Erick Robinson, Ph.D., RPA Native Environment Solutions, LLC 3538 Garden Center Way Boise, ID 83703 <u>erobinson@nes-na.com</u> <u>erick.robinson@dri.edu</u>

EDUCATION

2011 Ph.D. Archaeology, The University of Sheffield

2004 B.A. Anthropology & B.A. History (Cum Laude), University of Kansas

PROFESSIONAL EMPLOYMENT

2023-Present, Hourly Associate Research Professor, Division of Atmospheric Sciences, Desert Research Institute
2022-Present, Vice President, Senior Archaeologist, Native Environment Solutions LLC.
2022-Present, Visiting Scholar, School of Human Evolution and Social Change, Arizona State University.
2021-2022, Assistant Professor and Director, Center for Applied Archaeological Science, Department of Anthropology, Boise State University
2019-2021, Postdoctoral Researcher, Department of Sociology, Social Work, and Anthropology, Utah State University
2014-2019, Postdoctoral Researcher, Department of Anthropology, University of Wyoming
2011-2014, Postdoctoral Researcher, Department of Archaeology, Ghent University

PUBLICATIONS

Professional Reports

In prep.	Robinson, E., Original Boise Valley People Members. Dry Creek Rockshelter and
	the Sacred Geography of the Boise Foothills. Prepared under contract with The
	Terteling Company, Inc.
2022	Robinson, E., Paradise, J. Preliminary Report on Surveys of Crowley Creek and
	Thacker Pass, Montana Mountains, Nevada. Prepared under contract with
	Winnemucca District BLM.

Peer-Reviewed Journal Articles

- In revision Freeman, J., Robinson, E., Bird, D., Hard, R.J., Mauldin, R.P., Anderies, J.M. The long-term expansion and recession of human populations. *Proceedings of the National Academy of Sciences*.
 2023 Lima, M., Gayo, E.M., Gurruchaga, A., Robinson, E., Freeman, J., Latorre, C., Bird, D. Positive feedbacks in deep-time transitions of human populations.
 - *Philosophical Transactions of the Royal Society B* 20220256. https://doi.org/10.1098/rstb.2022.0256.

