

# R. Kyle Bocinsky, PhD, RPA

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## Contact Information

Montana Climate Office  
University of Montana  
Missoula, MT 59812

**phone** (770) 362-6659  
**email** kyle.bocinsky@umontana.edu  
**ORCID** 0000-0003-1862-3428

## Research Interests

*human dimensions of climate change • computational social science • paleo-environments  
complex systems • plant and animal domestication • Indigenous ecologies • reproducibility*

## Education

**Washington State University**, Pullman, Washington  
PhD, Anthropology, December 2014  
Dissertation title: *Landscape-based Null Models for Archaeological Inference*  
Committee: Timothy Kohler (chair), Jade d'Alpoim Guedes, Andrew Duff, and Colin Grier  
  
MA, Anthropology, May 2011  
Thesis title: *Is a Bird in Hand Really Worth Two in the Bush? Models of Domestication on the Colorado Plateau*  
Committee: Timothy Kohler (chair), Andrew Duff, Donna Glowacki, and Brian Kemp  
  
**University of Notre Dame**, Notre Dame, Indiana  
Glynn Family Honors Program, 2004–2008  
BA, Anthropology, May 2008  
Thesis title: *Rodent Stable Carbon-isotope Ratios as a Measure of Maize Production*  
Advisor: Mark Schurr

## Appointments

**University of Montana**, Missoula, Montana  
Jul 2022–Present Assistant Research Professor,  
Department of Society and Conservation,  
W.A. Franke College of Forestry and Conservation  
Jan 2021–Present Director of Climate Extension, Montana Climate Office  
Aug 2020–Dec 2020 Research Affiliate, Montana Climate Office  
Jan 2018–Jul 2020 Research Associate, Montana Climate Office  
  
**Crow Canyon Archaeological Center**, Cortez, Colorado  
Jan 2021–Present Research Associate  
Aug 2018–Dec 2020 Director of the Research Institute  
William D. Lipe Chair in Research  
Jan 2017–July 2018 Research Associate  
Jan 2016–Dec 2016 Director of Sponsored Projects  
  
**Desert Research Institute**, Reno, Nevada  
June 2017–Present Hourly Assistant Research Professor,  
Division of Earth and Ecosystem Sciences  
  
**Washington State University**, Pullman, Washington  
Jan 2016–Dec 2020 Adjunct Research Faculty, Department of Anthropology  
Jan 2015–Dec 2015 Post-doctoral Researcher, Department of Anthropology  
Aug 2014–Dec 2014 Teaching Assistant, Department of Anthropology  
Aug 2009–Jul 2014 Research Fellow, Department of Anthropology  
Aug 2008–Jul 2009 Research Assistant, Department of Anthropology

## Grants

2023– 2026	<p><b>PI, Enhancing Climate-smart Disaster Relief in FSA Programs: Non-stationarity at the Intersection of Normal Grazing Periods and US Drought Assessment</b></p> <p><b>Program:</b> United States Department of Agriculture, Agricultural Research Service, <i>Research, Education, and Economics</i></p> <p><b>Award:</b> 58-3070-3-016</p> <p><b>Amount:</b> \$225,000 awarded to UM</p>
2023– 2025	<p><b>Co-I, Upper Missouri River Basin Project: Plains Snow and Soil Moisture Monitoring Network – Operations and Maintenance</b></p> <p><b>Program:</b> National Oceanic &amp; Atmospheric Administration, National Mesonet Program</p> <p><b>Award:</b> 1305M223PNWWG0302</p> <p><b>Amount:</b> \$1,696,229 awarded to UM</p> <p><b>PI:</b> Kelsey Jencso, University of Montana</p>
2023– 2024	<p><b>Co-PI (UM PI), Collaborative Research: HNDS-R: Human Networks, Sustainable Development, and Lived Experience in a Nonindustrial Society</b></p> <p><b>Program:</b> National Science Foundation, Division of Behavioral and Cognitive Sciences, Directorate for Social, Behavioral &amp; Economic Sciences, <i>Human Networks &amp; Data Science – Research</i></p> <p><b>Award:</b> 2212725</p> <p><b>Amount:</b> \$498,706 total, \$25,393 awarded to UM</p> <p><b>PI:</b> Scott Ortman, University of Colorado, Boulder</p>
2023– 2024	<p><b>PI, Native Drought Resilience: CSKT Actions for Climate-Drought Adaptation</b></p> <p><b>Program:</b> National Oceanic &amp; Atmospheric Administration, National Integrated Drought Information System, <i>Coping with Drought – Building Tribal Drought Resilience</i></p> <p><b>Award:</b> NA22OAR4310232</p> <p><b>Amount:</b> \$498,194 awarded to UM, including sub-awards to the Confederated Salish and Kootenai Tribes of the Flathead Reservation and Salish Kootenai College</p>
2022– 2023	<p><b>PD, Disaster Resilience Planning Assistance and Hazard Mitigation Planning Fort Peck Assiniboine and Sioux Tribes</b></p> <p><b>Program:</b> Environmental Protection Agency, <i>Pre Disaster Mitigation Grant Program; American Rescue Plan</i></p> <p><b>Award:</b></p> <p><b>Amount:</b> \$40,000 awarded to UM through MOU with Spackman Massop Michaels</p>
2022– 2027	<p><b>Co-PD (UM PD), Native Climate: Strengthening the role of Climate Hubs in Indian Country</b></p> <p><b>Program:</b> United States Department of Agriculture, National Institute of Food and Agriculture, <i>Extension, Education &amp; USDA Climate Hubs Partnership</i></p> <p><b>Award:</b> 2022-68015-36357</p> <p><b>Amount:</b> \$1,500,000 total, \$291,981 awarded to UM</p> <p><b>PD:</b> Maureen McCarthy, Desert Research Institute</p>
2022– 2023	<p><b>Co-I, Developing the NIDIS Drought Early Warning System for the Upper Missouri River Basin</b></p> <p><b>Program:</b> National Oceanic &amp; Atmospheric Administration, National Integrated Drought Information System, <i>Climate and Atmospheric Research</i></p> <p><b>Award:</b> NA21OAR4310473</p> <p><b>Amount:</b> \$344,568 awarded to UM</p> <p><b>PI:</b> Kelsey Jencso, University of Montana</p>

