



Svalbard Reindeer 2017 – status, research needs and knowledge gaps

Open lectures in Lassegrøtta, UNIS, Svalbard Science Centre

Tuesday 31 October: 15:20–18:45

Wednesday 1 November: 08:30–11:15 and 15:00–16:15

The Svalbard reindeer is an endemic species to Svalbard and an important resource for the local community. The Svalbard reindeer has for decades been the subject of research and monitoring from many different stakeholders and research communities. Although the "reindeer research family" in Svalbard does not consist of very many scientists, research and surveillance are still spread between many research institutions. With this seminar we wish to strengthen the cooperation and knowledge base for the species. The seminar will summarize knowledge, reveal knowledge gaps and discuss what the most important research questions are in the short and long term regarding the Svalbard reindeer and its living areas and interactions with the tundra ecosystem. Central researchers, managers and NGOs will: 1) Provide a knowledge-based status within their field and present new, updated research, 2) respond to the knowledge needs and challenges one perceives in the short and long term and 3) actively participate in uncovering knowledge needs and point to the most important research needs. The seminar consists of open presentations as well as closed sessions where the discussions will contribute to various forms of scientific dissemination. The seminar is supported by the Svalbard Environmental Protection Fund.

Seminar committee: [Åshild Ønvik Pedersen](#), [Virve Ravolainen](#) and [Øystein Overrein](#) (NPI); [Audun Stien](#) (NINA); [Mads Forchhammer](#) (UNIS).

Programme – Open seminars

Tuesday 31 Oct

Population regulation, dynamics and climate change

- 15:20–15:30 Welcome by the organising committee
- 15:30–15:50 An introduction to the long-term population studies in Reindalen ([Audun Stien](#) / NINA)
- 15:55–16:15 Reindeer parasites and their role in population regulation ([Justin Irvine](#) / The James Hutton Institute)
- 16:20–16:40 Staying fat through the winter: Body mass dictates annual vital rates and population growth ([Steve Albon](#) / The James Hutton Institute)
- 16:45–17:05 Timing of spring and its consequences for reproductive output and phenology in Svalbard reindeer ([Vebjørn Veiberg](#) / NINA)
- 17:10–17:30 Coffee break
- 17:30–17:50 Environmental regulation of calving time ([Nicholas Tyler](#) / UiT The Arctic University of Norway)
- 17:55–18:15 Population dynamics, interactions between age structure, weather and reindeer densities ([Brage B. Hansen](#) / NTNU Centre for Biodiversity Dynamics)
- 18:20–18:40 Trapped in a cold-adapted body: the causes and consequences of phenotypic change in a rapidly warming Arctic (TRACT) ([Leif Egil Loe](#) & [Gabriel Pigeon](#) / NMBU)

Wednesday 1 Nov

Population abundance, distribution, genetics and long-term monitoring

- 08:30–08:40 Introduction to the SMF project: Changes in reindeer distribution, abundance and population genetics ([Brage B. Hansen](#), [Mathilde Le Moullec](#), [Bart Peeters](#) / NTNU Centre for Biodiversity Dynamics)
- 08:45–09:05 Estimating distribution and abundance across Svalbard: Monitoring methods and preliminary results ([Mathilde Le Moullec](#) / NTNU Centre for Biodiversity Dynamics)
- 09:10–09:30 Spatiotemporal patterns of population genetics across Svalbard ([Bart Peeters](#) / NTNU Centre for Biodiversity Dynamics, [Åshild Ønvik Pedersen](#) / NPI)
- 09:35–09:55 Future monitoring issues: some thoughts from a case study ([Brage B. Hansen](#) / NTNU Centre for Biodiversity Dynamics, [Åshild Ønvik Pedersen](#) / NPI)
- 10:00–10:15 COAT: Integration of long-term data series - a summary of monitoring modules ([Åshild Ønvik Pedersen](#) & [Virve Ravolainen](#) / NPI, [Audun Stien](#) / NINA, [Mads Forchhammer](#) / UNIS)
- 10:20–10:40 Coffee break

Spatial ecology and behavioural buffering

- 10:40–11:00 Reindeer movement, climate and management units ([Leif Egil Loe](#) / NMBU)
- 11:05–11:10 Reindeer calving areas (Ingrid G. Paulsen / [UiT The Arctic University of Norway](#))
- 11:15–11:20 Reindeer foraging at seashore and high elevational in icy winters ([Larissa Beumer](#) / Aarhus University)
- 11:25–12:00 Other 5-minute themes

Ecosystem interactions

- 15:00–15:20 Plant-herbivore-climate interactions ([René van der Wal](#) / University of Aberdeen, [Virve Ravolainen](#) / NPI)
- 15:25–15:45 Rainy is icy: Ground-icing patterns in space and time ([Bart Peeters](#) / NTNU - Centre for Biodiversity Dynamics)

Gaps and knowledge needs - management perspectives

- 15:50–16:10 Gaps and knowledge needs from the Governor's perspectives ([Bjarte Benberg](#) / The Governor of Svalbard)

