

From the editor:

Rangifer Report is especially for presenting conferences and meetings about reindeer and reindeer husbandry, e.g. NOR's Conferences and Workshops on Reindeer Research but will also include special subjects or research in a more common and popular way of publishing. Make notice that the report papers are not subjected to peer reviewing. In addition, they are in most cases printed directly from hard copies of the manuscripts received.

Rangifer Report no. 3, 1999, together with the programme and abstracts in Rangifer Report no. 2, 1998, provides a comprehensive synopsis of the successful conference on reindeer research and husbandry in Kautokeino, March 1998. The lectures presented at the conference are printed almost as they were held. The Finnish contributions are here printed in English. Furthermore, this issue also includes a complete conference' programme in English.

Some of you have missed the conference report from the Nordic conference in 1996. The abstracts from the 9th Nordic Conference on Reindeer Research, Uppsala, Sweden, 1996 were mistakenly not issued in Rangifer, but as its own publication: Program & referat/ Programme & abstracts. Nordiskt Organ för Renforskning (NOR) Nordic Council for Reindeer Research and Svensk Renforskarförening, Uppsala, 1996. 79 pp. The report is available from Susanna Westerberg, SVA (Swedish Veterinary Institute), P.O.Box 7073, S-750 07 Uppsala (susanna.westerberg@sva.se).

The proceedings from the 10th Nordic Conference on Reindeer Research have been extremely delayed which I regret very much. After a conference there is always a choice between issuing immediately and missing many contributions or waiting as long as possible to have the complete proceedings.

Tromsø 22nd June, 1999

Rolf Egil Haugerud

The 10th Nordic Conference on Reindeer Research, Guovdageaidnu-Kautokeino, Norway, March 13-15 1998

Rolf Egil Haugerud

NOR arranged the tenth Nordic conference on reindeer research and husbandry in Kautokeino, Finnmark, Norway, with the Sami College as the local co-organiser. The programme committee consisted of *Öje Danell*, Sweden, *Sven Nikander*, Finland, *Chris Cuyler*, Greenland, *Annfinn Pavall*, Norway and NOR's secretary *Rolf Egil Haugerud*. The main secretariat was NOR's secretary, with *Anne Berit Bæhr*, Sami College, as the local contact person. The conference was arranged March 13-15 1998, with about 160 participants.

The aim of the conference was to bring people together from the reindeer husbandry, management/administration and research communities, and to promote understanding and co-operation among them. The main theme was Reindeer husbandry in the Nordic countries, including a total of 20 invited lectures. The poster presentation included 45 posters. The conference languages were Scandinavian (Swedish/Danish/Norwegian) and Finnish. Simultaneous translation was used for the first time in a NOR-meeting. This improved both the communication and the comprehension. A programme and abstract report, including abstracts in English, was published before the opening of the conference (*Rangifer* Report No. 2, 1998). The lectures held at the conference are now published in this issue of *Rangifer* Report.

The conference was opened by the director of the Sami College, *Máret Á. Guhttor*, and NOR's chairman *Sven Nikander*.

Lectures 1st day. Session leader *Sven Nikander*, NOR.

Ole K. Sara, special adviser, Norwegian Reindeer Husbandry Administration: Utviklingstrekk - samarbeide over landegrensene (Outlines of development - cooperation across inter-national borders).

Johan Mathis Turi, reindeer owner and chairman of Association of World Reindeer Herders: Circumpolar reindrif (Circumpolar reindeer husbandry).

Berit Marie Eira Jonsson, reindeer owner: Kvinnor i modern renskötsel. Historik, status och framtid (Women in reindeer husbandry - history, status and future).

Lectures 2nd day. Session leader *Per Mikael Utsi*, Swedish Sami Parliament.

The reindeer husbandry in Finland

Jouni Filppa, executive director, Finnish Association of Reindeer Herding Co-operatives: Organiseringen av den finska rensköteln (Organization of the reindeer husbandry in Finland).

