CLIMATE HISTORY NEWS

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CCHRI
Climate Change and History Research Initiative
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CLIMATE HISTORY NEWS IS THE QUARTERLY NEWSLETTER OF THE CLIMATE HISTORY NETWORK
– A NETWORK OF INTERDISCIPOLINARY SCHOLARS STUDYING PAST CLIMATE CHANGE –
TO CONTRIBUTE EMAIL NJCUNIGAN@GMAIL.COM

Vol. 5, Issue 1

Letter from the Founders

DAGOMAR DEGROOT

SAM WHITE

Dear colleagues,

Welcome to another Climate History Network newsletter! Each time we compile these letters, it is always a pleasure to see the variety, quantity, and quality of new research and developments in the field.

You may have noticed that our online resources have been especially active these last few months. The biggest changes have happened at HistoricalClimatology.com, which now has a clean new look. Thanks to programmer and mapper Steven Ottens, part of our ongoing site redesign has involved finding a way to host an indispensable database of ship logbook information, the "Climatological Database of the World's Oceans," in newly accessible file formats.

This year, we've also partnered with two popular websites – ActiveHistory.ca and NiCHE-Canada.org – to publish a one-of-a-kind series in which historians consider the possibilities and often-ignored limitations of nuclear power as a solution to climate change. The series now has six articles and runs at well over 10,000 words. I've you'd like to contribute, please contact Dagomar.

Among many recent publications, we'd like to point out Eleonora Rohland's monograph, Changes in the Air: Hurricanes in New Orleans from 1718 to the Present. New York: Berghahn Books, 2018, and a number of articles that have come out of the colloquia of the Princeton Climate Change and History Research Initiative (CCHRI), appearing in Human Ecology and other publications.

We'd also like to bring your attention to two ongoing journal special issues of interest to list members: "Droughts over centuries: what can documentary evidence tell us about drought variability, severity and human responses?" edited by R. Brazdil, A. Kiss, G. Blöschl, S. Grab, and J. Luterbacher for Climate of the Past, and an ongoing special issue on historical droughts, led by Nicolas Maughan for Regional Environmental Change. And thanks to the CCHRI for sharing their recent news and upcoming events, which you can read more about in this newsletter.

As always, we invite you to follow us on Twitter and Facebook and to find more updates at Climatehistory.net and Historicalclimatology.com and to contact us with your news and publications.

Best wishes,
Dagomar Degroot and Sam White

Climate History Podcast

Now is the perfect time to catch up on past episodes of the Climate History Podcast. The Climate History Podcast features interviews with some of the most interesting people in climate change research, journalism, and policymaking. It is hosted by Dr. Dagomar Degroot, a professor of environmental history at Georgetown University. It is the official podcast of the Climate History Network and HistoricalClimatology.com. You can subscribe to the podcast here.

Upcoming Events

European Geosciences Union

7-12 April 2019 – Vienna, Austria

The EGU General Assembly 2019, taking place in Vienna (Austria) on 7–12 April 2019, brings together geoscientists from all over the world to one meeting covering all disciplines of the Earth, planetary, and space sciences. You can follow the conference in a variety of ways:

- Check out *EGU Today*, EGU's daily newsletter at the General Assembly. It highlights interesting sessions, especially those aimed at a broad, multidisciplinary audience, medal lectures, short courses, and other events.
- Watch interesting sessions and events *live or on-demand* through EGU's webstreaming.
- Follow the Twitter hashtag *#EGU19* through the 2019 EGU tweetwall.
- *Stay up-to-date* with General Assembly information by subscribing to the EGU blog and following the EGU on Twitter and Facebook.

American Society for Environmental History

10-14 April 2019 – Columbus, Ohio, USA

This year's American Society for Environmental History conference will be hosted by the Ohio State University. Those attending are encouraged to attend the roundtables "Seasons in the City: Climate in Urban Spaces" at 8:30am on Thursday, 4/11, and "New Perspectives on the Little Ice" at 3pm, Saturday, 4/13.

