

Dr. Heli Huhtamaa

Email: heli.huhtamaa@hist.unibe.ch
OrcidID: 0000-0001-5829-5575

Contact address: Institute of History & Oeschger Centre for Climate Change Research
University of Bern
Länggassstrasse 49
3000 Bern 9
Switzerland

1. PUBLICATIONS IN INTERNATIONAL PEER-REVIEWED SCIENTIFIC JOURNALS AND EDITED VOLUMES

- [21] **Heli Huhtamaa** & Fredrik Charpentier Ljungqvist (2021), Climate in Nordic historical research – A research review and future perspectives, *Scandinavian Journal of History*, [in press](https://doi.org/10.1080/03468755.2021.1929455).
<https://doi.org/10.1080/03468755.2021.1929455>
- [20] Maximilian Schuh & **Heli Huhtamaa** (2021), Europäische Umweltgeschichte [Environmental History in Europe]. In: Thomas Meier (ed.) *Interdisziplinäre Umweltwissenschaften [Interdisciplinary Environmental Sciences]*. Heidelberg University Publishing, [in press](https://doi.org/10.1002/wcc.691).
- [19] Dagomar Degroot, Kevin Anchukaitis, Martin Bauch, Jakob Burnham, Fred Carnegy, Jianxin Cui, Kathryn de Luna, Piotr Guzowski, George Hambrecht, **Heli Huhtamaa**, Adam Izdebski, Katrin Kleemann, Emma Moesswilde, Naresh Neupane, Timothy Newfield, Qing Pei, Elena Xoplaki & Natale Zappia (2021), Towards a rigorous understanding of societal responses to climate change. *Nature*, 591, 539–550.
<https://www.nature.com/articles/s41586-021-03190-2>
- [18] Fredrik Charpentier Ljungqvist, Andrea Seim & **Heli Huhtamaa** (2021), Climate and society in European history. *WIREs Climate Change*, 12(2), e691.
<https://doi.org/10.1002/wcc.691>
- [17] Fredrik Charpentier Ljungqvist & **Heli Huhtamaa** (2021), Histoire du climat du Royaume de Suède à l'époque moderne [Climate history of the early modern Swedish Realm]. *Revue d'Histoire Nordique*, 27, 3–27.
- [16] **Heli Huhtamaa**, Samuli Helama, Lotta Leijonhufvud & Fredrik Charpentier Ljungqvist (2020), Combining the archives of nature and society: Tree rings and tithes. *PAGES Magazine*, 28(2), 50–51.
<https://doi.org/10.22498/pages.28.2.50>
- [15] Chantal Camenisch, **Heli Huhtamaa**, Nicolas Maughan & Christian Rohr (2020), Historical climatology in Western and Northern Europe: State-of-the-art, typical documentary data and methods. *PAGES Magazine*, 28(2), 38–39.
<https://doi.org/10.22498/pages.28.2.38>
- [14] **Heli Huhtamaa** (2020), Climate and the crises of the early fourteenth century in north-east Europe? In: Gerrit J. Schenk and Martin Bauch (eds.) *The Crisis of the 14th Century: "Teleconnections" between Environmental and Societal Change?* Berlin/New York: De Gruyter, 80–99.
<https://doi.org/10.1515/9783110660784-005>
- [13] Markku Oinonen, Teija Alenius, Laura Arppe, Hervé Bocherens, Heli Etu-Sihvola, Samuli Helama, **Heli Huhtamaa**, Maria Lahtinen, Kristiina Mannermaa, Päivi Onkamo, Jukka Palo, Antti Sajantila, Kati Salo, Tarja Sundell, Santeri Vanhanen & Anna Wessman (2020) Buried in water, burdened by nature – Resilience carried the Iron Age people through Fimbulvinter. *PLoS One*, 15(4), p.e0231787.
doi.org/10.1371/journal.pone.0231787
- [12] **Heli Huhtamaa** (2020), The good, bad, undefined Little Ice Age. *Historical Climatology*, June 2020.
<https://www.historicalclimatology.com/features/the-good-bad-undefined-little-ice-age>