2023	Finley, J.B., Robinson, E. , DeRose, R.J. Arroyo formation impacts on an early dryland agricultural community in northeastern Utah, USA. <i>Geoarchaeology</i> 38(1): 109-126.
2022	Kelly, R.L., Mackie, M.E., Robinson, E., Meyer, J., Berry, M., Boulanger, M., Codding, B.F., Freeman, J., Garland, C.J. Gingerich, J., Hard, R., Haug, J.,
	Martindale, A., Meeks, S., Miller, M., Miller, S., Perttula, T., Railey, J.A., Reid, K., Scharlotta, I., Spangler, J., Thomas, D.H., Thompson, V., White, A. A new
	radiocarbon database for the lower 48 states. American Antiquity 87(3): 581-590.
2022	Joyce, K., Louderback, L.A., Robinson, E. Direct evidence for geophyte exploitation in the Wyoming Basin. <i>American Antiquity</i> 87(2): 236-247.
2022	Bird, D., Miranda, L., Vander Linden, M., Robinson, E. , Bocinsky, R.K., Capriles, J., d'Alpoim Guedes, J., Finley, J.B., Gayo, E., Gil, A., Hoggarth, J.,
	Kay, A., Lombardo, U., Mackie, M., Palmissano, A., Solheim, S., Kelly, R.L., Freeman, J. A global dataset of radiocarbon ages for comparative human paleo-
	demography research. Scientific Data 9(1): 27.
2022	Codding, B.F., Weitzel, E., Coltrain, J.B., Louderback, L., Vernon, K.B.,
	Magargal, K.E., Yaworsky, P., Robinson, E., Brewer, S.C., Spangler, J.D.
	Socioecological dynamics structuring the spread of farming in the North
	American Basin-Plateau region. Environmental Archaeology 27(4): 434-446.
2021	Robinson, E., Bocinsky, R.K., Bird, D., Freeman, J., Kelly, R.L.
	Dendrochronological dates confirm a Late Prehistoric population decline in the
	American Southwest derived from radiocarbon dates. <i>Philosophical Transactions</i>
	of the Royal Society B 376(1816): 20190718.
2021	Roscoe, P.J., Sandweiss, D., Robinson, E. Population density and size facilitate
	interactive capacity and the rise of the state. <i>Philosophical Transactions of the</i>
2021	Royal Society B 376(1816): 20190725.
2021	Freeman, J., Anderies, J.M., Beckman, N.G., Robinson, E. , Baggio, J.A., Bird,
	D., Nicholson, C., Finley, J.B., Capriles, J.M., Gil, A.F., Byers, D., Gayo, E.,
	Latorre, C. Constructed landscapes impact the long-term stability of agricultural
2021	populations. <i>Human Ecology</i> 49(4): 369-382.
2021	Carter, V.A., Brunelle, A., Power, M.J., DeRose, R.J., Bekker, M.F., Hart, I., Brower, S., Spangler, J., Bekinson, F., Abbett, M., Maggumi, S.Y., Cadding, P.F.
	Brewer, S., Spangler, J., Robinson, E. , Abbott, M., Maezumi, S.Y., Codding, B.F. Indigenous land use legacies shaped past wildfire regimes in the Western U.S.
	Communications Earth and Environment 2(1): 72.
2020	Finley, J.B., Robinson, E. , DeRose, R.J., Hora, E. Multidecadal climate
2020	variability and the florescence of Fremont societies in eastern Utah. American
	Antiquity 85(1): 93-112.
2020	Freeman, J., Robinson, E., Bird, D., Beckman, N., Baggio, J., Anderies, J.M. The
2020	global ecology of human population density and interpreting changes in paleo-
	population densities. <i>Journal of Archaeological Science</i> 120: 105168.
2020	Bird, D., Freeman, J., Robinson, E. , Maughan, G., Finley, J.B., Lambert, P.M.,
	Kelly, R.L. A first empirical analysis of population stability in North America using radiocarbon records. <i>The Holocene</i> 30(9): 1345-1359.
2019	Robinson, E., Nicholson, C., Kelly, R.L. The importance of spatial data to open-
2017	access national archaeological databases and the development of

paleodemography research. Advances in Archaeological Practice 7(4): 395-408.

2019	Robinson, E. , Zahid, H.J., Codding, B.F., Haas, R., Kelly, R.L. Spatiotemporal dynamics of prehistoric human population growth: radiocarbon 'dates as data' and population ecology models. <i>Journal of Archaeological Science</i> 101: 63-71.
2019	Harrison, S.P., Gaillard, MJ., Stocker, B., Vander Linden, M., Goldewijk, K.K., Boles, O., Braconnot, P., Dawson, A., Fluet-Chouinard, E., Kaplan, J., Kastner, T., Pausata, F.S.R., Robinson, E. , Whitehouse, N., Madella, M., Morrison, K.D. Development and testing of scenarios for implementing Holocene LULC in Earth System Model Experiments. <i>Geoscientific Model Development</i> , 13(2): 805- 824.113
2018	Freeman, J., Baggio, J.A., Robinson, E. , Byers, D.A., Gayo, E., Finley, J.B., Meyer, J.A., Kelly, R.L., Anderies, J.M. Synchronization of energy consumption by human societies throughout the Holocene. <i>Proceedings of the National</i> <i>Academy of Sciences</i> 115(40): 9962-9967.
2018	Freeman, J., Byers, D., Robinson, E. , Kelly, R.L. Culture process and the interpretation of radiocarbon data. <i>Radiocarbon</i> 60(2):453-467.
2018	Robinson, E. , Riede, F. Cultural and palaeoenvironmental changes in Late Glacial to middle Holocene Europe: gradual or sudden? <i>Quaternary International</i> 465b:159-161.
2018	Griffiths, S., Robinson, E. The 8.2 ka Holocene climate event and human population resilience in northwest Atlantic Europe. <i>Quaternary International</i> 465b:251-257.
2017	Crombé, P., Robinson, E. Human resilience to Lateglacial climate and environmental change in the Scheldt basin (NW Belgium). <i>Quaternary</i> <i>International</i> 428b:50-63.
2016	Zahid, H.J., Robinson, E. , Kelly, R.L. Agriculture, population growth and statistics of the radiocarbon record. <i>Proceedings of the National Academy of Sciences</i> 113(4):931-935.
2015	Hoek, W.Z., Robinson, E. , Gelorini, V. Climate impact on ecosystem changes and human responses during the Last Glacial and Early Holocene: a contribution to the INTIMATE (INTegration of Ice-Core, MArine and TErrestrial records) COST Action ES0907. <i>Quaternary International</i> 378:1-3.
2015	Birks, H.H., Gelorini, V., Robinson, E. , Hoek, W.Z. Impacts of palaeoclimate change 60 000-8000 years ago on humans and their environments in Europe: integrating palaeoenviornmental and archaeological data. <i>Quaternary International</i> 378:4-13.
2015	Crombé, P., Verhegge, J., Deforce, K., Meylemans, E., Robinson, E. Wetland landscape dynamics, Swifterbant land use systems, and the Mesolithic-Neolithic transition in the southern North Sea basin. <i>Quaternary International</i> 378:119-133.
2014	Crombé, P., Robinson, E. ¹⁴ C Dates as demographic proxies in Neolithisation models of northwestern Europe: a critical assessment using Belgium and northeast France as a case-study. <i>Journal of Archaeological Science</i> 52:558-566.
2014	Crombé, P., Robinson, E. , Van Strydonck, M. Synchronizing a Late Glacial abrupt cooling event with palaeoenvironmental and population changes: the case study of the Moervaart palaeolake area (NW Belgium). <i>Radiocarbon</i> 56(2):899-912.
2013	Robinson, E. , Van Strydonck, M., Gelorini, V., Crombé, P. Radiocarbon chronology and the correlation of hunter-gatherer sociocultural change with