- 2021–  
2023 **Co-PD (UM PD), TCU Missouri River Watershed Consortium**  
**Program:** United States Department of Agriculture, National Institute of Food and Agriculture, *Tribal Colleges Research Grants Program*  
**Award:** 2021-38424-34953  
**Amount:** \$220,000 total, \$64,508 awarded to UM  
**PD:** Ruth Plenty Sweetgrass-She Kills, Nueta Hidatsa Sahnish College
- 2021–  
2023 **Co-PD (UM PD), All Climate is Local: 'Multiple ways of knowing' to enhance resilience of tribal agroecosystems to droughts, floods, and rising temperatures**  
**Program:** United States Department of Agriculture, National Institute of Food and Agriculture  
**Award:** 2021-67019-33420  
**Amount:** \$49,998 awarded to DRI  
**PD:** Maureen McCarthy, Desert Research Institute
- 2020–  
2023 **Co-PD, COVID-19 Rapid Response Toolkit for Tribal Extension Agents**  
**Program:** United States Department of Agriculture, National Institute of Food and Agriculture  
**Award:** 2020-68008-32762  
**Amount:** \$300,000 awarded to DRI/CCAC  
**PD:** Maureen McCarthy, Desert Research Institute
- 2020–  
2022 **Co-PD, Teaching Native Waters: Place-based Community of Practice for STEM Teachers Serving Native American Students**  
**Program:** United States Department of Agriculture, National Institute of Food and Agriculture, *Women and Minorities in Science, Technology, Engineering, and Mathematics* (WAMS) program  
**Award:** 2020-38503-31952  
**Amount:** \$99,998 awarded to DRI  
**PD:** Meghan Collins, Desert Research Institute
- 2019–  
2022 **Project Manager, The Maize Database Project**  
**Program:** History Colorado — State Historical Fund  
**Award:** 2019-M2-001  
**Amount:** \$34,912 awarded to CCAC  
**PI:** Mark Varien, Crow Canyon Archaeological Center
- 2018–  
2022 **Co-PD, Improving the Efficacy of Climate Information for Water Use Decisions: Developing, Testing, and Institutionalizing New Tools for Producers**  
**Program:** United States Department of Agriculture, National Institute of Food and Agriculture, Agriculture and Food Research Initiative program area special competition, *Water for Agriculture: Understanding Decisions and Behaviors Connected with Agriculture and Post-harvest Processing Industry Water Use*  
**Award:** 2017-67027-26313  
**Amount:** \$462,539 awarded to UM  
**PD:** Laurie Yung, University of Montana
- 2016–  
2022 **Co-PI, Developing and Deploying SKOPE—A resource for Synthesizing Knowledge of Past Environments**  
**Program:** National Science Foundation special competition, *Resource Implementations for Data Intensive Research in the Social Behavioral and Economic Sciences*  
**Award:** 1637171  
**Amount:** \$1,339,658 total, \$254,189 awarded to WSU/CCAC  
**PI:** Tim Kohler, Washington State University

Awards & Scholarships	2015–2022	<p><b>Co-PD, Native Waters on Arid Lands: Enhancing Climate Resiliency &amp; Agriculture on American Indian Land</b></p> <p><b>Program:</b> United States Department of Agriculture, National Institute of Food and Agriculture, Agriculture and Food Research Initiative program area special competition, <i>Water for Agriculture</i></p> <p><b>Award:</b> 2015-69007-23190</p> <p><b>Amount:</b> \$2,516,844 awarded to the University of Nevada, Reno</p> <p><b>PD:</b> Maureen McCarthy, University of Nevada, Reno</p>
	2010–2015	<p><b>Fellow, NSF Graduate Research Fellowship Program</b></p> <p><b>Program:</b> National Science Foundation</p> <p><b>Award:</b> 1347973</p> <p><b>Amount:</b> \$92,000 stipend and \$32,000 cost-of-education allowance over three years</p> <p><b>PI:</b> Tim Kohler, Washington State University</p>
	2009–2011	<p><b>Trainee, IGERT Program in Evolutionary Modeling</b></p> <p><b>Program:</b> National Science Foundation</p> <p><b>Award:</b> 0549425</p> <p><b>Amount:</b> \$60,000 stipend and \$20,000 cost-of-education allowance over two years</p> <p><b>PI:</b> Tim Kohler, Washington State University</p>
	2022	<p><b>Presidential Recognition Award</b>, Society for American Archaeology</p> <p>Awarded to members of the SAA Bylaws Committee (on which Bocinsky served) for their thorough and thoughtful work updating the SAA Bylaws, the foundation of the Society's governing documents</p>
	2015	<p><b>Cordell Prize</b>, Pecos Conference, Mancos, Colorado</p> <p>Awarded for the best extemporaneous talk presented by an archaeologist 35 years of age or younger</p>
	2014	<p><b>Graduate Achievement Award in the Social Sciences at the Doctoral Level</b>, College of Arts and Sciences, Washington State University</p> <p>Awarded to a doctoral student for outstanding academic performance, achievements in research, scholarly, and/or creative activity, and contributions or service to the social sciences, the college and the institution during their advanced degree studies at Washington State University</p>
	2013	<p><b>R.E. Taylor Student Poster Award</b>, Society for Archaeological Science</p> <p>Awarded for the best student research poster presented at the Society for American Archaeology meetings displaying innovative contributions to archaeological research through the use of scientific methods</p>
	2011	<p><b>Elaine Burgess Graduate Fellowship in Anthropology</b>, Department of Anthropology, Washington State University</p> <p>Awarded to a graduate student of outstanding professional promise in anthropology without consideration of subfield</p>
	2009	<p><b>Nicholas Michael Scoales Scholarship in Archaeology</b>, Department of Anthropology, Washington State University</p> <p>Awarded to provide research support for an outstanding graduate student in archaeology specializing in analysis of lithic artifacts or in western North American prehistory</p>
	2008	<p><b>The Rev. Raymond W. Murray, C.S.C. Award in Anthropology</b>, Department of Anthropology, University of Notre Dame</p> <p>Awarded to the top graduating senior for exemplary work in anthropology</p>

Peer-reviewed  
Articles  
open access


- 2024 Snitker, Adam J., Laurie Yung, Elizabeth Covelli Metcalf, **R. Kyle Bocinsky**, Neva Hassanein, Kelsey Jencso, Ada P. Smith, Austin Schuver  
How agricultural producers use local knowledge, climate information, and on-farm “experiments” to address drought risk. *Agriculture and Human Values*.  
DOI: <https://doi.org/10.1007/s10460-024-10582-3>
- 2024 Hoylman, Zachary H., Zach Holden, **R. Kyle Bocinsky**, David Ketchum, Alan Swanson, and Kelsey Jencso  
Optimizing Drought Assessment for Soil Moisture Deficits. *Water Resources Research* 60(6): e2023WR036087.  
DOI: <https://doi.org/10.1029/2023WR036087>
- 2024 Bird, Darcy, **R. Kyle Bocinsky**, Kelsey M. Reese and Timothy A. Kohler  
Settlement persistence in the prehispanic central Mesa Verde Region: A dynamic analysis. *Journal of Archaeological Science: Reports* 56: 104515.  
DOI: <https://doi.org/10.1016/j.jasrep.2024.104515>  
Code: <https://github.com/darcybird/settlement-persistence-in-CMV>
- 2024 Gillreath-Brown, Andrew D., **R. Kyle Bocinsky**, and Timothy A. Kohler  
A low-frequency summer temperature reconstruction for the United States Southwest, 3000 BC–AD 2000. *The Holocene*, online first.  
DOI: <https://doi.org/10.1177/09596836231219482>  
Code: <https://github.com/Archaeo-Programmer/paleoMAT>
- 2023 Kohler, Timothy A., Darcy Bird, **R. Kyle Bocinsky**, Kelsey Reese and Andrew D. Gillreath-Brown  
Wealth inequality in the prehispanic northern US Southwest: from Malthus to Tyche. *Philosophical Transactions of the Royal Society B* 378: 1883.  
DOI: <https://doi.org/10.1098/rstb.2022.0298>  
Code: [https://github.com/village-ecodynamics/kohler\\_et\\_al\\_2023\\_ptrsb](https://github.com/village-ecodynamics/kohler_et_al_2023_ptrsb)
- 2022 Hoylman, Zachary Harwood, **R. Kyle Bocinsky**, and Kelsey G. Jencso  
Drought assessment has been outpaced by climate change: Empirical arguments for a paradigm shift. *Nature Communications* 13: 2715.  
DOI: <https://doi.org/10.1038/s41467-022-30316-5>  
Code: <https://github.com/zhoylman/drought-year-sensitivity>
- 2022 Bird, Darcy, Lux Miranda, Marc Vander Linden, Erick Robinson, **R. Kyle Bocinsky**, Christopher Nicholson, José Capriles, Judson Finley, Eugenia Gayo, Adolfo Gil, Jade d’Alpoim Guedes, Julie Hoggarth, Andrea Kay, Emma Loftus, Umberto Lombardo, Madeline Mackie, Dr Alessio Palmisano, Dr Steinar Solheim, Robert Kelly, and Jacob Freeman  
p3k14c, a synthetic global database of archaeological radiocarbon dates. *Scientific Data* 9: 27.  
DOI: <https://doi.org/10.1038/s41597-022-01118-7>  
Code: <https://github.com/people3k/p3k14c>
- 2021 Price, Michael Holton, José M. Capriles, Julie A. Hoggarth, **R. Kyle Bocinsky**, Claire E. Ebert, and James Holland Jones  
End-to-end Bayesian analysis for summarizing sets of radiocarbon dates. *Journal of Archaeological Science* 135: 105473.  
DOI: <https://doi.org/10.1016/j.jas.2021.105473>  
Code: <https://github.com/eehh-stanford/price2020>