Princeton CCHRI Colloquium on Migration

25 April 2019 – Princeton, NJ, USA

The Princeton Climate Change and History Research Initiative (CCHRI) is organizing a one-day mini-colloquium on the subject of environment and migration in historical perspective. Climate change influences human societies through diverse non-linear trajectories, including population displacements from vulnerable communities. A great deal of attention has focused on recent migrations under climatic changes and extremes. The investigation of earlier episodes of climate-induced migration has recently been improving, as innovative methods facilitate the critical examination of past responses to climate change. Studying these societies can help illuminate the causal links between climate change and migration in the present, and vice versa. The planned colloquium will include both contemporary and historical case studies and general framework approaches. The CCHRI will link up with ongoing programs on campus as well as at other universities or research centers in the USA, with the aim to inaugurate a more historically-focused approach to migratory movements across the longer term. You can find more information here.

INQUA

25-31 July 2019 – Dublin, Ireland

The International Union for Quaternary Research was founded in 1928 by a group of scientists seeking to improve understanding of environmental change during the glacial ages through interdisciplinary research. The 20th INQUA Congress will be held in Dublin, Ireland. Call for abstracts has been closed, but you are encouraged to register for here. A draft schedule can be found here.

World Congress of Environmental History

22-26 July 2017 – Florianópolis, Brazil

The Third World Congress of Environmental History will be held in Florianópolis, Brazil from July 22-26, 2017. Early registration closes on May 24, 2019. The theme of the congress is "Convergences: The Global South and the Global North in the Era of Great Acceleration." The World Congress of Environmental History is the chief activity of the ICEHO and is called every 5 years. Previous editions in Copenhagen (Denmark, 2009) and Guimarães (Portugal, 2014) consolidated the WCEH as a unique opportunity for scholars from different disciplines to situate environmental history in a planetary perspective.

PAGES Climate Reconstruction & Impacts from the Archives of Societies Workshop

October 2019 – Leipzig, Germany

Please watch for announcements for the second Past Global Changes (PAGES) Climate Reconstruction and Impacts from the Archives of Societies (CRIAS) workshop, planned for October 2019 in Leipzig, Germany.

Open Calls

Arcadia

Arcadia: Explorations in Environmental History is an open-access, peer-reviewed publication platform for short, illustrated, and engaging environmental histories. Embedded in a particular time and place, each story focuses on a site, event, person, organization, or species as it relates to nature and human society. By publishing digitally on the Environment & Society Portal, *Arcadia* promotes accessibility and visibility of original research in global environmental history and cognate disciplines. Each peer-reviewed article includes a profile of the researcher, links, and suggested readings.

We also welcome proposals for inter-connected contributions by individual authors or research groups. Let us know if you are interested in having your submission linked to an existing thematic *Arcadia* collection or if you would like to edit a new one. Existing *Arcadia* collections include: *Disaster Histories*, *National Parks in Time and Space*, *Global Environmental Movements*, *Water Histories*, *The Nature State*, *Rights of Nature Recognition*, *Diseases and Pests in History*, and *Terms of Disaster*.

To submit, simply send a filled-out version of this form together with your draft submission to *Arcadia's* managing editor, Jonatan Palmblad (arcadia@carsoncenter.lmu.de)—guidelines are included in the form. Your email should also include 2–5 images and/or multimedia (with permissions if necessary) and a profile photo. Complete submissions are assigned to two anonymous peer reviewers chosen for their expertise in a field related to the submission, often at the suggestion of the board. We also encourage authors to suggest potential reviewers as an option—they may or may not be contacted. We ask for reviewers to send feedback within one month. If reviewers request revisions, we will ask you to address these within two weeks. For accepted manuscripts, copy editing will be provided.

For full consideration for the next volume, please submit your draft by 15 April 2019. While submissions can be made at any time, we are concentrating the review process around three seasonal volumes. *Arcadia* requires no submission fees or article processing fees, and is published open-access under a Creative Commons CC-BY license. With submissions or any questions, please email Jonatan Palmblad at arcadia@carsoncenter.lmu.de.