	abrupt palaeoclimate change: the Middle Mesolithic in the Rhine-Meuse-Scheldt area of northwest Europe. <i>Journal of Archaeological Science</i> 40:755-763.
2013	Robinson, E. , Sergant, J., Crombé, P. Late Mesolithic armature variability in the southern North Sea basin: implications for forager-Linearbandkeramik contact
	models of the transition to agriculture in Belgium and the southern Netherlands.
	European Journal of Archaeology 16(1): 3-20.
2013	Crombé, P., Robinson, E., Van Strydonck, M., Boudin, M. Radiocarbon dating of
	Mesolithic open-air sites in the cover-sand area of the North-West European
	Plain: problems and prospects. Archaeometry 55(3): 545-562.
2011	Robinson, E., Lombaert, L., Sergant, J., Crombé, P. Armatures and the question
	of forager-LBK contact: the site of Verrebroek-Aven Ackers (East Flanders,
	Belgium). Archäologisches Korrespondenzblatt 41: 473-508.
2011	Crombé, P., Sergant, J., Robinson, E., De Reu, J. Hunter-gatherer responses to
	environmental change during the Pleistocene-Holocene transition in the southern
	North Sea basin: Late Glacial-Final Mesolithic land use in northwest Belgium.
	Journal of Anthropological Archaeology 30: 454-471.
2009	Crombé, P., Sergant, J., Robinson, E. Counting microliths: a reliable method to
	assess Mesolithic land-use? Antiquity 83: 821-830.
2007	Robinson, E. Cultural landscapes and neolithisation processes: outline of a model
	for the Scheldt basin (Belgium). <i>Internet Archaeology</i> 22.
	for the Scherar cushi (Belgram), internet includelogy 22.

