

HARVEY WEISS

ADDRESS: 300 Ogden Street
New Haven CT 06511
203-314-2396
harvey.weiss@yale.edu

Humanities Quadrangle, 617
Yale University
New Haven CT 06511
203-432-4080

EMPLOYMENT:

Professor of Near Eastern Archaeology and Environmental Studies, in Department of Near Eastern Languages and Civilizations and School of the Environment, Yale University (1976-).

EDUCATION:

University of Pennsylvania, Ph.D. (with distinction), 1976; The City College, C.U.N.Y., B.A., 1966.

RESEARCH:

Holocene paleoclimatology and societal adaptations to climatic change, West Asia, Mesopotamia, archaeology, 8th-1st millennium; origins of agriculture, states and empires, and societal collapse processes.

Director, Yale University Tell Leilan Project, Syria, (1978 -), <https://leilan.yale.edu> research design, implementation, analysis, publication: fifth - 2nd millennium northern Mesopotamia, primary and secondary state formation, empires and imperialism, abrupt climate change dynamics, societal collapse, social adaptations to climate change.

PUBLICATIONS: <http://yale.academia.edu/HarveyWeiss>

BOOKS:

In prep. Yale Tell Leilan Research, 4. Third Millennium B.C. Empire and Collapse. Editor, with 6 contributors.

2019 *The 4.2 ka BP climatic event. Climate of the Past.* editor, with M. Bini, Denis-Didier Rousseau, R. Bradley. <https://www.climate-of-the-past.net>

2017 *Megadrought and Collapse: From Early Agriculture to Angkor.* Oxford University Press. Editor, with 15 contributors. 344 pp.

2012 *Seven Generations since the Fall of Akkad.* Wiesbaden: Harrassowitz. Editor, with 13 contributors. 299 pp.

2006 Holocene Climate and Cultural Evolution in Late Prehistoric-Early Historic West Asia, *Quaternary Research* 66. special issue. Editor, with 8 contributors.

2003 *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society.* (editor, with Elena Rova) Brussels: Brepols. 535 pp.

1997 *Third Millennium B.C. Climate Change and Old World Collapse*. Berlin: Springer-Verlag (NATO Advanced Science Institute series). editor, with G. Kukla and N. Dalfes. Berlin: Springer. Pp. 723, with 19 contributors.

1990 *Resurrecting the Past [Festschrift Adnan Bounni]* (editor, with M. van Loon and P. Matthiae). Leiden: Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul, lxiv. (with 25 contributors).

1988 *Yale Tell Leilan Research, 1*. (editor). (G.M. Schwartz, "The Ceramic Sequence of the Operation 1 Sounding") New Haven: Yale University Press.

1986 *The Origins of Cities in Dry-Farming Syria and Mesopotamia in the Third Millennium B.C.* (editor). Guilford: Four Quarters. (with 7 contributors).

1985 *Ebla to Damascus: art and archaeology of ancient Syria*. (editor). Washington: Smithsonian Institution. (with 25 contributors). Pp. 2nd edition, 1987, University of Washington Press.

ARTICLES (since 2010):

2021. Weiss, Harvey. Global KM-A Congruence and the Indus Collapse. *Climate of the Past*. 1-21. Jan 4, 2021 [10.5194/cp-2020-138-RC2](https://doi.org/10.5194/cp-2020-138-RC2), 2021

2020. Johnson, Michael, Harvey Weiss, Kutlu Aslihan Yener. Sharing Ore Resources: Lead isotope analyses of third and second millennium BC metals from Tell Atchana (Alalakh) and Tell Leilan (Shubat Enlil). *Anadolu Prehistoryasına Adanmış Bir Yaşam: Jak Yakar'a Armağan (A Life Dedicated to Anatolian Prehistory: Festschrift for Jak Yakar)*, edited by Barış Gür and Semra Dalkılıç. Ankara: Bilgin Kültür Sanat Yayınları, 2020

2019. Walker, Mike, Phil Gibbard, Martin J. Head, Max Berkelhammer, Svante Björck, Hai Cheng, Les C. Cwynar, David Fisher, Vasilios Gkinis, Antony Long, John Lowe, Rewi Newnham, Sune Olander Rasmussen, Harvey Weiss. Formal Subdivision of the Holocene Series/Epoch: A Summary. *Journal of the Geological Society of India* 93: 135-151. [doi: 10.1007/s12594-019-1141-9](https://doi.org/10.1007/s12594-019-1141-9), 2019