Postdoctoral Research Fellow position in Meteorology/ Climate at the University of Oslo

The University of Oslo is accepting applications for a postdoc position that will be carried out within the VIKINGS project on "Volcanic Eruptions and their Impacts on Climate, Environment, and Viking Society in 500-1250 CE". The Postdoc will have a strong focus on Earth System Climate Modelling. Experience in Climate or Earth System Modelling, atmospheric dynamics, ocean-sea interactions, as well as the analysis of climate model data in combination with paleo proxies (i.e., ice cores, tree rings) will be beneficial. Contact and further information can be obtained in the attached Job Description or by contacting Kirstin Krüger.

The application must be submitted online: www.jobbnorge.no/en/available-jobs/job/166331/postdoctoral-research-fellow-in-meteorology-climate

Past Events

Princeton Climate Change and History Research Initiative (CCHRI) Colloquium

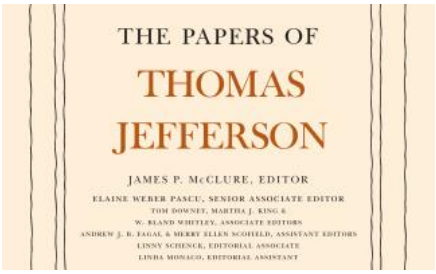
The Princeton University *Climate Change and History Research Initiative* (CCHRI) held its annual colloquium in collaboration with the Palaeo-Science and History Independent Research Group (led by Adam Izdebski) at the Max-Planck Institute for the Science of the Human Past in Jena, Germany from March 18-20, 2019. The meeting brought together interdisciplinary projects on climate and environmental change that work on two different "human pasts"—history and prehistory—to see whether the levels of social and cultural complexity and the types of evidence we study lead to different conclusions about social capabilities of coping with environmental challenges; and the degree to which our approaches are complementary and how far their synergy increases our understanding of the mechanisms of human resilience to climatic change and other "natural" stressors. The program can be found at: https://www.shh.mpg.de/1225709/resilience-environmental-change-and-society-perspectives-from-history-and-prehistory. The colloquia organizers plan to publish the results either as a special issue in an interdisciplinary journal, or as one or two multi-author articles.

Princeton Climate Change and History Research Initiative (CCHRI) Workshop on Paleoscience

The CCHRI hosts a series of occasional workshops intended to introduce historians and archaeologists methodologies in the natural sciences. This year the core members of the group held a workshop, hosted by the Seeger Center for Hellenic Studies at Princeton at its Athens Center, in which specialists in palynology, multi-proxy analysis, climate modelling, palaeopathogy, aDNA and palaeogenetics, among others, explained the methodologies and approaches of their fields. The lastest meeting in March 2019 was attended by more than 30 junior scholars, graduates and postdocs. The CCHRI plans to produce a concise guide to the palaeosciences for historians and social scientists, to serve as a useful introduction for those not familiar with the complexities of these fields.

News

Papers of Thomas Jefferson Project



The Papers of Thomas Jefferson project is undertaking an initiative to transcribe, digitize, and publish the US President and plantation owner's complete meteorological records, including regular weather observations and instrumental measurements. If anyone with relevant expertise is interesting in utilizing these records or advising this project, please contact Sam White.

Svalbard's Climate History

Two new pieces of research profile the climate history of the island of Svalbard in the Arctic Ocean. An article by Dagomar Degroot outlines how changes in the amount of local sea ice alternately facilitated or hindered conflict between Dutch and English whalers in the area, demonstrating how climate change played out on a local scale. Wesley Farnsworth's recent dissertation provides a detailed overview of glaciation on the island during the Holocene, suggesting in particular that the Little Ice Age brought about quite dramatic advances for glaciers on the island. Read more in Dr. Degroot's article here, or Dr. Farnsworth's dissertation here.