- 2021 Alam, Ornob, Rafal M. Gutaker, Cheng-chieh Wu, Karen A. Hicks, **R. Kyle Bocinsky**, Cristina Cobo Castillo, Stephen Acabado, Dorian Fuller, Jade A. d'Alpoim Guedes, Yue-ie Hsing, and Michael D. Purugganan  
Genome analysis traces regional dispersal of rice in Taiwan and Southeast Asia. *Molecular Biology and Evolution*: msab209.  
DOI: <https://doi.org/10.1093/molbev/msab209>
- 2021 Scheffer, Marten, Egbert H. van Nes, Darcy Bird, **R. Kyle Bocinsky**, and Timothy A. Kohler  
Loss of resilience preceded transformations of pre-Hispanic Pueblo societies. *Proceedings of the National Academy of Sciences* 118(18): e2024397118.  
DOI: <https://doi.org/10.1073/pnas.2024397118>
- 2021 Smith, Ada P., Laurie Yung, Adam Snitker, **R. Kyle Bocinsky**, Elizabeth Covelli Metcalf, and Kelsey Jencso  
Scalar mismatches and underlying factors for underutilization of climate information: Perspectives from farmers and ranchers. *Frontiers in Climate* 3: 29 pages.  
DOI: <https://doi.org/10.3389/fclim.2021.663071>
- 2021 Robinson, Erick, **R. Kyle Bocinsky**, Darcy Bird, Jacob Freeman, and Robert L. Kelly  
Dendrochronological dates confirm a Late Prehistoric population decline in the American Southwest derived from radiocarbon dates. *Philosophical Transactions of the Royal Society B* 376: 20190718.  
DOI: <https://doi.org/10.1098/rstb.2019.0718>  
Code: <https://github.com/people3k/robinson2020>
- 2020 Strawhacker, Colleen, Grant Snitker, Matthew A. Peeples, Ann P. Kinzig, Keith W. Kintigh, **R. Kyle Bocinsky**, Brad Butterfield, Jacob Freeman, Sarah Oas, Margaret C. Nelson, Jonathan A. Sandor, Katherine A. Spielmann  
A landscape perspective on climate-driven risks to food security: Exploring the relationship between climate and social transformations in the Prehispanic U.S. Southwest. *American Antiquity* 85(3): 427–451.  
DOI: <https://doi.org/10.1017/aaq.2020.35>  
Code: <https://github.com/gsnitker/LTVTP>
- 2020 Gutaker, Rafal M., Simon C. Groen, Emily S. Bellis, Jae Y. Choi, Inês S. Pires, **R. Kyle Bocinsky**, Emma R. Slayton, Olivia Wilkins, Cristina C. Castillo, Sónia Negrão, M. Margarida Oliveira, Dorian Q. Fuller, Jade A. d'Alpoim Guedes, Jesse R. Lasky, and Michael D. Purugganan  
Genomic history and ecology of the geographic spread of rice. *Nature Plants* 6: 492–502.  
DOI: <https://doi.org/10.1038/s41477-020-0659-6>  
Code: <https://github.com/bocinsky/gutaker2020>
- 2019 Grimstead, Deanna N., Matthew C. Pailles, and **R. Kyle Bocinsky**  
Refining potential source regions via combined maize niche modeling and isotopes: A case study from Chaco Canyon, NM, USA. *Journal of Archaeological Method and Theory* 26(1): 25–51.  
DOI: <https://doi.org/10.1007/s10816-017-9359-6>

- 2018 Kohler, Timothy A., Philip I. Buckland, Keith W. Kintigh, **R. Kyle Bocinsky**, Adam Brin, Andrew Gillreath-Brown, Bertram Ludäscher, Timothy M. McPhillips, Rachel Opitz, and Jeffrey Terstriep  
Paleodata for and from archaeology. *Past Global Changes Magazine* 26(2): 68–69.  
DOI: <https://doi.org/10.22498/pages.26.2.68>
- 2018 d’Alpoim Guedes, Jade, and **R. Kyle Bocinsky**  
Climate change stimulated agricultural innovation and exchange across Asia. *Science Advances* 4(10): eaar4491.  
DOI: <https://doi.org/10.1126/sciadv.aar4491>  
Code: <https://github.com/bocinsky/guedesbocinsky2018>
- 2017 d’Alpoim Guedes, Jade and **R. Kyle Bocinsky**  
A reply to Bellezza. *Current Anthropology* 58(4): 539–539.  
DOI: <https://doi.org/10.1086/692996>
- 2017 **Bocinsky, R. Kyle** and Mark D. Varien  
Calibrating Maize Paleoproduction Models using Experimental Data. *Ethnobiology* 37(2): 282–307.  
DOI: <https://doi.org/10.2993/0278-0771-37.2.282>  
Code: [https://github.com/bocinsky/Bocinsky\\_Varien\\_2017](https://github.com/bocinsky/Bocinsky_Varien_2017)
- 2017 Gillreath-Brown, Andrew and **R. Kyle Bocinsky**  
A Dialogue Between Empirical and Model-Based Agricultural Studies in Archaeology. *Ethnobiology* 37(2): 167–171.  
DOI: <https://doi.org/10.2993/0278-0771-37.2.167>  
Code: [https://github.com/bocinsky/Bocinsky\\_Varien\\_2017](https://github.com/bocinsky/Bocinsky_Varien_2017)
- 2017 Crabtree, Stefani A., **R. Kyle Bocinsky**, Paul L. Hooper, Susan C. Ryan, and Timothy A. Kohler  
How to make a polity (in the central Mesa Verde region). *American Antiquity* 82(1): 71–95.  
DOI: <https://doi.org/10.1017/aaq.2016.18>
- 2016 d’Alpoim Guedes, Jade, Stefani A. Crabtree, **R. Kyle Bocinsky**, and Timothy A. Kohler  
21<sup>st</sup> century approaches to ancient problems: Climate and society. *Proceedings of the National Academy of Sciences* 113(51): 14483–14491.  
DOI: <https://doi.org/10.1073/pnas.1616188113>
- 2016 d’Alpoim Guedes, Jade, Sturt Manning, and **R. Kyle Bocinsky**  
A 5,500-year model of changing crop niches on the Tibetan Plateau. *Current Anthropology* 57(4): 6 pages.  
DOI: <https://doi.org/10.1086/687255>
- 2016 Van Dyke, Ruth M., **R. Kyle Bocinsky**, Tucker Robinson, and Thomas C. Windes  
Great houses, shrines, and high places: Intervisibility in the Chacoan World. *American Antiquity* 81(2): 205–230.  
DOI: <https://doi.org/10.7183/0002-7316.81.2.205>  
Code: [https://github.com/bocinsky/VanDyke\\_et\\_al\\_2016](https://github.com/bocinsky/VanDyke_et_al_2016)