Book Chapters

In press	Robinson, E., Thomas, D.H. Intermountain demography. In D.H. Thomas (Ed.)
	The Central Mountains Archaic: A Great Basin Natural and Culture History.
	Anthropological Papers of the American Museum of Natural History.
In press	Robinson, E. Radiocarbon time and human paleodemography in the
-	Intermountain West. In D.H. Thomas (Ed.) The Central Mountains Archaic: A
	Great Basin Natural and Culture History. Anthropological Papers of the
	American Museum of Natural History.
2024	Robinson, E., Harris, S., Codding, B.F. Cultural landscapes and long-term human
	ecology. In E. Robinson, S. Harris, B.F. Codding (Eds.) Cultural Landscapes and
	Long-Term Human Ecology. New York: Springer
2024	Robinson, E., Freeman, J. Holocene human ecology and adaptation to millennial
	and centennial-scale climate change: A case study from the North Sea Basin. In E.
	Robinson, S. Harris, B.F. Codding (Eds.) Cultural Landscapes and Long-Term
	Human Ecology. New York: Springer.
2019	Kelly, R.L., Pelton, S.R., Robinson, E. Studying sharing from the archaeological
	record: problems and potential of scale. In N. Lavi, D.E. Friesem (Eds.) Towards
	a Broader View of Hunter-Gatherer Sharing, pp. 143-151. Cambridge:
	MacDonald Institute Monographs.
2018	Robinson, E., Sellet, F. Lithic technological organization and paleoenvironmental
	change. In E. Robinson, F. Sellet (eds.) Lithic Technological Organization and
	Paleoenvironmental Change: Global and Diachronic Perspectives, pp. 1-11. New
	York: Springer.
2014	Crombé, P., Robinson, E. European Mesolithic: Geography and culture. In C.
	Smith (ed.) Encyclopedia of Global Archaeology, pp. 2623-2645. New York:
	Springer.

2011	Robinson, E. , Hadjikoumis, A., Viner, S. The dynamics of neolithisation in Europe. In A. Hadjikoumis, E. Robinson, S. Viner (eds.) <i>Dynamics of Neolithisation in Europe: Studies in Honour of Andrew Sherratt</i> , pp. 1-9. Oxford:
	Oxbow Press.
2011	Robinson, E. Technological traditions and 'the dialectic of expansion': contact,
	transmission, and neolithisation along the northwestern fringes of the LBK. In A.
	Hadjikoumis, E. Robinson, S. Viner (eds.) Dynamics of Neolithisation in Europe:
	Studies in Honour of Andrew Sherratt, pp. 284-312. Oxford: Oxbow Press.
2009	Robinson, E. The evolution of trapeze industries and the role of armatures in
	neolithisation models for northwest Europe: a systematic approach. In P. Crombé,
	M. Van Strydonck, J. Sergant, M. Boudin, M. Bats (eds.) Chronology and
	Evolution within the Mesolithic of NW Europe, pp. 671-692. Newcastle-upon-
	Tyne: Cambridge Scholars Publishing.
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Edited Volumes

In press	Robinson, E., Harris, S., Codding, B.F. (Eds.) Cultural Landscapes and Long-
	Term Human Ecology. New York: Springer.
2018	Robinson, E., Sellet, F. (Eds.) Lithic Technological Organization and
	Paleoenvironmental Change: Global and Diachronic Perspectives. New York:
	Springer.
2011	Hadjikoumis, A., Robinson, E., Viner, S. (Eds.) Dynamics of Neolithisation in
	Europe: Studies in Honour of Andrew Sherratt. Oxford: Oxbow Press.

TEACHING EXPERIENCE

Boise State University

ANTH 103 Introduction to Archaeology ANTH 312 Archaeology of North America ANTH 316/516 Evolution of Human Technology ANTH 402 Geoarchaeology ANTH 490 Archaeology Field School ANTH 503 History and Theory in Anthropology ANTH 513 Research Design in Anthropology

Utah State University

ANTH 4800/ENVS 4610 Anthropological Perspectives on Conservation ANTH 5300/6300 Archaeological Field School ANTH 6360 Research Design and Quantitative Methods in Archaeology

University of Wyoming

ANTH 1450 World Archaeology ANTH 4020/5005 Archaeometry

GRANTS AND EXTERNAL CONTRACTS

2023 **\$24,000,000.** *iCrews: Idaho Community-engaged Resilience for Energy-Water Systems.* National Science Foundation EPSCoR Program. Work Package Leader.