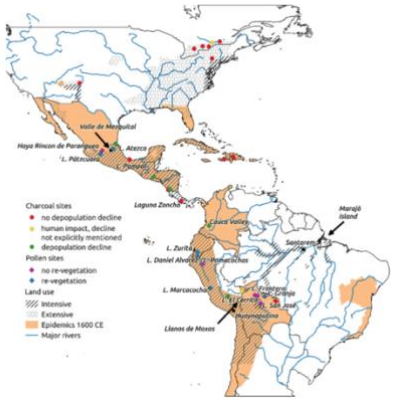
Spanish Archival Documents as Sources for Historical Climatology

A new article by Francisco Saulo Rodríguez Lajusticia profiles the usefulness of various Spanish archival sources for understanding climatic events including drought, floods, storms, volcanic eruptions, and earthquakes. Drawing attention to various types of documentation and archival repositories where they can be found, it offers a point of entry for new scholars looking to study climatic trends in Spain, southern Europe, and anywhere else affected by the same climate patterns. Also included is an appendix of several documents reprinted in full. Read the full article here.

New Online Database of Chinese Sources for Climate History

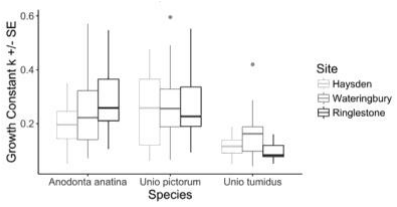
A new open-access article in Scientific Data presents the REACHES climate database based on historical documents of China. This database of thousands of records, principally from the Ming and Qing periods, electronically publishes and encodes many sources previously available only in compilations that were difficult to access or search. The article explains the type of records available and some of the difficulties of interpretation they present.

Depopulation in the Americas and Climate Forcing



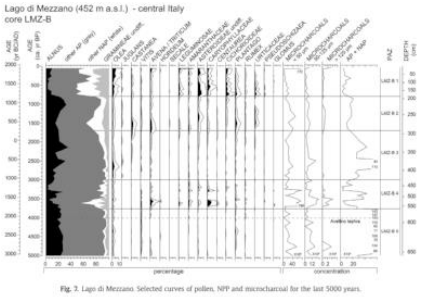
A recent article published in *Quaternary Science Reviews* offers an updated view on the effect of indigenous depopulation in the Americas on the global climate. Reviewing 119 regional studies, it points a decline in atmospheric carbon of 3.5 ppm due to the regrowth of secondary forests in areas previously used for agriculture that were abandoned after indigenous populations shrank. The authors point to this event as one of the earliest anthropogenic climate interventions. Read the full text here.

Freshwater Mussels as a Source of Climate Data



A new paper in *Ecological Indicators* outlines the opportunities in using freshwater mussels as a climate proxy. Although using data from shells is a well-established practice, the study's authors draw attention to alternative methods for noninvasive measurement. These measurements are annually banded and have the best response during warmer months, offering scientists the opportunity to create high resolution proxy records. Read the full paper here.

New Pollen Record for Central Italy



A forthcoming palynology study on Lago di Mezzano in central Italy provides greater clarity to the landscape history in the region. In presenting her 15,300 year record, the author traces a shift from oak to beach to alder cars to a heavily human-modified assemblage in the recent past. This pollen data suggests that the area was most heavily impacted by humans during the Bronze Age, imperial Roman era, and the middle ages, though differently in each separate case. Read the full article here.

Feature Articles

Environmental Historians Debate: Can Nuclear Power Solve Climate Change?

Jim Clifford, Dagomar Degroot, and Daniel Macfarlane

This series focuses on what environmental and energy historians can bring to discussions about nuclear power. It is a tripartite effort between Active History, the Climate History Network (CHN), and the Network in Canadian History and Environment (NiCHE), and will be cross-posted across all three platforms. The series is co-edited by a member of each of those websites: professors Jim Clifford, Dagomar Degroot, and Daniel Macfarlane. More

Closing Nuclear Plants Will Increase Climate Risks

Nancy Langston, Michigan Tech

On March 28, 1979, I woke up late and rushed to catch the bus to my suburban high school in Rockville MD. So it wasn't until I found my friends clustered around the radio in the cafeteria that I learned seventy-seven miles upwind of us, Three Mile Island Reactor Unit 2 was in partial meltdown. More

Next Generation Nuclear?