Mauri Nieminen, research leader, Finnish Reindeer Research Station: Ekonomisk och distriktsmessig betydelse (Economical importance of Finnish reindeer industry).

Juhani Magga, reindeer owner: Samisk renskötsel, vardag och visioner (Sami reindeer husbandry: everyday life and visions).

Osmo Säkkinen, reindeer owner: Reindeer husbandry in Kuusamo.

Mauri Nieminen, research leader, Finnish Reindeer Research Station: Forskning och forskningsbehov (Finnish reindeer research and needs for further research).

The reindeer husbandry in Sweden

Per-Gustav Idivuoma, reindeer owner/Sámiid Riikkasearvi-SSR: Rennäringen inför millenniumsskiftet 2000 (Reindeer husbandry in the year 2000).

Bror Saitton, professional adviser, Sami Parliament in Sweden: Rennäringen i Sverige (Reindeer husbandry in Sweden).

Öje Danell, professor in reindeer husbandry, Swedish University of Agricultural Sciences: Renskötsforskning i Sverige (Reindeer husbandry research in Sweden).

The reindeer husbandry in Norway

John Henrik Eira, chairman, Sami Reindeer Herders' Association of Norway:

Reindriftsspørsmål i Norge (Issues of reindeer husbandry in Norway).

Isak Mathis O. Hætta, council member of the Sami Parliament in Norway: Sametinget og reindriftspolitikken (Sami Parliament and the politics of reindeer husbandry).

Roger Pedersen, adviser, Norwegian Reindeer Husbandry Administration: Reindriften og dens forvaltning (Management of the reindeer husbandry).

The reindeer husbandry in Greenland

Christine Cuyler, researcher, Greenland Institute of Natural Resources: Reindrift i Grønland (Reindeer herding in Greenland).

Lectures 3rd day. Session leader *Svein D. Mathisen*, Norwegian College of Veterinary Medicine.

Mikkel Nils Sara, lecturer, Sami College: Praktisk reinbeitebruk - tradisjonelle kunnskaper (Practical reindeer husbandry - traditional knowledge).

Eldar Gaare, researcher, Norwegian Institute of Nature Research (NINA): Kan vi beregne hvor mange rein beitene tåler? (Are we able to assess carrying capacity of reindeer pastures?).

Jouko Kumpula, researcher, Finnish Reindeer Research Station: Mitä tarvitaan ekologisesti ja taloudellisesti kestävään porotalouteen -suomalainen näkökulma (What is needed for ecologically and economically stable reindeer husbandry - Finnish point of view).

Anders Isak Oskal, reindeer owner: Tradisjonelle vurderinger av livdyr (Traditional selection of animals for breeding).

Öje Danell, professor in reindeer husbandry, Swedish University of Agricultural Sciences: Optimal produktion (Optimal production).

List of posters:

Forvaltning/Management

Ekaterina Ruth-Balaganskaya, Päivi Soppela & Bruce Forbes: The circumpolar arctic natural science Ph.D. network.

Mauri Nieminen, Sari Kadenius, K. Tikkanen & H. Törmänen: Poronliha ja sen tuotanto Suomessa/Reindeer meat and its production in Finland.

Reindriftsforvaltningen, Alta: Reindriften i Norge - Organisering, ressursforhold og økonomi/Reindeer husbandry in Norway.

Samfunnsvitenskap/Social science

Thomas V. Hahn, Andrew K. Dragun & Daniel W. Bromley: The institutional foundation and justification of indigenous Saami rights in Sweden/Svenska (fjäll-) samers äganderätt till mark.

Helena Sandström: Vems intresse skall tilgodoses - privata markägare eller renägande samer?/Whose interest will be provided for - private landowner or reindeerowner.

Ann-Marie Karlsson: Beslutsfattande under pastorala förhållanden med särskild inriktning på renskötsel.

Anders J. H. Eira: Fra individuell produksjonsorientering til kollektiv markedstilpasning - valg mellom kontraksjons- eller ekspansjonsstrategi?

