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Reindeer herders, reindeer and global change in Northwestern Russia: An interdisciplinary case study in the Nenets Autonomous Okrug

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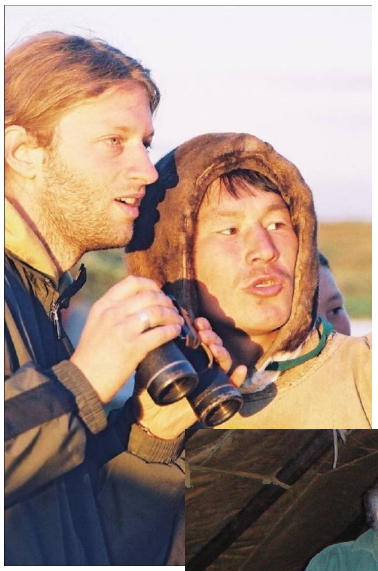
This research looks at consequences of and responses to global change at the local level from an interdisciplinary perspective. It bridges the gap between the natural science and social science approaches to studying processes of change and continuity in the Arctic. Climate change is conceptualised as one aspect within a set of complex interrelations of animate and inanimate components of the environment, such as reindeer pastures, plants, animals, people, spirits, and weather.

Gareth Rees, a remote sensing specialist and physicist, and Fiona Danks, an Arctic ecologist and geographer, study in detail changes in the physical environment of reindeer herders. They analyse the condition of reindeer pastures and the impact of reindeer grazing on them with the help of satellite images, remote sensing and ground truthing in the field.

Piers Vitebsky and Florian Stammler, both anthropologists, look at the perception of global change among the reindeer herders of a particular reindeer herding enterprise, who became sedentarised during the Soviet Union era and thus became “part-time nomads”. Anthropological fieldwork based on interviews and participant observation reveals to what extent the perception of and ideas about nature influence the scope for adaptations of reindeer herders and the socio-economic systems to changes in the physical environment. How do they respond to the changes they perceive, and what are their likely responses in the future?

Through the synthesis of facts and figures with the ideas and responses of local people, we expect to develop a better understanding of the social and natural implications of change in the Arctic.

This research is part of an ongoing EU project called BALANCE. Fifteen research institutions from six countries collaborate and work to assess present and future climatic vulnerabilities of the Barents Sea region based on a common modelling framework for major environmental and societal components and on combining them through an Integrated Assessment Model.



Fieldwork involved participant observation, interviewing and botanical ground truthing in the tundra