Kate Brown, MIT

Climate change is here to stay. So too for the next several millennia is radioactive fallout from nuclear accidents such as Chernobyl and Fukushima. Earthlings will also live with radioactive products from the production and testing of nuclear weapons. The question as to whether next generation nuclear power plants will be “perfectly safe” appears to decline in importance as we consider the catastrophic outcome of climate change. More

Only Dramatic Reductions in Energy Use Will Save the World from Climate Catastrophe

Andrew Watson, University of Saskatchewan

There is no longer any debate. Humanity sits at the precipice of catastrophic climate change caused by anthropogenic greenhouse gas (GHG) emissions. Recent reports provide clear assessments: to limit global warming to 1.5ºC above historic levels, thereby avoiding the most harmful consequences, governments, communities, and individuals around the world must take immediate steps to decarbonize their societies and economies. More

The Cold War Constraints on the Nuclear Energy Option

Robynne Mellor

Shortly before uranium miner Gus Frobel died of lung cancer in 1978 he said, "This is reality. If we want energy, coal or uranium, lives will be lost. And I think society wants energy and they will find men willing to go into coal or uranium." Frobel understood that governments had crunched the numbers. They had calculated how many miners died comparatively in coal and uranium production to produce energy. More

The Nuclear Renaissance in a World of Nuclear Apartheid

Toshihiro Higuchi, Georgetown University

Nuclear power is back, riding on growing fears of catastrophic climate change. The climate crisis has rekindled heated debate over the advantages and disadvantages of nuclear power. However, advocates and opponents alike tend to overlook or downplay a unique risk that sets atomic energy apart from all other energy sources: proliferation of nuclear weapons. More

Energy History and Energy Futures

Sean Kheraj, York University

If nuclear power is to be used as a stop-gap or transitional technology for the de-carbonization of industrial economies, what comes next? Energy history could offer new ways of imagining different energy futures, but current scholarship offers linear narratives of growth toward the development of high-energy economies, leaving little room to imagine low-energy futures. More

Did Colonialism Cause Global Cooling? Revisiting an Old Controversy

Dagomar Degroot, Georgetown University

Roughly 11,000 years ago, rising sea levels submerged Beringia, the vast land bridge that once connected the Old and New Worlds. Vikings and perhaps Polynesians briefly established a foothold in the Americas, but it was the voyage of Columbus in 1492 that firmly restored the ancient link between the world's hemispheres. Plants, animals, and pathogens – the microscopic agents of disease – never before seen in the Americas now arrived in the very heart of the western hemisphere. More

Reconstructing Africa's Climate: Solving the Riddle of Rainfall History and Energy Futures

David J. Nash, University of Brighton, UK and University of the Witwatersrand, South Africa

To grasp the significance of global warming, and to confirm its connection to human activity, you have to know how climate has changed in the past. Scholars of past climate change know that understanding how climate has varied over historical timescales requires access to robust long-term datasets. This is not a problem for regions such as Europe and North America, which have a centuries-long tradition of recording weather with instruments. More

Best of the Web

September 2018

Europe's Triumphs and Troubles Are Written in Swiss Ice. *NY Times*

The Perfect Storm: How Climate Change and Wall Street Almost Killed Puerto Rico. *Rolling Stone*

How Much Hotter is Your Hometown Than When You Were Born? *NY Times*

The Unlearned Lesson of Hurricane Maria: A Conversation with Stuart Schwartz. *Edge Effects*