Anders J. H. Eira: Hvorfor går reintallet opp? Reintallsdrivende mekanismer i næringen.
Berit Inga: Traditionella kunskaper om nyttjandet av naturresurser i fjällområden/Traditional knowledge on natural resources use in the Mountain region.
Olof Eriksson, Erik Persson & Tuomo Raunistola: Sambruk av taigaen. Renskötselanpassade skogsbruksplaner för samebyars kärnområden/Taigan yhteiskäyttöä. Porotaloudelle sopeutettu alueellinen metsänhoitosuunnitelma lapinkylien ydinalueille/Co-management of the taiga. Reindeer management tailored forestry plans for principal foraging areas in Sami communities.

Rein generelt/Reindeer generally

Hallvard Gjøstein & Øystein Holand: Simlenes dominans og dets innvirkning på kalvingstidspunkt.

Martin Smith, Øystein Holand, Knut Røed, Jouko Kumpula, Veijo Tervonen & Mauri Nieminen: Skifter simlene harem gjennom brunsten?/Movements of female semi-domestic reindeer during the breeding period related to mate choice.

Knut Røed, Øystein Holand, Jouko Kumpula, Mauri Nieminen & Martin Smith: Bukkenes reproduksjonsuksess i reindriften.

Helene Ween, Erik Ropstad, Hannele Säkkinen & Dag Lenvik: Drekthetsstatus hos reinsdyrkalver om vinteren/Pregnancy status of reindeer calves in winter.

Kathrin C. Hofmann & Mauri Nieminen: Feiing av bast hos simler (*Rangifer tarandus tarandus*) i forbindelse med reproduksjon/ Velvet shedding in female reindeer (*Rangifer tarandus tarandus*) in relation to reproductive activity.

Lars Rønnegård: Gen flöde och populationsmodeller/Modelling gene flow and population dynamics.

Bob van Oort, Astrid Vik-Strønen, B. M. Barnes, Irene Tobler, Karl-Arne Stokkan & N. J. C. Tyler: Activity loggers for reindeer.

Josephine Nymand: Range capacity and body condition of West Greenland herbivores.

P. Anders Mårell & Annika Hofgaard: Renens rumsliga och tidsmässiga sommarbetesmönster i relation til habitatförändringar/ Spatial and temporal summer grazing patterns by reindeer in relation to habitat change.

Hans Roar Christiansen, Ole J. Johansen & Nicholas J. C. Tyler: Female reindeer grow fatter in winter.

Ernæring-beite/Nutrition-pasture

Alfred Colpaert, Timo Kumpula, Jouko Kumpula & Mauri Nieminen:

Porojen kesälaidunten kartoitus Landsat 5 TM satelliittikuvien avulla/Mapping reindeer summer pastures using Landsat 5 TM images.

Ann Marie Odasz-Albrigtsen & Hanne Edvardsen: Winter pastures on Finnmarksvidda Today and Yesteryear/Dálveguohtumat Finnmarkkoduoddaris Otne ja ikte.

Kari Anne Bråthen & Christina Wegener: Reinens sommerbeiter: varierer kvaliteten med reintallet?/Reindeer summer pastures: does the quality depend on reindeer density?

Nicholas J. C. Tyler: Reindeer pastures at disequilibrium.

Svein Morten Eilertsen, Ivar Scheldrup & Svein D. Mathisen: Vårbeiting med rein på nedlagt innmark/Grazing on old meadows with reindeer in spring.

Harri Norberg & Svein D. Mathisen: Korkealaatuinen timoteisäilörehu porojen lisäruokinnassa/High quality timothy silage (*Phleum pratense*) as supplemental feed for reindeer.

Øystein Holand, Barbro Dahlberg & Hans Staaland: Kan fragmentanalyser av reinmøkk gi oss svar på reinens vinterdiett? (Reindeer faeces and winter diet) (In Norwegian).

