# The 14th Nordic Conference on Reindeer and Reindeer Husbandry Research, Vantaa/Helsinki, Finland, 20-22 March 2006

# Report by Rolf Egil Haugerud



The conference arranged by Nordic Council for Reindeer Husbandry Research (NOR) in co-operation with the Finnish Game and Fisheries Research Institute (RKTL), The National Veterinary and Food Research Institute of Finland and University of Helsinki, gathered 83 participants from all kind of fields related to reindeer research. Venue was Sokos Hotel Vantaa, near Helsinki.

NOR' conferences have since long anticipated crossdiciplinary knowledge and also this 14th conference was mediated in such a spirit. The conference marked the 25th Anniversary of NOR and invited key lectures reflected scientific development and today's situation in different research fields. Participants' contribution either as lectures or in posters, showed the broad spectrum of interests in reindeer and reindeer husbandry research. An abstract book was, besides abstracts containing organisation, information, program and list of lectures, posters and participants, issued for the conference (*Rangifer* Report No. 11, 2006).

As part of the anniversary celebration NOR had invited special senior guests, and six were present at the meeting; *Bengt Ekendahl*, Sweden, and *Veikko Huttu-Hiltunen*, Finland, were both at the constitu-

tional meeting of NOR. At the first ordinary meeting *Bengt Westerling* (NOR's chairman 1985-1991) and *Sven Skjenneberg*, (NOR's secretary 1981-1994), attended. The wife of the latter, *Ragnhild Skjenneberg*, was also invited for her support to Sven's work in NOR. *Sven Nikander* was the Finnish member of NOR's working committee for a long period in the 1990s and 2000s.

Mauri Nieminen, Finland, could have been a senior guest. He was present at NOR's constitution and has been a delegate to NOR all time thereafter and for the period 2005-2007 he is elected NOR's chairman. In that capacity he opened the 2006-conference.

There were totally 43 scientific contributions; 24 oral presentations of them 11 key note lectures, and 19 posters. Proceedings is planned to be published in *Rangifer* Report No. 12.

At the conference dinner Öje Danell, NOR's vice charmain and former chairman in five years, gave a historical account of the first years and pointed at the main focus of NOR. Sven Skjenneberg and Veikko Huttu-Hiltunen shared some old impressions during the sessions and the chairman of Sami Reindeer Herders' Association of Norway (NRL), Aslak J.

Eira, handed to NOR a book gift for the anniversary. Finally, Mauri Nieminen, showed his photos from northern regions and concluded the conference. The next NOR conference will be held in Sweden.

#### Lectures 21 March

Session chair Professor Öje Danell

Knut Røed, Professor, The Norwegian School of Veterinary Science, Oslo, Norway (invited) -"Taxonomy and origin of reindeer"

Lennart Lundmark, Scientific author, Sweden (invited) - "Reindeer pastoralism in Sweden 1550-1950"

Mauri Nieminen, Senior researcher, RKTL, Reindeer Research Station, Kaamanen, Finland (invited) - "History and development of reindeer husbandry in Finland"

Johnny-Leo Jernsletten, PhD-student, Institute of Cultural Anthropology and Ethnology, Uppsala University, Sweden - "The concession reindeer management in Tornedalen – historical development, challenges and opportunities"

Session chair Professor Timo Soveri

Arnoldus Schytte Blix, Professor, Department of Arctic Biology, University of Tromsø, Norway (invited) - "Physiology and feeding – establishing knowledge through 25 years"

Harri Norberg, PhD-student and researcher, University of Lapland, Rovaniemi, Finland - "Spatio-temporal mortality patterns of semi-domes-

ticated reindeer calves in Finland"

Øystein Holand, Associate Professor, Norwegian University of Life Sciences, Ås, Norway (invited) - "Herd productivity – revisited"

Ingunn Vistnes, PhD-Student and Researcher, NORUT-NIBR, Alta, Norway/ Norwegian University of Life Sciences, Ås, Norway - "Research on impacts of antropo genic disturbance of reindeer trough 25 years – current knowledge and future challenges"

Bruce Forbes, Professor, University of Lapland, Rovaniemi, Finland - "Effects of petroleum development on reindeer herding in northwest Russia"

Session chair Professor Erik Ropstad

Antti Oksanen, Section director, National Veterinary and Food Research Institute (EELA) (invited) - "Semi-domesticated reindeer health and diseases before and during the NOR era"

Morten Tryland, Associate professor, The Norwegian School of Veterinary Science, Tromsø, Norway -"Contagious ecthyma in semi-domesticated reindeer in Norway: clinical outbreaks, experimental infection and virus characterization"

Kjetil Åsbakk, Associate professor, The Norwegian School of Veterinary Science, Tromsø, Norway - "Prolonged persistence of faecally excreted ivermectin from reindeer in an arctic Environment"



Conference lecturers from left Knut Røed, Lennart Lundmark, Johnny-Leo Jernsletten and Mauri Nieminen.