- 2016 **Bocinsky, R. Kyle**, Johnathan Rush, Keith W. Kintigh, and Timothy A. Kohler  
Exploration and exploitation in the macrohistory of the pre-Hispanic Pueblo Southwest. *Science Advances* 2(4): e1501532.  
DOI: <https://doi.org/10.1126/sciadv.1501532>  
Code: [https://github.com/bocinsky/Bocinsky\\_et\\_al\\_2016](https://github.com/bocinsky/Bocinsky_et_al_2016)
- 2016 Schwindt, Dylan M., **R. Kyle Bocinsky**, Scott G. Ortman, Donna M. Glowacki, Mark D. Varien, and Timothy A. Kohler  
The social consequences of climate change in the Central Mesa Verde region. *American Antiquity* 81(1): 74–96.  
DOI: <https://doi.org/10.7183/0002-7316.81.1.74>
- 2016 Lipe, William D., **R. Kyle Bocinsky**, Brian S. Chisholm, Robin Lyle, David M. Dove, RG Matson, Elizabeth Jarvis, Kathleen Judd, and Brian M. Kemp  
Cultural and genetic contexts for early turkey domestication in the northern Southwest. *American Antiquity* 81(1): 97–113.  
DOI: <https://doi.org/10.7183/0002-7316.81.1.97>
- 2015 d'Alpoim Guedes, Jade, Guiyun Jin, and **R. Kyle Bocinsky**  
The impact of climate on the spread of rice to North-eastern China: A new look at the data from Shandong Province. *PLoS ONE*. 30 June 2015.  
DOI: <https://doi.org/10.1371/journal.pone.0130430>
- 2015 d'Alpoim Guedes, Jade, **R. Kyle Bocinsky**, and Ethan E. Butler  
Comment on "Agriculture facilitated permanent occupation of the Tibetan Plateau after 3600 B.P." *Science* 348: 872.  
DOI: <https://doi.org/10.1126/science.aaa4819>
- 2015 McPhillips, Timothy, Tianhong Song, Tyler Kolisni, Steve Aulenbach, Khalid Belhajjame, **R. Kyle Bocinsky**, Yang Cao, James Cheney, Fernando Chirigati, Saumen Dey, Juliana Freire, Christopher Jones, James Hanken, Keith W. Kintigh, Timothy A. Kohler, David Koop, James A. Macklin, Paolo Missier, Mark Schildhauer, Christopher Schwalm, Yaxing Wei, Mark Bieda, Bertram Ludäscher  
YesWorkflow: A User-Oriented, Language-Independent Tool for Recovering Workflow Information from Scripts. *International Journal of Digital Curation* 10(1): 298–313.  
DOI: <https://doi.org/10.2218/ijdc.v10i1.370>
- 2014 **Bocinsky, R. Kyle** and Timothy A. Kohler  
A 2,000-year reconstruction of the rain-fed maize agricultural niche in the US Southwest. *Nature Communications* 5: 5618.  
DOI: <https://doi.org/10.1038/ncomms5618>
- 2014 **Bocinsky, R. Kyle**  
Extrinsic site defensibility and landscape-based archaeological inference: An example from the Northwest Coast. *Journal of Anthropological Archaeology* 35: 164–176.  
DOI: <https://doi.org/10.1016/j.jaa.2014.05.003>  
Code: [https://github.com/bocinsky/Bocinsky\\_2014](https://github.com/bocinsky/Bocinsky_2014)



-  2013 Cockburn, Denton, Stefani A. Crabtree, Ziad Kobti, Timothy A. Kohler, and **R. Kyle Bocinsky** Simulating Social and Economic Specialization in Small-scale Agricultural Societies. *Journal of Artificial Societies and Social Simulation* 16(4): 4.  
DOI: <https://doi.org/10.18564/jasss.2308>
- 2012 Kohler, Timothy A., **R. Kyle Bocinsky**, Denton Cockburn, Mark D. Varien, Stefani A. Crabtree, Kenneth E. Kolm, Shaun M. Smith, and Scott G. Ortman Modelling Prehispanic Pueblo Societies in their Ecosystems. *Ecological Modelling* 241: 30–41.  
DOI: <https://doi.org/10.1016/j.ecolmodel.2012.01.002>
- 2012 Kohler, Timothy A., Denton Cockburn, Paul L. Hooper, **R. Kyle Bocinsky** and Ziad Kobti The coevolution of group size and leadership: An agent-based public goods model for Prehispanic Pueblo societies. *Advances in Complex Systems* 15(1–2): 29 pages.  
DOI: <https://doi.org/10.1142/S0219525911003256>
- Book Contributions**  
\* peer-reviewed
- \* 2023 Ermigiotti, Paul, Mark D. Varien, Grant D. Coffey, **R. Kyle Bocinsky**, Leigh Kuwanwisiwma, and Stewart B. Koyiyumptewa The Pueblo Farming Project: Research, Education, and Native American Collaboration. In *Research, Education and American Indian Partnerships at the Crow Canyon Archaeological Center*, edited by Susan C. Ryan, Chapter 4, pp. 53–71. Routledge, New York.  
DOI: <https://doi.org/10.5876/9781646424597>
- \* 2023 Potter, James M., Mark D. Varien, Grant D. Coffey, and **R. Kyle Bocinsky** Community Organization on the Edge of the Mesa Verde Region: Recent Investigations at Cowboy Wash Pueblo, Moqui Springs Pueblo, and Yucca House. In *Research, Education and American Indian Partnerships at the Crow Canyon Archaeological Center*, edited by Susan C. Ryan, Chapter 13, pp. 204–221. Routledge, New York.  
DOI: <https://doi.org/10.5876/9781646424597>
- \* 2023 Kohler, Timothy A., **R. Kyle Bocinsky**, and Darcy Bird *Fluctuat nec mergitur*: Seven Centuries of Pueblo Crisis and Resilience. In *How Worlds Collapse: What History, Systems, and Complexity Can Teach Us About Our Modern World and Fragile Future*, edited by Miguel A. Centeno, Peter W. Callahan, Paul Laracey, and Thayer Patterson, Chapter 4, pp. 146–166. Routledge, New York.  
DOI: <https://doi.org/10.4324/9781003331384-11>
- \* 2021 Schachner, Gregson, Joel Nicholas, R. J. Sinensky, and **R. Kyle Bocinsky** The sustainability of Hopi agriculture. In *Becoming Hopi: A History*, edited by Wesley Bernardini, Stewart Koyiyumptewa, Gregson Schachner, and Leigh Kuwanwisiwma, pp. 113–132. University of Arizona Press, Tucson.  
HTML: <https://uapress.arizona.edu/book/becoming-hopi>  
**Winner of the 2022 Society for American Archaeology Scholarly Book Award.**