- [11] Stefan Brönnimann, Rob Allan, Linden Ashcroft, Saba Baer, Mariano Barriendos, Rudolf Brázdil, Yuri Brugnara, Manola Brunet, Michele Brunetti, Barbara Chimani, Richard Cornes, Fernando Domínguez-Castro, Janusz Filipiak, Dimitra Founda, Ricardo García Herrera, Joelle Gergis, Stefan Grab, Lisa Hannak, **Heli Huhtamaa**, Kim S. Jacobsen, Phil Jones, Sylvie Jourdain, Andrea Kiss, Kuanhui Elaine Lin, Andrew Lorrey, Elin Lundstad, Jürg Luterbacher, Franz Mauelshagen, Maurizio Maugeri, Nicolas Maughan, Anders Moberg, Raphael Neukom, Sharon Nicholson, Simon Noone, Øyvind Nordli, Kristín Björg Ólafsdóttir, Petra R. Pearce, Lucas Pfister, Kathleen Pribyl, Rajmund Przybylak, Christa Pudmenzky, Dubravka Rasol, Delia Reichenbach, Ladislava Řezníčková, Fernando S. Rodrigo, Christian Rohr, Oleg Skrynyk, Victoria Slonosky, Peter Thorne, Maria Antónia Valente, José M. Vaquero, Nancy E. Westcott, Fiona Williamson & Przemysław Wyszyński (2019), Unlocking pre-1850 instrumental meteorological records: A global inventory. *Bulletin of the American Meteorological Society*, 100(12), ES389–ES413.
<https://journals.ametsoc.org/doi/abs/10.1175/BAMS-D-19-0040.1>
- [10] **Heli Huhtamaa** (2018), "Kewät kolkko, talwi tuima" – Ilmasto, sää ja sadot nälkävuosien taustalla [Chilly spring, severe winter – Climate, weather and harvest underlying the Hunger Years] In: Tuomas Jussila and Lari Rantanen (eds.), *Nälkävuodet 1867–1868 [Hunger Years 1867–1868]*. Suomalaisen Kirjallisuuden Seura, Helsinki, 33–65.
ISBN: 978-951-858-015-0
- [9] **Heli Huhtamaa** (2018), Combining written and tree-ring evidence to trace past food crises: A case study from Finland, in: Dominik Collet and Maximillian Schuh (eds.), *Famines in the premodern world (1300-1800): Socio-natural entanglements in historical societies*. Springer, Cham, 43–66.
https://link.springer.com/chapter/10.1007/978-3-319-54337-6_3
- [8] **Heli Huhtamaa** & Samuli Helama (2017), Distant impact: tropical volcanic eruptions and climate-driven agricultural crises in seventeenth-century Ostrobothnia, Finland. *Journal of Historical Geography* 57, 40–51.
<http://www.sciencedirect.com/science/article/pii/S0305748817300014>
- [7] Samuli Helama, **Heli Huhtamaa**, Erkki Verkasalo & Alar Läänelaid (2017), Something old, something new, something borrowed: new insights to human-environment interaction in medieval Novgorod inferred from tree rings. *Journal of Archaeological Science: Reports* 13, 341–35.
<http://www.sciencedirect.com/science/article/pii/S2352409X16305879>
- [6] **Heli Huhtamaa** & Samuli Helama (2017), Reconstructing crop yield variability in Finland: long-term perspective of the cultivation history on the agricultural periphery since AD 760. *The Holocene* 27(1), 3–11.
<http://journals.sagepub.com/doi/abs/10.1177/0959683616646188>
- [5] Raúl Sánchez-Salguero, Andrea Hevia, J. Julio Camarero, Kerstin Treydte, Dave Frank, Alan Crivellaro, Marta Domínguez-Delmás, Lena Hellman, Ryszard J. Kaczka, Margot Kaye, Linar Akhmetzyanov, Muhammad Waseem Ashiq, Upasana Bhuyan, Olesia Bondarenko, Álvaro Camisón, Sien Camps, Vicenta Constante García, Filipe Costa Vaz, Ionela G. Gavrilă, Erik Gulbranson, **Heli Huhtamaa**, Karolina Janecka, Darren Jeffers, Matthias Jochner, Tomáš Koutecký, Mostafa Lamrani-Alaoui, Julie Lebreton-Anberrée, María Martín Seijo, Pawel Matulewski, Sandra Metslaid, Sergiu Miron, Robert Morrissey, Jorgen Opdebeeck, Svyatoslav Ovchinnikov, Richard Peters, Any M. Petritan, Margarita Popkova, Stepanka Rehorkova, María O. Rodríguez Ariza, Ángela Sánchez-Miranda, Marjolein Van der Linden, Astrid Vannoppen & Daniel Volařík (2017), An intensive tree-ring experience: Connecting education and research during the 25th European Dendroecological Fieldweek (Asturias, Spain). *Dendrochronologia* 42, 80–93.
<http://dx.doi.org/10.1016/j.dendro.2016.12.005>
- [4] Chantal Camenisch, Kathrin M. Keller, Melanie Salvisberg, Benjamin Amann, Martin Bauch, Sandro Blumer, Rudolf Brázdil, Stefan Brönnimann, Ulf Büntgen, Bruce M. S. Campbell, Laura Fernández-Donado, Dominik Fleitmann, Rüdiger Glaser, Fidel González-Rouco, Martin Grosjean, Richard C. Hoffmann, **Heli Huhtamaa**, Fortunat Joos, Andrea Kiss, Oldrich Kotyza, Flavio Lehner, Jürg Luterbacher, Nicolas Maughan, Raphael Neukom, Theresa Novy, Kathleen Pribyl, Christoph C. Raible, Dirk Riemann, Maximilian Schuh, Philip Slavin, Johannes P. Werner & Oliver Wetter (2016), The 1430s: a cold period of extraordinary internal climate variability during the early Spörer Minimum with social and economic impacts in north-western and central Europe. *Climate of the Past* 12(11), 2107–2126.
<http://www.clim-past.net/12/2107/2016/>