2019. Sinha, Ashish, Gayatri Kathayat, Harvey Weiss, Hanying Li, Hai Cheng, Justin Reuter, Adam W. Schneider, Max Berkelhammer, Selim F. Adali, Lowell D. Stott, R. Lawrence Edwards. Role of climate in the rise and fall of the Neo-Assyrian Empire. *Science Advances* vol 5 no 11 Nov 13 [doi:10.1126/sciadv.aax6656](https://doi.org/10.1126/sciadv.aax6656), 2019

2019. Walker, Mike, Martin J. Head, John Lowe, Max Berkelhammer, Svante Björck, Hai Cheng, Les C. Cwynar, David Fisher, Vasileios Gkinis, Anthony Long, Rewi Newnham, Sune Olander Rasmussen, Harvey Weiss. Subdividing the Holocene Series/Epoch: formalization of stages/ages and subseries/subepochs, and designation of GSSPs and

auxiliary stratotypes. . *Journal of Quaternary Science* 34.3: 173-186. doi: [10.1002/jqs.3097](https://doi.org/10.1002/jqs.3097), 2019

2019. Weiss, Harvey. Karl Popper, Imre Lakatos, and the 4.2 ka BP event in the northern North Atlantic, Anatolia, and the Indus. *Climate of the Past*, 3 Apr 2019 <https://doi.org/10.5194/cp-2018-162-RC3>, 2019

2019. Weiss, Harvey. The 4.2 ka BP event in the northern North Atlantic. *Climate of the Past*, 26 Mar 2019 <https://doi.org/10.5194/cp-2018-162-RC2>, 2019

2018. Persoiu, A., M. Ionita, H. Weiss. Blocking induced by the strengthened Siberian High led to drying in west Asia during the 4.2 ka BP event – a hypothesis *Clim. Past Discuss.*, <https://doi.org/10.5194/cp-2018-161>, 2018

2018. Walker, M...H. Weiss. Formal ratification of the subdivision of the Holocene Series/Epoch (Quaternary System/Period): two new Global Boundary Stratotype Sections and Points (GSSPs) and three new stages/subseries. *Episodes* 41.4: 1-11. <https://doi.org/10.18814/epiugs/2018/018016>

2017. Weiss, Harvey. “Seventeen kings who lived in tents,” In F. Hoflmayer, ed., *Late Third Millennium Radiocarbon Chronology and Abrupt Climate Change*. Chicago: Oriental Institute. Pp. 131-162.

2017. Styring, A...H. Weiss. New isotope evidence for agricultural extensification reveals how the world’s first cities were fed. *Nature Plants* 3, 17076/ [DOI: 10.1038/nplants.2017.76](https://doi.org/10.1038/nplants.2017.76) / www.nature.com/natureplants

2017. Weiss, H. Megadrought, Collapse and Causality. In H. Weiss, ed., *Megadrought and Collapse: From Early Agriculture to Angkor*. NY: Oxford University Press. Pp. 1-31.

2017. Weiss, H. 4.2 ka BP Megadrought and the Akkadian Collapse. In H. Weiss, ed., *Megadrought and Collapse: From Early Agriculture to Angkor*. NY: Oxford University Press. Pp. 93-161.

Weiss, H. 2016. Tell Leilan (Hassake). In Y. Kanjou, and A. Tsuneki, eds., *A History of Syria in One Hundred Sites*. Oxford: Archaeopress. Pp. 115-118.

2016 M.J.C. Walker, M. Berkelhammer, S. Björck, H. Cheng, China, L.C. Cwynar, D.L. Fisher, V. Gkinis, A.J. Long, J.J. Lowe, R.M. Newnham, S.O. Rasmussen, H. Weiss. 2016. Formal subdivision of the Holocene Series/Epoch: Three Proposals by a Working Group of Members of INTIMATE (Integration of Ice-core, Marine and Terrestrial Records) and the Subcommittee on Quaternary Stratigraphy. Submitted Feb 9 2016.

2016. Weiss, Harvey. Global Megadrought, Societal Collapse, and Resilience at 4.2 – 3.9 ka BP across the Mediterranean and West Asia. *PAGES (Past Global Changes)* 24.2: 62-63. doi: [10.22498/pages.24.2.62](https://doi.org/10.22498/pages.24.2.62) 2017

2015 Weiss, Harvey. Megadrought, collapse, and resilience in late 3rd millennium BC Mesopotamia, in H. Meller, H.W. Arz, R. Jung, and R. Risch, eds., 2015, *2200 BC - A climatic breakdown as a cause for the collapse of the Old World?* Halle: Landesmuseum für Vorgeschichte, 35-52.