- \* 2021 Van Dyke, Ruth M., Timothy De Smet, and **R. Kyle Bocinsky**  
 Viewscapes and Soundscapes. In *The Greater Chaco Landscape: Ancestors, Scholarship, and Advocacy*, edited by Ruth Van Dyke and Carrie Heitman, Chapter 11. University Press of Colorado, Boulder.  
 DOI: <https://doi.org/10.5876/9781646421701>  
**Winner of the 2022 Society for American Archaeology Popular Book Award.**  
**Winner of the 2021 American Anthropological Association Engaged Anthropology Award.**
- \* 2020 Kohler, Timothy A., Laura J. Ellyson and **R. Kyle Bocinsky**  
 Beyond One-Shot Hypotheses: Explaining Three Increasingly Large Collapses in the Northern Pueblo Southwest. In *Going forward by Looking Back: Archaeological Perspectives on Socio-Ecological Crisis, Response and Collapse*, edited by Felix Reide and Payson Sheets, pp. 304–332. Berghahn Books, New York.  
 DOI: <https://doi.org/10.3167/9781789208641>
- 2018 Ermigiotti, Paul, Mark Varien, Erin Bohm, **Kyle Bocinsky**, the Hopi Cultural Preservation Office, and the Hopi Cultural Resources Advisory Task Team  
*The Pueblo Farming Project: A collaboration between Hopi farmers and the Crow Canyon Archaeological Center*. Crow Canyon Archaeological Center, Cortez, Colorado.  
 HTML: <https://pfp.crowcanyon.org>
- \* 2018 Kohler, Timothy A., Stefani A. Crabtree, **R. Kyle Bocinsky**, and Paul L. Hooper  
 Sociopolitical Evolution in Midrange Societies: The Prehispanic Pueblo Case. In *The Emergence of Premodern States: New Perspectives on the Development of Complex Societies*, edited by Jeremy A. Sabloff and Paula L.W. Sabloff, pp. 133–186. SFI Press, Santa Fe, New Mexico.  
 HTML: <https://www.sfipress.org/books/emergence-of-premodern-states>
- \* 2017 Kohler, Timothy A. and **R. Kyle Bocinsky**  
 Crises as opportunities for culture change. In *Crisis to Collapse: The Archaeology of Social Breakdown*, edited by Tim Cunningham and Jan Driessen, pp. 263–273. Presses Universitaires de Louvain, Louvain, France.  
 HTML: <https://pul.uclouvain.be/book/?GCOI=29303100293170>
- \* 2016 **Bocinsky, R. Kyle** and Timothy A. Kohler  
 Complexity, rigidity, and resilience in the Ancient Puebloan Southwest. In *Viewing the Future in the Past: Historical Ecology Applications to Environmental Issues*, edited by H. Thomas Foster, II, Lisa Paciulli, and David Goldstein. pp. 86–105. University of South Carolina Press, Columbia, South Carolina.  
 HTML: <https://uscpress.com/Viewing-the-Future-in-the-Past>
- \* 2012 **Bocinsky, R. Kyle**, Jason A. Cowan, Timothy A. Kohler and C. David Johnson  
 Hunting results: How hunting changes the VEP world, and how the VEP world changes hunting. In *Emergence and Collapse of Early Villages: Models of Central Mesa Verde Archaeology*, edited by T.A. Kohler, and M.D. Varien, pp. 145–152. University of California Press, Berkeley.  
 HTML: <https://www.ucpress.edu/ebook/9780520951990/>

- \* 2012 Kohler, Timothy A., **R. Kyle Bocinsky**, Stefani A. Crabtree and Ben Ford  
Supply, Demand, Return Rates, and Resource Depression: Hunting in the Village Ecodynamics World. In *Emergence and Collapse of Early Villages: Models of Central Mesa Verde Archaeology*, edited by T.A. Kohler, and M.D. Varien, pp. 129–144. University of California Press, Berkeley.  
**HTML:** <https://www.ucpress.edu/ebook/9780520951990/>
  
- \* 2012 Cowan, Jason A., Timothy A. Kohler, C. David Johnson, Kevin Cooper and **R. Kyle Bocinsky**  
Exercising the Model: Settlement Efficiency and Changes in Locational Practice. In *Emergence and Collapse of Early Villages: Models of Central Mesa Verde Archaeology*, edited by T.A. Kohler, and M.D. Varien, pp. 153–164. University of California Press, Berkeley.  
**HTML:** <https://www.ucpress.edu/ebook/9780520951990/>

## Technical Reports

\* peer-reviewed

- \* 2024     Hrozencik, Aaron, Gabriela Perez-Quesada, and **Kyle Bocinsky**  
*The Stocking Impact and Financial-Climate Risk of the Livestock Forage Disaster Program*. Report No. ERR-329. U.S. Department of Agriculture, Economic Research Service.  
**HTML:**    <https://www.ers.usda.gov/publications/pub-details/?pubid=108371>
  
- 2023     **Bocinsky, R. Kyle**  
Calculating normal grazing periods using historical nClimGrid-daily data. Montana Climate Office, Missoula, Montana.  
**Code:**    <https://github.com/mt-climate-office/nclimgrid-normal-grazing-period>  
**HTML:**    <https://mt-climate-office.github.io/nclimgrid-normal-grazing-period/>
  
- 2023     Fort Peck Assiniboiné and Sioux Tribes, Spackman Mossop Michaels, and the **Montana Climate Office**  
Hazard Mitigation Plan for the Fort Peck Reservation, Montana. Fort Peck Assiniboiné and Sioux Tribes. August 2023 revision.
  
- 2020     **Bocinsky, R. Kyle**  
Defining Accurate Floating Coordinate Reference Systems for Legacy Crow Canyon Projects. Crow Canyon Archaeological Center, Cortez, Colorado.  
**HTML:**    <https://crowcanyon.github.io/localgrid/articles/floating-grid-trigonometry.html>
  
- 2017     Glowacki, Donna M., **R. Kyle Bocinsky**, Kelsey M. Reese, and Katherine A. Portman  
The Mesa Verde Community Center Survey: Summer 2017. Manuscript submitted to Mesa Verde National Park, on file with Crow Canyon Archaeological Center and the University of Notre Dame.
  
- 2012     Glowacki, Donna M., with contributions by Elise Alonzi, **R. Kyle Bocinsky**, and Kelsey Reese  
The Mesa Verde Community Center Survey: Final Report. Manuscript submitted to the National Science Foundation and Mesa Verde National Park, on file with Crow Canyon Archaeological Center and Washington State University in compliance with deliverable for NSF Grant DEB-0816400.
  