- [3] Jari Holopainen, Samuli Helama & **Heli Huhtamaa** (2016), Keskiaikaisten kivikirkkojen keskeneräisyys ympäristöhistoriallisessa tarkastelussa [An environmental historical view of unfinished medieval stone churches]. *SKAS - Suomen keskiajan arkeologian seuran jäsenlehti* 20(1), 3–10.
www.skas.fi/wp-content/uploads/2018/01/skas1_2016.pdf
- [2] **Heli Huhtamaa** (2015), Climatic anomalies, food systems, and subsistence crises in medieval Novgorod and Ladoga. *Scandinavian Journal of History* 40(4), 562–590.
<http://www.tandfonline.com/doi/abs/10.1080/03468755.2015.1063081>
- [1] **Heli Huhtamaa**, Samuli Helama, Jari Holopainen, Carolin Rethorn & Christian Rohr (2015), Crop yield responses to temperature fluctuations in 19th century Finland: provincial variation in relation to climate and tree-rings. *Boreal Environment Research* 20(6), 707–723.
<http://www.borenav.net/BER/pdfs/ber20/ber20-707.pdf>

2. REVIEWS AND OUTLOOKS

- [3] Chantal Camenisch, Sam White, Qing Pei & **Heli Huhtamaa** (2020), Recent results and new perspectives in Historical Climatology: An overview. *PAGES Magazine*, 28(2), 35.
<https://doi.org/10.22498/pages.28.2.35>
- [2] Chantal Camenisch, Martin Bauch, **Heli Huhtamaa**, Qing Pei & Sam White (2019), Climate Reconstruction and Impacts from the Archives of Societies working group. *PAGES Magazine*, 27(2), 73.
<https://doi.org/10.22498/pages.27.2.73>
- [1] **Heli Huhtamaa** (2017), Kurkistus ilmähätökijöiden arkeen ja ajatusmaailmaan [Glimpses to the research and thoughts of atmospheric scientists]. *Agricola Book Reviews*, 3.1.2017.
<https://agricolaverkko.fi/review/kurkistus-ilmahatukijoiden-arkeen-ja-ajatusmaailmaan/>

3. MONOGRAPHS

- [1] **Heli Huhtamaa** (2017), *Exploring the climate-society nexus with tree-ring evidence: Climate, crop yields, and hunger in medieval and early modern north-east Europe*. University of Eastern Finland, Joensuu.
ISBN: 978-952-61-2562-6.
Published PhD thesis.