2021	\$12,577. Dry Creek Rockshelter Archaeometry Project. Private Contract from The
2021	Terteling Company. Principal Investigator (PI). \$288,009. <i>Hydroclimatic Variability and the Evolution of Socioecological</i> <i>Complexity in Dryland Farming Communities.</i> National Science Foundation
2020	Archaeology Program. Co-PI. \$21,000. Chronological modeling for D.H. Thomas, <i>The Central Mountains Archaic: A Great Basin Natural and Culture History</i> . American Museum of Natural History. Co-PI.
2018	\$261,946 . <i>Populating a Radiocarbon Database of North America, Phase III.</i> National Science Foundation Archaeology Program. Senior Scientist.
2018	\$10,000 . <i>Human Paleo-biogeography and the Synchrony of Social-Ecological Systems on Earth</i> . Workshop funding. Past Global Change (PAGES). Co-PI.
2017	\$50,000 . Creating and Updating Site Files and Data Input for Archaeological Sites Located within Dinosaur National Monument. Dinosaur National Monument and Colorado Plateau Cooperative Ecosystems Study Unit. Co-PI.
2017	\$10,000 . Developing the Capacity for In-Field and Non-Destructive Analysis of Wyoming's Cultural Heritage. Wyoming Cultural Trust Fund. PI.
2017	\$15,000 . <i>Developing an Archaeometry Laboratory at the University of Wyoming.</i> University of Wyoming Office of Research and Economic Development Seed Grant. PI.
2017	\$2,500 . <i>Matching Funds for a New In-Field and Non-Destructive Chemical Analysis Instrument in the Department of Anthropology at the University of Wyoming</i> . George C. Frison Institute. PI.
2017	\$1,500 . Radiocarbon Dating Cultural Occupations from Two Rockshelters in the Canyon Creek Watershed, Bighorn Mountains, WY. George C. Frison Institute. PI.
2017	\$2,000 . Holocene Climate Change and Upland Settlement Strategies in the Bighorn Mountains: The Canyon Creek Project. Fund for Wyoming Archaeology.
2016	\$261,946 . <i>Populating a Radiocarbon Database of North America, Phase II.</i> National Science Foundation Archaeology Program. Senior Scientist.
2016	\$2,000 . <i>Starch Grain Analysis on Ground Stone Assemblages in Wyoming</i> . George C. Frison Institute for Archaeology and Anthropology. PI.
2016	\$1,196 . Radiocarbon Dating Two Stratified Rockshelters in the Montane Zone of the Southern Bighorn Mountains. George C. Frison Institute for Archaeology and Anthropology. PI.
2016	\$12,000 . Assessing the Potential for Cryptotephra Research in the Western US. Roy J. Shlemon Center for Quaternary Studies Project and Mentoring Award. PI.
2016	\$2,000 . Assessing the Potential for Cryptotephra Research in the Rockies and High Plains. George C. Frison Institute for Archaeology and Anthropology. PI.
2014	\$20,000 . Cultural and Paleoenvironmental Changes in Late Glacial to Middle Holocene Europe—Gradual or Sudden? International Union for Quaternary Research (INQUA) Project Funding. Co-PI.
2011	\$230,000 . Exchange Networks and Ecological Change in Early Holocene Northwest Europe. Ghent University Special Research Fellowship. PI.
2010	\$36,000. Long Distance Raw Material Distribution During the Mesolithic in the North Sea Basin. Belgian-American Educational Foundation Postdoctoral Fellowship. PI.

INVITED PRESENTATIONS

- 2021 A Fremont Irrigation System in Dinosaur National Monument. Plenary Presentation, Great Basin Archaeological Conference, Las Vegas, NV. 11-16-2021.
- 2021 Macro-history of Indigenous demography in the pre-Hispanic greater Southwest. Crow Canyon Archaeological Center, Cortez, CO. 02-04-2021.
- 2018 Radiocarbon big data and Holocene population dynamics in the Great Basin. Plenary Presentation, Great Basin Archaeological Conference, Salt Lake City, UT. 11-08-2018.
- 2018 Radiocarbon records, human paleo-biogeography, and the sustainability of human societies. University of Oslo, Museum of Cultural History. 09-17-2018.
- 2016 Population growth in forager and agricultural societies. University of Utah. 11-12-2018.