- 2011     Glowacki, Donna M. and **R. Kyle Bocinsky**  
The Mesa Verde Community Center Survey: 2011 Progress Report. Manuscript submitted to the National Science Foundation and Mesa Verde National Park, on file with Crow Canyon Archaeological Center and Washington State University in compliance with deliverable for NSF Grant DEB-0816400.
  
- 2009     Reed, Charles A., **R. Kyle Bocinsky** and Donna M. Glowacki  
Mesa Verde National Park Community Center Survey: Report and Synthesis. Manuscript submitted to the National Science Foundation and Mesa Verde National Park, on file with Crow Canyon Archaeological Center and Washington State University in compliance with deliverable for NSF Grant DEB-0816400.

Other Publications	2020	<b>Bocinsky, R. Kyle</b> Review of <i>The Archaic Southwest: Foragers in an Arid Land</i> , edited by Bradley J. Vierra. <i>Journal of California and Great Basin Anthropology</i> 40(2): 244–245. HTML: <a href="http://malkimuseum.org/wp-content/uploads/2017/02/jcgba_40-2_toc.pdf">http://malkimuseum.org/wp-content/uploads/2017/02/jcgba_40-2_toc.pdf</a>
	2018	<b>Bocinsky, R. Kyle</b> Climate at the Center Place. <i>Archaeology Southwest</i> 32(2–3): 32–33. HTML: <a href="https://www.archaeologysouthwest.org/product/asw32-3/">https://www.archaeologysouthwest.org/product/asw32-3/</a>
	2018	<b>Bocinsky, R. Kyle</b> Skipping stones off improbable histories. <i>The SAA Archaeological Record</i> 18(2): 17–19. HTML: <a href="http://onlinedigeditions.com/publication/?m=16146&amp;i=486133&amp;p=19">http://onlinedigeditions.com/publication/?m=16146&amp;i=486133&amp;p=19</a>
	2018	Marwick, Ben, Jade d’Alpoim Guedes, C Michael Barton, Lynsey A Bates, Michael Baxter, Andrew Bevan, Elizabeth A Bollwerk, <b>R. Kyle Bocinsky</b> , Tom Brughmans, Alison K Carter, Cyler Conrad, Daniel A Contreras, Stefano Costa, Enrico R Crema, Adrienne Daggett, Benjamin Davies, B Lee Drake, Thomas S Dye, Phoebe France, Richard Fullagar, Domenico Giusti, Shawn Graham, Matthew D Harris, John Hawks, Damien Huffer, Eric C Kansa, Sarah Witcher Kansa, Mark E Madsen, Jennifer Melcher, Joan Negre, Fraser D Neiman, Rachel Opitz, David C Orton, Paulina Przstupa, Maria Raviele, Julien Riel-Savatore, Philip Riris, Iza Romanowska, Jolene Smith, Nehemie Strupler, Isaac I Ullah, Hannah G Van Vlack, Nathaniel VanValkenburgh, Ethan C Watrall, Chris Webster, Joshua Wells, Judith Winters, and Colin D Wren Open science in archaeology. <i>The SAA Archaeological Record</i> 17(4): 8–14. HTML: <a href="http://onlinedigeditions.com/publication/?m=16146&amp;i=440506&amp;p=10">http://onlinedigeditions.com/publication/?m=16146&amp;i=440506&amp;p=10</a>
	2014	<b>Bocinsky, R. Kyle</b> Drain your dammed DEMs! Here’s how. <i>Society for Archaeological Sciences Bulletin</i> 37(1): 1–5. HTML: <a href="https://socarchsci.org/bulletin/SAS3701.pdf">https://socarchsci.org/bulletin/SAS3701.pdf</a>
Software * peer-reviewed c on CRAN	*c 2023	<b>Bocinsky, R. Kyle</b> <i>FedData: Functions to Automate Downloading Geospatial Data Available from Several Federated Data Sources</i> . R package version 4.0.0 URL: <a href="https://github.com/bocinsky/FedData">https://github.com/bocinsky/FedData</a>
	*c 2023	Bevan, Andrew, Enrico Crema, <b>R. Kyle Bocinsky</b> , Martin Hinz, Philip Riris, and Fabio Silva <i>rcarbon: Calibration and Analysis of Radiocarbon Dates</i> . R package version 1.5.1 URL: <a href="https://github.com/ahb108/rcarbon">https://github.com/ahb108/rcarbon</a>
	2020	<b>Bocinsky, R. Kyle</b> <i>thredds: Access to THREDDS Servers</i> . R package version 0.0.1 URL: <a href="https://github.com/bocinsky/thredds">https://github.com/bocinsky/thredds</a>
	2022	<b>Bocinsky, R. Kyle</b> <i>mcor: The core Montana Climate Office R package</i> . R package version 0.2.0 URL: <a href="https://github.com/mt-climate-office/mcor">https://github.com/mt-climate-office/mcor</a>

- \* 2021 Price, Michael Holton and **R. Kyle Bocinsky**  
*baydem: Bayesian Tools for Reconstructing Past and Present Demography*. R package version 1.0.0  
URL: <https://github.com/eehh-stanford/baydem>
- 2019 **Bocinsky, R. Kyle**  
*demdrainer: Drain Your Dammed DEMs*. R package version 0.1.0  
URL: <https://github.com/bocinsky/demdrainer>
- 2019 **Bocinsky, R. Kyle**  
*tdar: R Bindings to the Digital Archaeological Record (tDAR) API*. R package version 0.1.0  
URL: <https://github.com/bocinsky/tdar>
- 2019 **Bocinsky, R. Kyle**  
*treecats: Tree-like Factors in R*. R package version 0.1.0  
URL: <https://github.com/bocinsky/treecats>
- \* 2021 **Bocinsky, R. Kyle**  
*paleocar: Paleoclimate Reconstruction from Tree Rings using Correlation Adjusted correlation*. R package version 3.0.0  
URL: <https://github.com/bocinsky/paleocar>