4. ORAL CONTRIBUTIONS TO SCIENTIFIC CONFERENCES AND WORKSHOPS

- [33] **Heli Huhtamaa** (2021), Migration, mobility and climate in history. *Climate Migrations: Past, Present, Future*. Paris, France, September 21. [invited]
- [32] **Heli Huhtamaa** (2021), Mapping disaster – Mobility and diseases during the 1695–1697 famine in Finland. Elements, Eleventh Biennial Conference of the European Society for Environmental History. Bristol, United Kingdom, July 5–9, postponed to July 2022.
- [31] **Heli Huhtamaa** (2021), How to Quantify Climatic Impact on Human Calamities? Examples from Medieval Livonia. *International Medieval Congress*. Leeds, United Kingdom, July 5–9.
- [30] **Heli Huhtamaa** (2021), Expansion or desertion? Nordic narratives of the seventeenth century Little Ice Age revisited. *Fifth biennial conference of the European Rural History Organisation*. Uppsala, Sweden, August 23–26.
- [29] **Heli Huhtamaa** (2021), Mobility and death during the 1690s Finnish famine. *Epidemien in der Geschichte, 14.-20. Jahrhundert. Verflechtungen mit Klima, Subsistenzkrisen und Lebensstandard/Epidemic diseases in history, 14th to 20th century. Entanglements with climate, subsistence crises and living standard*. Bern, Switzerland, January 11. [invited, remote]

- [28] **Heli Huhtamaa** (2020), Storm data in 19th century written sources: transforming descriptive records into quantitative storminess reconstruction. *Igal tuulel oma tuju – tormid ja tormisus. Ekstreemne kliima ja selle ühiskondlik mõju Eesti näitel / Every Breeze Has a Mood – Storms and Storminess. Climate Extremities and Their Social Effects on the Example of Estonia*. Tallinn, Estonia, December 9. [\[invited\]](#), remote]
- [27] **Heli Huhtamaa** (2020), Assessing the 16–17th centuries socio-economic consequences of eruption related climatic shocks. *Impacts of large volcanic eruptions on climate and societies: proxies, models and solutions for the future*. Saas-Fee, Switzerland, August 11–15. [\[invited\]](#)
- [26] **Heli Huhtamaa** (2019), The Little Ice Age in Europe and its influence on food systems on agricultural margins, *Boundaries in/of Environmental History, Tenth Biennial Conference of the European Society for Environmental History*, Tallinn, Estonia, August 21–25.
- [25] **Heli Huhtamaa** (2019), Natural disasters or man-made demographic crises? Famine in Finland in 1690s and 1860s, *Mensch – Umwelt – Katastrophe. Wahrnehmung und Wirkungsgeschichte im östlichen Europa von der Spätantike bis in die Gegenwart*. Leibniz-Institut für Geschichte und Kultur des östlichen Europa, Leipzig, Germany, June 17–18. [\[invited\]](#)
- [24] **Heli Huhtamaa** (2019), Crop failures, abandoned farmsteads and witchcraft accusations – Social impacts of volcanic eruptions in Finland 1580–1710 CE, *Volcanic Impacts on Climate and Society: The Common Era and beyond*, University of Cambridge, United Kingdom, April 13–14.
- [23] **Heli Huhtamaa** (2018), Societal impacts of volcanic-related climatic shocks in the northern Baltic Sea Region prior to industrialization, *American Geophysical Union Fall Meeting*, Washington D.C., USA, December 10–14. [\[invited\]](#)
- [22] **Heli Huhtamaa** & Ulrike Plath (2018), Advancing Baltic climate history: Creating a new module on Euro-Climhist, *Baltic Conference on the Environmental Humanities and Social Sciences*, Riga, Latvia, October 8–9.
- [21] **Heli Huhtamaa** (2018), Christopher of Bavaria and climate-related crises in the light of memory of nature, *International Medieval Congress*, Leeds, United Kingdom, July 2–5.
- [20] **Heli Huhtamaa** (2018), Tracing pre-1850s meteorological measurements from Finland, *Early Instrumental Meteorological Series Conference and Workshop*, University of Bern, Switzerland, June 18–21. [\[invited\]](#)
- [19] **Heli Huhtamaa** (2018), Success or failure? Socio-economic consequences of the 17th century eruptions in Finland, *VICES: Volcanic Impacts on Climate, Environment and Society*, University of St Andrews, United Kingdom, May 2. [\[invited\]](#)
- [18] **Heli Huhtamaa** (2017), Influence of landownership on peasant resilience: Microhistorical study of early modern rural Finland, *Shocks and Hazards in History: Vulnerability and Resilience*, University of Antwerp, Belgium, November 27–28. [\[invited\]](#)
- [17] **Heli Huhtamaa** (2017), Crop failures and crises in relation to climate-sensitive tree-ring records in medieval (1100–1500) Finland and North-West Russia, *International Medieval Congress*, Leeds, United Kingdom, July 3–6.
- [16] **Heli Huhtamaa** (2017), From tropical to boreal zone: Tracing linkages between volcanic eruptions and peasant livelihoods in the 17th century Finland, *Natures in Between, Ninth Biennial Conference of the European Society for Environmental History*, Zagreb, Croatia, June 28 – July 2.
- [15] **Heli Huhtamaa** (2016), Climate, crop failure and famine in pre-modern Finland: Tree-ring evidence for climate-society interactions, *International Medieval Congress*, Leeds, United Kingdom, July 4–7.
- [14] **Heli Huhtamaa** (2016), Societal impacts of tropical eruptions in the far north – the 17th century food crises in Finland, *PAGES Volcanic Impacts on Climate and Society (VICS) workshop*, Lamont-Doherty Earth Observatory, Columbia University, Palisades, USA, June 6–8. [\[invited\]](#)

