in close collaboration with local herders. Contacts with them have been established and developed through frequent fieldwork in the past eight years. Participation of local specialists shall also be recruited. In consequence, all results will be made available to the local herders and farm administration. Besides material for written scientific presentation, we aim to capture a larger public interest by achieving an anthropological film and an interactive web-site. The latter should provide not only exciting news and ethnographical notes, but

also enable the visitor to virtually “follow” the migration routes and engage general public attention on the importance of Arctic change to the global system.

### **Method**

The *Herd's Calendar* is proposed as an anthropological research having, however, interdisciplinary methods and output. It concerns social sciences, animal biology, environmental studies, geography and reindeer-herding management. In this sense, the team composition reflects the domains of scientific and practical application.

The main principle of the field-methodology and corresponding logistics of the expedition is to keep as close to the main body of a brigade herd as possible. This position will help to find answers to the following questions:

- What are the actual changes in migration patterns, herd-composition, age-sex demography, and reproductive rate? What is the current overall trek-route and its relation to previously recorded patterns?
- What is the actual contact between a crew (brigade) and the herd itself throughout the seasons? To what an extent the crew has control over the herd?
- In particular: how is the calving campaign carried out? Is there a separation between productive and non-productive part of the herd? How do mothers with young calves migrate? When are fawns marked?
  - How do herds react to diminished human interference in post-Sovkhoz days?
  - What is the rate of mixing with other herds, and in particular - with wild deer?
  - What is the actual predator/ poacher pressure?
  - What is the ratio between private and collective deer?
  - How is the transport part of the herd being managed?
  - What is the optimal model for reindeer herding in the Kola Peninsula?

The expedition is planned to be carried out on reindeer-drawn sleds with occasional snowmobile support in the winter and tracked vehicles in the summer. A permanent satellite connection is to be established between the herding-camp base and the research team camping around the herd. The use of Global Positioning Systems (GPS) technology will be considered in order to precisely track the geographic patterns of the herds. At a later stage, the resulting data will be plotted and analyzed using Geographic Information Systems (GIS) programs.

### **Time Scheme:**

1. Assembly of team and preparing the expedition: 10 January 2007 - 30 April 2007.
2. Field-research period: 1 May 2007-30 April 2008:
  - (a) Spring (calving, calf-marking, assembling reindeer-teams, moving of brigades to tundra-bases): 1 May - 30 June 2007;
  - (b) Summer (free grazing, moving out to the coast) : 1 July - 31 August 2007;
  - (c) Autumn (pelt-slaughter; assembling reindeer-teams, rut, moving back to the interior): 1 September - 31 October 2007;
  - (d) Winter (counting, trekking to slaughter-corral; slaughter, winter grazing, castration) : 1 November 2007 - 31 March 2008;
  - (e) Returning from field: 1-30 April 2008.
3. Follow up Phase:
  - Processing of field-material (including visual material and web-site): 1 June - 1 October 2008;
  - Preparation of final report, article format publications, monograph - by 1 Dec 2008;
  - Parallel finalising of visual material (film, photography) - by 31 May 2009.

### **Major logistical requirements:**

1. Transportation: 3 snowmobiles, 1 tracked vehicle;
2. GPS and GIS programs;
3. Satellite connection