Photos: R. E. Haugerud

#### Lectures 22 March

Session chair Associate Professor Birgitta Åhman

- Eva Wiklund, Researcher, University of Fairbanks Alaska, Reindeer Research Program, Fairbanks, AK, USA (invited) "Reindeer meat is it always tender, tasty and healthy?"
- Charlotte Rylander, PhD-student, Centre for Sami Health Research, University of Tromsø, Norway - "Reindeer meat – healthy and safe food?"
- **Eigil Reimers**, Professor, Department of Biology, University of Oslo, Norway (invited) - "Wild reindeer in Norway – population ecology, management and harvest"

Session chair Associate Professor Oystein Holand

- Bernt Johansen, Senior researcher, Norut Information Technology, Tromsø, Norway (invited)
  "Satellite images an important tool for mapping and monitoring reindeer ranges in northern Fennoscandia"
- Johan Olofsson, Assistant Professor, Department of Ecology and Environmental Science, Umeå University, Sweden - "Effects reindeer grazing on tundra ecosystems"
- Otso Suominen, Dr., Section of Ecology, University of Turku, Åbo, Finland "Reindeer impacts on microclimate and structure of forest floor communities in summer and winter ranges"
- Christian Uhlig, Reseacher, Bioforsk Nord, Tromsø, Norway - "Arctic ungulate grazing does not necessarily increases tundra fertily"
- Jon Moen, Senior Leturer, Deptartment of Ecology and Environmental Science, Umeå University, Sweden "How does forestry affect lichen growth?"

Session chair Researcher Harri Norberg,

- Ilpo Kojola, Senior researcher, RKTL, Oulu Game and Fisheries Research, Oulu, Finland (invited) - "Predation in wild and domestic reindeer herds"
- Åsa Nordin, Researcher, CeSam Centre for Sami Research, Umeå University, Umeå, Sweden -"Social relations and the system of "skötesrenar""
- Niklas Labba, Reseacher, Nordic Sami Institute, Kautokeino, Norway - "Reindeer–source of income or cultural linkage - an analysis of Sami reindeer management households economies"

Juhani Kettunen, Professor, Finnish Game and Fisheries Research Institute (RKTL), Helsinki, Finland (invited) - "Economic research of reindeer husbandry in Finland"

## Poster presentations

Reindrift / Reindeer Husbandry – Villrein / Wild reindeer

- Henrik Lundqvist, Öje Danell & L. Norell: Range characterization and grouping of the Swedish reindeer herding districts.
- Ingunn Vistnes, C. Nellemann, P. Jordhøy & O-G. Støen: The relative impacts of several disturbance sources on wild reindeer in summer.
- Anu Marjukka Pajunen, Bruce Forbes, E. Kaarlejärvi, Timo Kumpula, N. Messhtyb & F. Stammler: The impact of off-road vehicle use on reindeer pastures' vegetation in the vicinity of Bovanenkova gas field, Central Yamal Peninsula (70°20'N, 68°00'E).
- Timo Kumpula: Reindeer pastures under pressure of gas and oil exploration in the Russian arctic: Remote Sensing in assessment of impacts.
- Jouko Kumpula, A. Colpaert, A. Tanskanen & Marja Anttonen: Monitoring the state of reindeer ranges in Finland.
- Marja Anttonen: Changes on land cover in reindeer pastures of the Ivalo reindeer herding district, Finland, in years 1987-2001.
- 7. Viia Forsblom, Sari Siitari & Mauri Nieminen: Importance of nature conservation areas in Finnish reindeer husbandry.
- Anna Skarin, Öje Danell, Roger Bergström & Jon Moen: Reindeer habitat selection in different temporal and spatial scales.
- Anna-Liisa Sippola, Harri Norberg, M. Renko & T. Sutinen: Economic losses caused by large predators: a case study from four Finnish herding cooperatives.
- Kaija Saarni, J. Setälä, L. Aikio, J. Kempainen & A. Honkanen: The Market of reindeer meat products in Finland.
- 11. Arto Latukka: Profitability bookkeeping in the reindeer husbandry.

### Biologi – Fysiologi / Biology – Physiology

- 12. Päivi Soppela, M. Turunen, Bruce Forbes, P. Aikio, H. Magga, M-L. Sutinen, K. Lakkala & Christian Uhlig: The response of summer pasture plants of reindeer to ultraviolet (UV) radiation.
- Päivi Soppela, S. Pohjola, H. Visser & Mauri Nieminen: Milk intake and energy expenditure of reindeer calves estimated by the doubly-labelled water method.
- Jonna Heikura, N. Smeds, K. Valkonen, Mauri Nieminen, Øystein Holand & V. Virtanen: Finnish and Norwegian reindeer milk Betalactoglobulin; characterization of genetic variants.
- Eva Wiklund, L. Johansson, G. Aguiar, P. J. Bechtel & G. Finstad: Seasonal variation in sensory quality of meat from Alaskan reindeer bulls and steers.

- Jackie T. Hrabok, Antti Oksanen, Mauri Nieminen & Peter J. Waller: Population dynamics of gastrointestinal nematodes of reindeer in Lapland, Finland.
- 17. Sauli Laaksonen & Antti Oksanen: Setaria tundra outbreak in reindeer in Finland.
- 18. Carlos das Neves, Matthieu Roger, E. Rimstad & Morten Tryland: Comparison of two commercial serological tests for alphaherpesvirus antibodies in reindeer (Rangifer tarandus tarandus) in Finnmark County, Norway.
- 19. Anna Olofsson & Öje Danell: Can weight records as an indicator of body condition be improved?