- [13] **Heli Huhtamaa** (2016), Assessing the role of climate in food crises: example from pre-industrial Finland, *Struggling Nations – Phrasing Famines*, Reykjavik, Iceland, May 19–20.
- [12] **Heli Huhtamaa** (2016), Climate and the Great Famine in North-East Europe, *The Crisis of the 14th Century: ‘Teleconnections’ between Environmental and Societal Change*, Rome, Italy, February 24–26. [\[invited\]](#)
- [11] **Heli Huhtamaa** (2015), Uusi apuväline historiantutkimukselle: satorekonstruktio puun vuosirengassarjoista, [Novel source material for historical research: yield reconstruction based on tree-ring evidence] *Finnish Historical Research Days*, Joensuu, Finland, October 22–24.
- [10] **Heli Huhtamaa** (2015), Exploring historical food system vulnerability to climatic anomalies in fourteenth to eighteenth century Finland, *The International Conference of Historical Geographers*, London, United Kingdom, July 5–10.
- [9] **Heli Huhtamaa** (2015), Weather extremes and livelihood (in)security in 15th century north-east Europe, *International Medieval Congress*, Leeds, United Kingdom, July 6–9.
- [8] **Heli Huhtamaa** (2015), Linking weather to violence: climate, crop failures and conflicts in late-medieval Sweden, *Greening History, Eighth Biennial Conference of the European Society for Environmental History*, Versailles, France, June 30 – July 3.
- [7] **Heli Huhtamaa** (2015), Exploring climate-driven food crises in Finland during the Little Ice Age with written and dendrological evidence, Famines during the 'Little Ice Age' (1300-1800), *Socio- natural entanglements in premodern societies*, Bielefeld, Germany, February 19. [\[invited\]](#)
- [6] **Heli Huhtamaa** (2014), Linking climate and conflict in 1430s northern Europe? *The Coldest Decade of the Millennium? The Spörer Minimum, the Climate during the 1430s, and its Economic, Social and Cultural Impact*, Bern, Switzerland, December 5. [\[invited\]](#)
- [5] **Heli Huhtamaa** (2014), Climate-driven subsistence crises in northern Baltic Sea region, *Bellies, Bodies, Policy: Embodied Environments between Catastrophes and Control*, Tallinn and Tartu, Estonia, September 10–12.
- [4] **Heli Huhtamaa** (2014), Pre-modern history and modern Science: Hunger and climate in medieval northeastern Europe, *The 28. Conference of Nordic Historians*, Joensuu, Finland, August 14–17.
- [3] **Heli Huhtamaa** (2014), The Great Famine and food system vulnerability in medieval North-East Europe, *Crossing Divides, Conference of the American Society for Environmental History*, San Francisco, USA, March 12–16.
- [2] **Heli Huhtamaa** (2013), Climate-driven disasters and food crises in North-East Europe before 1300 CE, *Mortality Crises Between the Plagues: Epidemics, Epizootics and Famines in Europe, 800–1300*, Stirling, United Kingdom, November 13, 2013. [\[invited\]](#)
- [1] **Heli Huhtamaa** (2013), Climate and hunger in medieval Novgorod and Ladoga, *Circulating Natures: Water-Food-Energy, Seventh Biennial Conference of the European Society for Environmental History*, Munich, Germany, August 21–24.