2014 Weiss, Harvey. The northern Levant during the Intermediate Bronze Age: Altered Trajectories. In M. Steener and A. Killebrew, eds. *The Oxford Handbook of the Archaeology of the Levant: c. 8000-332 BCE*. Oxford U. Press. Pp. 367-387.

2013. Barnes, J., M. Dove, M. Lahsen, A. Mathews, P. McElwee, R. McIntosh, F. Moore, J. O'Reilly, B. Orlove, R. Puri, H. Weiss, and K. Yager, Contribution of Anthropology to the Study of Climate Change, *Nature Climate Change* 3:541-544.

2013. Weiss, Harvey, Tell Leilan and the Dynamics of Social and Environmental Forces Across the Mesopotamian Dry-Farming Landscape, in D. Bonatz and L. Martin, eds., *100 Jahre archäologische Feldforschungen in Nordost-Syrien - Eine Bilanz. Schriften der Max Freiherr von Oppenheim Stiftung*. Wiesbaden, Harrassowitz. Pp. 101-116.

2013. Ristvet, L. and H. Weiss. The Habur Region in the Late Third and Early Second Millennium B.C., in Winfried Orthmann, ed., *The History and Archaeology of Syria*. Vol. 1. Saarbrücken: Saarbrücken Verlag. pp. 257-272.

2012. Walker, M. J.C. Walker, M. Berkelhammer, S. Björck, L. C. Cwynar, D. A. Fisher, A. J. Long, J. J. Lowe, R. M. Newnham, S. O. Rasmussen, H. Weiss,
2012. Formal subdivision of the Holocene Series/Epoch: a Discussion Paper by a Working Group of INTIMATE (Integration of ice-core, marine and terrestrial records) and the Subcommittee on Quaternary Stratigraphy (International Commission on Stratigraphy) *Journal of Quaternary Science* 27.7: 649-659.

2012. Weiss, Harvey, Sturt W. Manning, Lauren Ristvet, Lucia Mori, Mark Besonen, Andrew McCarthy, Philippe Quenet, Alexia Smith, Zainab Bahrani. Tell Leilan Akkadian Imperialization, Collapse, and Short-Lived Re-occupation Defined by High-Resolution Radiocarbon Dating, in H. Weiss, ed., *Seven Generations since the Fall of Akkad*. Wiesbaden: Harrassowitz. pp. 163-193.

2012. Weiss, H. Quantifying Collapse: The Late Third Millennium Khabur Plains, in H. Weiss, ed., *Seven Generations since the Fall of Akkad*. Wiesbaden: Harrassowitz. pp. 1 - 24.

2012. Ristvet, L. and H. Weiss, 2012 Šhubat Enlil, B. Archäologisch. in *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*. Bd. 13. Lfg. 3/4. Berlin: deGruyter. pp. 229 - 236 .

2012. Kaniewski, D., E. van Campo, and H. Weiss, Drought is a recurring challenge in the Middle East. *Proceedings of the National Academy of Sciences* 109.10: 3862–3867. doi: 10.1073/pnas.1116304109

2011. Kaniewski, D., E. Van Campo, K. Van Lerberghe, T. Boiy, K. Vaansteenhuyse, G. Jans, K. Nys, H. Weiss, C. Morhange, T. Otto and J. Bretschneider. The Sea Peoples, from cuneiform tablets to carbon dating. *PLoS ONE* 6(6), e20232. doi:10.1371

2011. Kaniewski, D., E. Van Campo, E. Paulissen, H. Weiss, J. Bakker, I. Rossignol. and K. Van Lerberghe K. The Medieval Climate Anomaly and the Little Ice Age in coastal Syria inferred from pollen-derived palaeoclimatic patterns, *Global and Planetary Change* 78: 178-187. doi.org/10.1016/j.gloplacha.2011.06.010

2011. Kaniewski, D., E. Van Campo, E. Paulissen, H. Weiss, T. Otto, J. Bakker, I. Rossignol and K. Van Lerberghe. Medieval coastal Syrian vegetation patterns in the principality of Antioch. *The Holocene* 21(2): 251-262. doi.org/10.1177/0959683610378883

2010. Kaniewski, D., E. Paulissen, E. Van Campo, H. Weiss, T. Otto, J. Bretschneider, and K. Van Lerberghe. Late second-early first millennium BC abrupt climate changes in coastal Syria and their possible significance for the history of the Eastern Mediterranean. *Quaternary Research* 74: 207-215.

PUBLICATIONS, EARLIER:

<https://leilan.yale.edu/publications/all>
<http://yale.academia.edu/HarveyWeiss>

PUBLIC MEDIA, RECENT:

2017. Yale Excavation in Syria Continues to Reveal Secrets of World's Earliest Cities. Yale School of Forestry and Environmental Studies. By Kevin Dennehy.