## Conference Presentations

- 2023 **Bocinsky, R. Kyle**, Maureen I. McCarthy, Meghan Collins, Staci Emm, Kelsey Fitzgerald, Vicki E. Hebb, Kelsey Jencso, Ileah Kirchoff, and Trent Teegerstrom  
Strengthening the Role of Climate Hubs in Indian Country: Introducing the Native Climate Project. In symposium, *Translating Climate Science into Action with the USDA Climate Hubs*. 103<sup>rd</sup> American Meteorological Society Annual Meeting, Denver, Colorado. January 10, 2023.
- 2023 Jencso, Kelsey, Zachary H. Hoylman, **R. Kyle Bocinsky**, Kevin Hyde, Joel Martin, and Colin Brust  
Navigating the Waters Ahead: The Development of a Climate Monitoring and Drought Assessment Framework for Montana. In symposium, *Advancements in Analysis and Prediction of Drought II*. 103<sup>rd</sup> American Meteorological Society Annual Meeting, Denver, Colorado. January 12, 2023.
- 2022 Plenty Sweetgrass-She Kills, Ruth, Jennifer Harrington, Kyle Bocinsky, Amber Finley, Judy Dudley, John Phillips, Marea DeVille, Gerri Pearson, Selena Finley, and Paige Johnson  
CU Missouri River Basin Consortium. 2022 First American Land Grants Consortium (FALCON) Annual Conference, Albuquerque, New Mexico. October 20, 2022.
- 2022 **Bocinsky, R. Kyle**  
Who Owns Tribal Climate Data? A micro-workshop on Climate Data Sovereignty. Second National Tribal & Indigenous Climate Conference, St. Paul, Minnesota. August 29, 2022.
- 2022 Bird, Darcy, Andrew Gillreath-Brown, **R. Kyle Bocinsky**, and Tim Kohler  
Climate, Maize, and Demography: A Case Study from the Southwestern United States. In symposium, *Climatic Influences on Diet, Demography, and Conflict*. Society for American Archaeology, 87<sup>th</sup> Annual Meeting, Chicago, Illinois.
- 2022 Kohler, Tim, Andrew Gillreath-Brown, **R. Kyle Bocinsky**, and Darcy Bird  
From Unconstrained to Density-dependent Growth: 900 years of Pueblo pre/history. In symposium, *Demography in Archaeology beyond Boom and Bust? Critical Examination of Phases of Under- and Overpopulation*. European Association of Archaeologists, 27<sup>th</sup> Annual Meeting, Kiel, Germany.

- 2021 Bird, Darcy, **R. Kyle Bocinsky**, and Tim Kohler  
Maize, Construction, and Population Changes: One Way to Identify Sunk Cost Behaviors in Central Mesa Verde. In symposium, *People, Climate, and Proxies in Holocene Western North America*. Society for American Archaeology, 86<sup>th</sup> Annual Meeting, online.
- 2019 Erick Robinson, Jacob Freeman, Robert L. Kelly, and **R. Kyle Bocinsky**  
The Role of Edge Effects in Late Holocene Archaeological Radiocarbon Time Series. In symposium, *Global Perspectives on Climate-Human Population Dynamics During the Late Holocene*. Society for American Archaeology, 84<sup>th</sup> Annual Meeting, Albuquerque, New Mexico.
- 2019 Gillreath-Brown, Andrew, **R. Kyle Bocinsky**, and Tim Kohler  
The Impact of Temperature on the Transition to Maize Agriculture in the Northern Upland United States Southwest. In symposium, *Global Perspectives on Climate-Human Population Dynamics During the Late Holocene*. Society for American Archaeology, 84<sup>th</sup> Annual Meeting, Albuquerque, New Mexico.
- 2019 Glowacki, Donna, Mark Varien, Grant Coffey and **R. Kyle Bocinsky**  
Mesa Verde Centers and Regional Analyses: Good Stuff!. In symposium, *Attention to Detail: A Pragmatic Career of Research, Mentoring, and Service, Papers in Honor of Keith Kintigh*. Society for American Archaeology, 84<sup>th</sup> Annual Meeting, Albuquerque, New Mexico.
- 2019 Coffey, Grant, Mark Varien and **R. Kyle Bocinsky**  
Basketmaker III in the Central Mesa Verde Region: Transitions, Social Dynamics, and Population Growth. In symposium, *Adopting the Pueblo Fettle: The Breadth and Depth of the Basketmaker III Cultural Horizon*. Society for American Archaeology, 84<sup>th</sup> Annual Meeting, Albuquerque, New Mexico.
- 2019 **Bocinsky, R. Kyle**, Andrew Gillreath-Brown and Tim Kohler  
The Climates of Pueblo Emergence. In symposium, *Adopting the Pueblo Fettle: The Breadth and Depth of the Basketmaker III Cultural Horizon*. Society for American Archaeology, 84<sup>th</sup> Annual Meeting, Albuquerque, New Mexico.
- 2018 **Bocinsky, R. Kyle**  
Directing the arrow by chasing its tail: Climate, adaptation, and future (agri)cultural systems in the West. In plenary symposium, *Arrow of Time: Anthropological Disciplines of the Future*. 36<sup>th</sup> Great Basin Anthropological Conference, Salt Lake City, Utah.
- 2018 Glowacki, Donna and **R. Kyle Bocinsky**  
The Great Houses of the Mesa Verde Cuesta. In symposium, *Mesa Verde Ancestral Pueblo Villages: Recent Research*. Society for American Archaeology, 83<sup>rd</sup> Annual Meeting, Washington, DC.
- 2018 Gillreath-Brown, Andrew, **R. Kyle Bocinsky**, Simon Goring and Tim A. Kohler  
Paleotemperature Reconstructions of the Upland United States Southwest for the Last 2,000 Years. In general session, *Environmental Archaeology*. Society for American Archaeology, 83<sup>rd</sup> Annual Meeting, Washington, DC.
- 2017 d'Alpoim Guedes, Jade, and **R. Kyle Bocinsky**  
Climate Change, Agricultural Innovation and Exchange across Asia. American Geophysical Union, Fall Meeting 2017, New Orleans, Louisiana.
- 2017 **Bocinsky, R. Kyle**  
"Constraint and Freedom" in the Era of Big Data. In Frison Institute Symposium, *The Future of "Big Data" in Archaeology*. Society for American Archaeology, 82<sup>nd</sup> Annual Meeting, Vancouver, British Columbia, Canada.

- 2017 Lipe, William, Laura Ellyson, **R. Kyle Bocinsky**, Robin Lyle and R.G. Matson  
Costly Gobbling: Raising Turkeys in the Central Mesa Verde Area. In general session, *The Archaeology of Foodways*. Society for American Archaeology, 82<sup>nd</sup> Annual Meeting, Vancouver, British Columbia, Canada.
- 2017 d'Alpoim Guedes, Jade, and **R. Kyle Bocinsky**  
Modeling the Spread of Crops across Eurasia. In Fryxell Award Symposium, *Papers in Honor of Naomi F. Miller*. Society for American Archaeology, 82<sup>nd</sup> Annual Meeting, Vancouver, British Columbia, Canada.
- 2016 Stodden, Victoria, Bertram Ludaescher, **Kyle Bocinsky**, Keith Kintigh, Tim Kohler, Timothy McPhillips, and Johnathan Rush  
Querying Provenance Information: Basic Notions and an Example from Paleoclimate Reconstruction. American Geophysical Union, Fall Meeting 2016, San Francisco, California.
- 2016 Varien, Mark. D and **R. Kyle Bocinsky**  
The Pueblo Farming Project: Investigating the Agrarian Ecology of the Mesa Verde Region. In symposium, *First Farmers, First Farms: Landscape Ecology of the Early Neolithic*. Society of Ethnobiology, 39<sup>th</sup> Annual Conference, Tucson, Arizona.
- 2016 **Bocinsky, R. Kyle** and Adam Brin  
SKOPE: Bringing Continent-scale, Local Paleoenvironmental Data to Researchers and the Public. In symposium, *What Do We Mean by "Digital Curation?"* Society for American Archaeology, 81<sup>st</sup> Annual Meeting, Orlando, Florida.
- 2016 d'Alpoim Guedes, Jade, Sturt Manning, and **R. Kyle Bocinsky**  
5500 Years of Changing Crop Niches on the Tibetan Plateau. In symposium, *Guava Cat Archaeology: Papers in Memory of Prof. Pochan Chen*. Society for American Archaeology, 81<sup>st</sup> Annual Meeting, Orlando, Florida.
- 2016 Ellyson, Laura, Timothy Kohler, and **R. Kyle Bocinsky**  
Evaluation of the Village Ecodynamics Hunting and Domestication Models. In general session, *Southwestern Archaeology*. Society for American Archaeology, 81<sup>st</sup> Annual Meeting, Orlando, Florida.
- 2016 Van Dyke, Ruth M., **R. Kyle Bocinsky**, Tucker Robinson, and Thomas C. Windes  
Great houses, shrines, and high places: Intervisibility across the Chacoan World. 2016 Navajo Nation Archaeology Meeting, Shiprock, New Mexico. 4 March 2016.
- 2016 **Bocinsky, R. Kyle**, Jade d'Alpoim Guedes, Karen Adams, Rob Quinlan, Mark Caudell, and Timothy A. Kohler  
Can Pueblo Corn Save Ethiopian Farms? Deploying 1,400 Years of Agricultural Knowledge in Service of the Future. In symposium, *Engaged Archaeology through Transnational, Interdisciplinary, and Indigenous Collaborations*. 15<sup>th</sup> Biennial Southwest Symposium, Tucson, Arizona.
- 2016 Schwindt, Dylan M., **R. Kyle Bocinsky**, Scott G. Ortman, Donna M. Glowacki, Mark D. Varien, and Timothy A. Kohler  
Interactions among society, climate, production, and population: A case study from the central Mesa Verde region with contemporary implications. In symposium, *Engaged Archaeology through Transnational, Interdisciplinary, and Indigenous Collaborations*. 15<sup>th</sup> Biennial Southwest Symposium, Tucson, Arizona.
- 2015 **Bocinsky, R. Kyle**  
What is the Pecos System, Anyway? 2015 Pecos Conference, Mancos, Colorado.  
**Winner of the 2015 Cordell Prize.**