October 2018

What Renaissance Literary Theory Tells Us about Climate Communication *Medium*

The Earth's Memory Is Locked in Ancient Seafloor Muck. *Earther*

Google's New Tool to Fight Climate Change. *The Atlantic*

How to Write About a Vanishing World. *The New Yorker*

How Much Hotter is Your Hometown Than When You Were Born? *NY Times*

November 2018

Archives of the Anthropocene. *History Workshop*

Tales from the Ice Age. *History Today*

Winter Is Coming: Europe's Deep Freeze of 1709 *National Geographic*

Why 536 was "The Worst Year to be Alive." *Science Magazine*

Interactive: How Climate Finance 'Flows' Around the World. *Carbon Brief*

December 2018

Climate Change, Water, and the Golden Age of the Dutch Republic. *Europe Now*

The Planet Has Seen Sudden Warming Before. It Wiped Out Almost Everything. *New York Times*

Facing Floods in the Middle Ages. *Europe Now*

Risks of 'Domino Effect' of Tipping Points Greater Than Thought, Study Says. *The Guardian*

January 2019

How Climate Change Caused the World's First Ever Empire to Collapse. *The Conversation*

The Coming Climate Crisis. *Foreign Policy*

The Melting Arctic Is a Real-Time Horror Story — Why Doesn't Anyone Care? *Rolling Stone*

The Last Time Humans Engineered the Climate, They Changed History. *Axios*

A Frozen History of Climate Change. *The Guardian*

February – March 2019

The Forgotten Woman Who Discovered The Greenhouse Effect. *NEXT*

Radical Plan To Artificially Cool Earth's Climate Could Be Safe, Study Finds. *The Guardian*

Until 1950, U.S. Weathermen Were Forbidden From Talking About Tornados. *Atlas Obscura*

Mapped: How Climate Change Affects Extreme Weather Around The World. *CarbonBrief*

Yes, Humans Are Causing Climate Change. And We've Known About It For 40 Years. *Popular Science*

Recent Publications

Historical Climatology (including documentary and early instrumental reconstructions, and studies of climate and human history)

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Athimon, Emmanuelle, and Mohamed Maanan. "Vulnerability, Resilience and Adaptation of Societies during Major Extreme Storms during the Little Ice Age." *Climate of the Past* 14 (2018): 1487–97. https://doi.org/10.5194/cp-14-1487-2018.

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Brázdil, Rudolf, Petr Dobrovolný, Miroslav Trnka, Ladislava Řezníčková, Lukáš Dolák, and Oldřich Kotyza. "Extreme Droughts and Human Responses to Them: The Czech Lands in the Pre-Instrumental Period." *Climate of the Past* 15 (2019): 1–24. https://doi.org/10.5194/cp-15-1-2019.

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Damodaran, Vinita, James Hamilton, and Rob Allan. "Climate Signals, Environment and Livelihoods in the Long Seventeenth Century in India." In *A Cultural History of Famine: Food Security and the Environment in India and Britain*, edited by Ayesha Mukherjee. New York: Routledge, 2019.

Das, Pallavi V. "People's History of Climate Change." *History Compass*, October 17, 2018, e12497. https://doi.org/10.1111/hic3.12497.

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Dobrovolný, Petr. "Analysis and Interpretation: Calibration-Verification." In *The Palgrave Handbook of Climate History*, edited by Sam White, Christian Pfister, and Franz Mauelshagen, 107–13. London: Palgrave Macmillan UK, 2018. https://doi.org/10.1057/978-1-137-43020-5_10.

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Haldon, John, Hugh Elton, Sabine R. Huebner, Adam Izdebski, Lee Mordechai, and Timothy P. Newfield. "Plagues, Climate Change, and the End of an Empire: A Response to Kyle Harper's The Fate of Rome (1): Climate." *History Compass*, November 9, 2018, e12508. https://doi.org/10.1111/hic3.12508.

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Earliest Rice Cultivating Civilization." *Quaternary Science Reviews* 201 (2018): 418–28. https://doi.org/10.1016/j.quascirev.2018.10.035.

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