Jouko Kumpula & Päivi Parikka: Porojen talvilaitumilla esiintyvä homeongelma/Mould problem on reindeer winter pastures.

Anna Nilsson: Fysiologiska särdrag hos ren i förhållande till näringsstatus och omställning från bete till utfodring/Physiological characteristics of reindeer in relation to nutritional status and transition from pasture to feeding.

Ulla Heiskari, Maijala, V., Syrjala-Qvist, L. & Nieminen, M: Adaptation of digestive system in reindeer to annual winter feeding.

Leiv-Tore Kårstad, Jorid Folland & Svein D. Mathiesen: Slikkestein som krisefor til rein om vinteren/Multinutrient block as supplement to reindeer in winter.

Helse og veterinærmedisin /Health and veterinary medicine

Monica A. Olsen, Øyvind E. Haga & Svein D. Mathiesen: Vomsvikt som følge av kriseforing/Rumen failure induced during emergency feeding.

Birgitta Åhman, Eija Eloranta, Sanna Sainmaa & Anna Nilsson: Förekomst av blöt buk hos renar/The wet belly syndrome in reindeer.

Svein Mathiesen, Marit A. Vader, Vigdis B. Rædergård, Wenche Sørmo, Øyvind Haga, Nicholas J. C. Tyler & R. R. Hofmann: Sesongvariasjon i bladmagestruktur hos to underarter av reinsdyr/Seasonal changes of the omasal structures in two subspecies of *Rangifer*.

Terje D. Josefsen, Monica A. Olsen, Tove H. Aaagnes Utsi & Svein D. Mathiesen: Kasuistikk: Bilateralt symmetriske tanncyster i underkjeven hos en reinkalv/A case report: Bilateral symmetric tooth-bearing bone cysts in the mandible of a reindeer calf.

Minna Nylund, Varpu Hirvelä-Koski & Harri Norberg: *Pasteurella multocida* verenmyrkytys poronvasassa talvella - tapausselostus/*Pasteurella multocida* septicemia in reindeer calf during winter - a case report.

Hannele Säkkinen, Erik Ropstad, Øystein Holand, Knut Hove & Eija Eloranta: A field study in Finnmark: foetal loss and low plasma proteins in spring.

Eva Wiklund, P. J. Goddard, Claes Rehbinder & Gunnar Malmfors: Mikrobiologisk kvalitet och pH-värden i kött och stressmetabolitter i blod från transporterade rentjurar/Ultimate pH-values and microbiological condition of meat and stress metabolites in blood of transported reindeer bulls.

Antti Oksanen, Mauri Nieminen, Kjetil Åsbakk & Harri Norberg: Tarharuokinta tartuttaa poroille toksoplasmoosia/Fôring i gjerde øker toksoplasma-prevalens hos rein/*Toxoplasma gondii* in reindeer associated with corral feeding.

Marit Holm & Svein D. Mathisen: Veterinærens fremtidige rolle i den nomadiske reindriften/Future aspects of veterinary medicine in the nomadic reindeer herding.

Eli Ristin Nergård: Fremtidig reinveterinær!?!/Future reindeer veterinarian!?!

Arne C. Nilssen, Willy Hemmingsen & Rolf Egil Haugerud: Er det umulig å utrydde reinbremsen fra øyer i Finnmark?/Is it impossible to eradicate the reindeer oestrids on islands in Finnmark, northern Norway.

Andre emner/Other themes

Kjetil Åsbakk, Arne C. Nilssen, Rolf E. Haugerud, Heidi R. Bendiksen, Willy Hemmingsen & Antti Oksanen: Ivermectin i avføring fra rein/Ivermectin in reindeer dung.

Heli Lindeberg & Maija Valtonen: Uhanalaisten eläinlajien ex-situ säilyttäminen sukusolujen ja alkioiden kylmäsäilytyksen avulla/Ex-situ preservation of endangered species as frozen gametes and embryos.

Marjoniemi, M., E. Mäntysalo & M. Nieminen: Properties of reindeer calf leather.