

Conference: Nordic Climate History

Learning from past experience

Abstracts

Nordic societies are particularly exposed to climate change. Yet over time they have cultivated a broad repertoire of responses to climatic stress. Current challenges have raised and urgent questions about the past. How did Nordic societies manage historical climate variability? What impacts did the Little Ice Age, the Medieval Climate Anomaly, and Late Antique disasters have on society? And how do we study, narrate, and learn from these experiences?

The conference is open to interested listeners and connects researchers, communicators, and stakeholders. It will provide a forum for cross-disciplinary cooperation across the sciences and humanities and provide a link to communities beyond academia, including museum curators, policy advisors, and educators. Its goal is to consolidate the emerging research environment of Nordic climate history, and to release the potential of learning from past climate.

Day 1 – 23.05.2024

9.00-9.15 Introduction and welcome

9.15-10.00 Keynote I

- **Felix Riede (Aarhus)**, Apocalypse Then! Lessons from Socio-Ecological Tipping Points in Nordic Deep History

10.00-10.20 Coffee break and stretch legs

10.20-12.20 Proxy data and society

- **Björn Gunnarson (Stockholm)**, North Atlantic Sea Surface Temperature variability over the past 1000 years
- **Elin Lundstad (Bern/Oslo)**, Past Climate Variations in Early Instrumental Data
- **Magdalena Opala-Owczarek (Sosnowiec)**, The first multi-century dendroclimatic record from southern Greenland provided by dead, historical and living juniper wood
- **Manon Bajard, Kirstin Krüger, Eirik Gottschalk Ballo (Oslo)**, A tipping point in the erosion of SE Norway: the development of human activities enhanced vulnerability to climate changes in the Little Ice Age
- **Roberta Guerra (Bologna)**, Historical record of Chemicals of Emerging Arctic Concern (CEACs): influence of human and climate changes (Kongsfjorden, Svalbard)
- **Astrid E. J. Ogilvie (Colorado/Akureyri)**, Melding Climate and History. The Past Sea Ice record from Iceland

12.20-13.10 Lunch break

13.10-14.50 Ancient and medieval climate

Session 1 (Klimahuset Amfi)

- **Rosemary Bishop (Stavanger)**, Resilience and adaptation of cultivation strategies in prehistoric North-West Europe
- **Anastasia Bertheussen (Oslo)**, The Story of Mesna lake – Anthropogenic impact in prehistoric inner regional Norway
- **Sara Westling (Stavanger)**, Agricultural development in the context of the 6th century crisis – a synthesis of macrofossil data from southwestern Norway

Session 2 (Tøyen Hovedgård)

- **Sarah Kerr (Cork)**, Adaptation and Resilience in late medieval Jutland (Denmark)
- **Carina Damm (Katowice)**, Volcanic vulnerability in medieval Iceland
- **Stefka Eriksen (Oslo)**, Medieval 'climate fiction'? Old Norse literary production during the Little Ice Age
- **Kristian Reinjfjord (Hamar)**, Architectural Climate Change Adaptions in Little Ice Age Norway c. 1300 – 1500

14.50-15.10 Coffee break and stretch legs

15.10-16.50 Little Ice Age climate I

- **Mathias Kallevik / Wendy Khumalo (Oslo/Trondheim)**, On the margins of agriculture – regional responses to 18th century crises in Norway
- **Jakob Starlander (Bern)**, The impact of wildfire and climate on the resilience and vulnerability of peasant forest communities in seventeenth century North Ostrobothnia, Finland.
- **John Brolin (Lund)**, Little Ice Age energy and consumer revolutions
- **Ingar Mørkestøl Gundersen (Oslo)**, Interlocking climate and society. An analytical approach to climate extremes in the past

17.00-18.00 Visit to Klimahuset

18.00-19.00 Public lecture

Heli Huhtamaa (Bern), Hammering Nordic history - Volcanic impacts on climate, environment and society

19.30 Dinner for speakers

Day 2 – 24.05.2024

9.15-10.45 Little Ice Age climate II

- Martin Skoglund (Stockholm), Gearing towards Rearing - Livestock and Climate Challenges in Early Modern Jämtland and Härjedalen
- Raimund Przybylak / Piotr Olinski Cedric (Toruń), Extreme weather and climate conditions in the South Baltic Sea coast in the 15th and 16th centuries and their impact on the society and the economy
- Roberta Guerra (Bologna), High-resolution record of post-Little Ice Age in the Kongsfjorden (1250-present)
- Garrima Singh (Toruń), Thermal conditions of coastal Labrador in the late 18th century

10.45-11.15 Coffee break and stretch legs

11.15-12.00 Keynote II

- Mads Dengsø Jessen (Copenhagen), Early Iron Age agricultural innovations – a resilient response to 2.8k BP climate fluctuations?

12.00-13.00 Lunch

13.00-15.00 Narrating climate history

- Eivind Heldaas Seland (Bergen), Climate narratives in Norwegian 20th-century historiography
- Stefan Norrgård (Turku), Stranded, isolated and forgotten. Climate impact and adaptation strategies in the Finnish archipelago
- Kristine Kleveland (Oslo), Perceptions of glaciers through Nordic poetry
- Christine Nadeau (Oslo), Tipping the Narrative on Climate Change: An Interdisciplinary Review on the Role of Tipping Points on the Temporality of Climate Change
- Natália Nascimento e Melo (Evora), Representing the past in climate exhibitions: history as catalysts for futures literacy

15.00-15.20 Coffee break and stretch legs

15.20-16.20 Nordic Climate History and Future (roundtable)

- Dominik Collet, Fredrik Fredrik C. Ljungqvist, Heli Huhtamaa, Sam White

Guests are welcome! Please register here:

In person attendance: <https://nettskjema.no/a/410478>

Online attendance: <https://nettskjema.no/a/411193>

Organisers:

- Dominik Collet (Oslo)
- Heli Huhtamaa (Bern)
- Fredrik C. Ljungqvist (Stockholm)
- Sam White (Helsinki)

Location:

Tøyen Hovedgård, The Botanical Garden, Oslo

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Thermal conditions of coastal Labrador in the late 18th century

This study focuses on the analysis of air temperature conditions of Labrador's coastal region from 1771 to the late 1780s. To reconstruct the climatic conditions of this historical era, we draw upon invaluable instrumental meteorological observations made by Moravian missionaries. These records are sourced from three primary archival collections: the Moravian Archives in Herrnhut (Germany), the Moravian Archives at Muswell Hill in London, and the Archives of the Royal Society in London (Great Britain).

The eighteenth-century Moravian missionary observations offer a unique perspective on the climate of the Labrador coast, providing essential data on temperature, precipitation and wind patterns, and short descriptions of the weather, from observations made two, three, or four times a day. By examining the records in a detailed and systematic manner, we aim to better understand the region's climate variability and trends during the early instrumental period. For this study, we utilized sub-daily air temperature measurements from three sites: Nain (1771–1786), Okak (1776–1787), and Hoffenthal (1782–1786). The data will be converted to present units, and quality control will be applied for statistical analysis. Thermal conditions of the study period in the coastal part of Labrador will be compared to present-day ones.

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