SELECTED CONFERENCE ACTIVITY/PARTICIPATION

Selected Conferences/Symposia Organized

- 2019 Global perspectives on climate-human population dynamics during the Late Holocene. Co-organized with J. Freeman, J. Capriles, C. Latorre. Society for American Archaeology Annual Meeting, Albuquerque, NM, April 10-14.
- 2017 Frison Institute Symposium: The future of 'big data' in archaeology. Co-organized with R.L. Kelly, N. Naudinot. Society for American Archaeology Annual Meeting, Vancouver, March 29-April 2.
- 2016 Human adaptations to Lateglacial and early Holocene climate and environmental changes: towards a trans-Atlantic perspective. Co-organized with J.A.M. Gingerich, D.S. Miller, F. Riede. Society for American Archaeology Annual Meeting, Orlando, USA, April 6-10.
- 2013 Lithic Technological Organization and Paleoenvironmental Change. Co-organized with F. Sellet. Society for American Archaeology Annual Meeting, Honolulu, USA, April 3-7.

Selected Papers Presented

- 2021 Thomas, D.H., Robinson, E., Camp, A. Time traps: Secular and sacred syncopation in the Lahontan Basin. Great Basin Anthropological Conference, Las Vegas, NV, October 13-16.
- 2021 Finley, J.B., Robinson, E. A Fremont irrigation system in Cub Creek, Dinosaur National Monument. Great Basin Anthropological Conference, Las Vegas, NV, October 13-16.
- 2019 Robinson, E., Bocinsky, R.K., Freeman, J. Bird, D., Kelly, R.L. Dendrochronological dates confirm a Late Prehistoric population decline in the American Southwest derived from radiocarbon dates. Society for American Archaeology Meeting, Albuquerque, NM, April 10-14.
- 2018 Late Holocene climate change and human demography in the American Southwest: a view from the 'periphery'. With C. Nicholson, R.L. Kelly. 16th Southwest Symposium. Denver, Jan. 4-6.
- 2017 The challenges and prospects of developing radiocarbon 'big data' for the study of prehistoric demography. With R.L. Kelly. Society for American Archaeology Annual Meeting, Vancouver, March 29-April 2.
- 2016 Holocene climate change and human population growth rates. With H.J. Zahid, B.N. Shuman, R.L. Kelly. Society for American Archaeology Annual Meeting, Orlando, USA, April 6-10.

- 2014 Climate change archaeology in the southern North Sea basin. With P. Crombé. Society for American Archaeology Annual Meeting, Austin, TX, April 23-27.
- 2013 Radiocarbon dates as demographic proxies in neolithisation models of northwestern Europe: A case study from Belgium and northeast France. With P. Crombé. Society for American Archaeology Annual Meeting, Honolulu, USA, April 3-7.

PROFESSIONAL SERVICE AND ORGANIZATION OF SCIENTIFIC NETWORKS

Committee Member, Society for American Archaeology Task Force of Sharing Public Outcomes of CRM Project Leader, PEOPLE 3000 (PalEOclimate and the PeopLing of the Earth), PAGES (Past Global Changes) Working Group, 2017-2020. http://www.pastglobalchanges.org/ini/wg/arctic2k/170-initiatives/working-group/people-3000/1732-people-3000 Elected committee member, 2015-2019, Humans and Biosphere Commission, International Union for Quaternary Research (INQUA) Early Career Researcher Committee, 2015-2019, International Union for Quaternary Research (INQUA) Project Leader, Humans and Biosphere Commission, International Union for Quaternary Research (INQUA), 2014-2017, http://www.inqua.org/habcom/projects/1404.html Reviewer for Science, Nature, PNAS, American Antiquity, Quaternary International, Journal of Archaeological Science, Germania, National Science Foundation, Polish Science Foundation, Irish Research Council.

UNIVERSITY SERVICE

2021-2022. Faculty Advisor. BSU Students' Association of Anthropology and Archaeology.

2021-2022. BSU School of the Environment Development Committee.

2021-2022. Internship Coordinator. BSU Department of Anthropology.

2021-2022. BSU Anthropology Seminar Series Coordinator.

PUBLIC MEDIA

2018 "Study shows synchronous human energy consumption of the past 10,000 years." <u>https://phys.org/news/2018-09-synchronous-human-energy-consumption-years.html</u> 2016 Wyoming Public Radio. "Study Says 'Agricultural Revolution' May Not Have Been So Revolutionary For Human Population Growth", <u>http://wyomingpublicmedia.org/post/study-says-agricultural-revolution-may-not-have-</u> been-so-revolutionary-human-population-growth