<https://environment.yale.edu/news/article/ancient-city-in-syria-continues-to-reveal-its-secrets/>

2012. When Civilizations Collapse. Yale School of Forestry and Environmental Studies. By Richard Conniff.

<http://environment.yale.edu/envy/stories/when-civilizations-collapse/#gsc.tab=0>

2010. "Collapse! What Collapse? Societal Change Revisited." By Andrew Lawler.

http://leilan.yale.edu/sites/default/files/public-media/pdf/lawler2010collapse_science_0.pdf
Science 330. 12 Nov. 2010. Pp. 907-909.

PUBLIC MEDIA, EARLIER: New York Times, The New Yorker, Independent, Science, New Scientist, Le Monde, The Economist, Scientific American, Discover, etc.

<https://leilan.yale.edu/about-project/public-media>

COURSES, RECENT:

EVST 226 Global Environmental History.

EVST 351 The Anthropocene.

EVST 399 Agriculture: Origins, Evolution, Crises.

EVST 473 Climate Change, Societal Collapse and Resilience.

NELC 026 / ARCG 020 / EVST 030 Origins of Civilization: Egypt and Mesopotamia. NELC 500 / ARCG 500 Environmental History of West Asia, Egypt, and Mediterranean.

TELL LEILAN PROJECT PH.D. THESES:

<https://leilan.yale.edu/works-progress/tell-leilan-project-doctoral-dissertations>

UNIVERSITY AND PROFESSIONAL SERVICE, SELECTED

Director of Undergraduate Studies, Environmental Studies Program, 2000-2003. Founding member, Yale College, Environmental Studies Advisory Committee, 1990-present.

Director of Graduate Studies, Dept. NELC, 1990-1993.

Chair, Center for Middle East Studies, 1988-1992.

Editor, "Archaeology in Syria" (biennial), American Journal of Archaeology, 1985-1995.

Guest curator, "Ebla to Damascus: art and archeology of ancient Syria." Smithsonian Institution. 1985.

President, American Research Institute in Syria (Center for Amer Overseas Research) 1988-1993.

Organizer, The 4.2 ka BP Climate Event: an international conference. Università di Pisa, Pisa, Italy, Jan 10-12, 2018.

Organizer, Collapse! What Collapse? Humanities Workshop, Whitney Humanities Center, Yale University, Oct 20-22, 2017.

Organizer, Abrupt Climate Change and Old World Collapse. NATO Advanced Research Workshop, Kemer, Turkey, September 19-24, 1994.

Organizer, The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society. National Endowment for the Humanities Conference, December 15-19, 1988.

TEACHING AND RESEARCH STATEMENT, RECENT:

The complex and dynamic relationship between societies and their environments over the course of the Holocene provides the background knowledge for understanding contemporary global change issues. Climate changes of the past, both abrupt and gradual, both short- and long-term, forced adaptive societal responses that shaped history and condition present-day mitigation and adaptation responses and responsibilities.

The record of Holocene anthropogenic and natural environmental change is available through the archaeological and historical record, that are lengthiest and most detailed in west Asia, and especially Mesopotamia. I study the Mesopotamian record, in Iran, Iraq, Syria and Turkey, and the Nile River basin and Indus records, using high-resolution archaeological and palaeoclimate data for agricultural regimes, regional settlement patterns, and abrupt high-magnitude climate changes.

I initiated the Tell Leilan Project in northeastern Syria in 1978, and directed extensive excavations and regional surface reconnaissance there until 2008, funded by three National

Science Foundation and six National Endowment for the Humanities grants. This archaeological research has generated the high-resolution data and new perspectives for Mesopotamian and adjacent societies' agro-production and settlement strategies across irrigation and dry-farming landscapes, their different settlement distributions, and their politico-economic histories as cities, states and empires evolved during the past eight thousand years.

The adaptive West Asian responses to abrupt Holocene climate changes, including collapse, regional abandonment, and habitat-tracking to refugia have been identified within Tell Leilan Project excavation, regional survey, epigraphic, and genomic data. The 4.2 ka BP (2200 BC) abrupt century-scale megadrought was defined by the Tell Leilan Project in 1993 and is now a global stratigraphic marker, while the coincident record for societal collapses is now a hemispheric research arena.

I teach interdisciplinary undergraduate and graduate level seminars on long-term environmental history, the evolution and crises of agricultural systems from hunting and gathering to the present, the origins of ancient states, and the adaptive societal responses to Holocene abrupt climate changes.