- 2015 **Bocinsky, R. Kyle**, Keith Kintigh, Timothy Kohler, Bertram Ludäscher, Ann Kinzig, Carla Van West, Margaret Nelson, Adam Brin, Sarah Oas, Johnathan Rush, Timothy McPhillips, and Yang Cao  
Toward Effective Cyber-Infrastructure Support of Socio-Environmental Research. In symposium, *The Robustness and Vulnerability of Food Production and Social Change: An Evaluation of Interdisciplinary Concepts Using Archaeological Data, Models, and Ethnographic Observations*. Society for American Archaeology, 80<sup>th</sup> Annual Meeting, San Francisco, California.
- 2015 Van Dyke, Ruth, **R. Kyle Bocinsky**, and Tucker Robinson  
Friends in High Places: Windes, Shrines, and Lines of Sight. In symposium, *It's About Time: Contributions in Honor of Thomas C. Windes*. Society for American Archaeology, 80<sup>th</sup> Annual Meeting, San Francisco, California.
- 2015 Kohler, Timothy A., Stefani A. Crabtree, and **R. Kyle Bocinsky**  
The Effects of Temporal Coarse-Graining on Inferred Networks of Human Movement. In symposium, *The Short and Long of It: Combining Timescales*. Society for American Archaeology, 80<sup>th</sup> Annual Meeting, San Francisco, California.
- 2015 Crabtree, Stefani A., **R. Kyle Bocinsky**, and Timothy A. Kohler  
Alliances, Coalitions, Hierarchies and Conflict in the Ancestral Pueblo World. In symposium, *Simulating Social Complexity to Understand the Archaeological Past*. Society for American Archaeology, 80<sup>th</sup> Annual Meeting, San Francisco, California.
- 2015 McPhillips, Timothy, Tianhong Song, Tyler Kolisnik, Steve Aulenbach, Khalid Belhajjame, **R. Kyle Bocinsky**, Yang Cao, Fernando Chiriga, Saumen Dey, Juliana Freire, Deborah Huntzinger, Christopher Jones, David Koop, Paolo Missier, Mark Schildhauer, Christopher Schwalm, Yaxing Wei, James Cheney, Mark Bieda, and Bertram Ludäscher  
YesWorkflow: A User-Oriented, Language-Independent Tool for Recovering Workflow Information from Scripts. 10<sup>th</sup> International Digital Curation Conference, London.
- 2014 Crabtree, Stefani A., **R. Kyle Bocinsky**, and Timothy A. Kohler  
Modeling Emergence of Complex Groups on Realistic Landscapes. In symposium, *Principles of Complexity: Life, Scale, and Civilization III*. Santa Fe Institute, Santa Fe, New Mexico. August.
- 2014 **Bocinsky, R. Kyle**, Kurt F. Anschultz, Jesse Clark, and Timothy A. Kohler  
A General Spatial Reconstruction of Potential Maize Paleoproductivity, AD 600–2000. In symposium, *Coupled Regions, Coupled Systems: Dynamics of Prehispanic Farming Societies in the Northern San Juan and the Northern Rio Grande*. Society for American Archaeology, 79<sup>th</sup> Annual Meeting, Austin, Texas.
- 2014 Kohler, Timothy A., Kelsey M. Reese, Stefani A. Crabtree, **R. Kyle Bocinsky**, and Brian M. Kemp  
Prolegomenon: VEP II, Almost in Retrospect. In symposium, *Coupled Regions, Coupled Systems: Dynamics of Prehispanic Farming Societies in the Northern San Juan and the Northern Rio Grande*. Society for American Archaeology, 79<sup>th</sup> Annual Meeting, Austin, Texas.
- 2014 Crabtree, Stefani A., Timothy A. Kohler and **R. Kyle Bocinsky**  
The Development of Social Groups, Leadership and Inequality in the Central Mesa Verde. In symposium, *Coupled Regions, Coupled Systems: Dynamics of Prehispanic Farming Societies in the Northern San Juan and the Northern Rio Grande*. Society for American Archaeology, 79<sup>th</sup> Annual Meeting, Austin, Texas.

- 2014 Conway, Meagan and **R. Kyle Bocinsky**  
Household and Community Scales of Post-Famine Demographic Change in Western Ireland. In symposium, *The Archaeology of the Irish Famine: Exploring Lasting Effects on Local, Regional, and Transatlantic Scales*. Society for American Archaeology, 79<sup>th</sup> Annual Meeting, Austin, Texas.
- 2013 **Bocinsky, R. Kyle**  
Pueblo II and the Turkey Taboo: Changing Attitudes Towards Domesticated Turkeys in the Puebloan Southwest. In symposium, *Food: It's What's for Dinner*. American Anthropological Association, 2013 Annual Meeting, Chicago, Illinois.
- 2013 Kohler, Timothy A., **R. Kyle Bocinsky**, Stefani A. Crabtree, Andrew Hlynka, Lokesh Patil, Paul Lovell Hooper and Ziad Kobti  
Leadership, Territoriality and Conflict in an Agentized Pueblo World. In symposium, *Complex-systems Approaches to Long-term Change*. American Anthropological Association, 2013 Annual Meeting, Chicago, Illinois.
- 2013 **Bocinsky, R. Kyle**  
"Free nights and weekends" in the AD 1000s? Prehistoric visual communication systems and the influence of infrastructure on modern social network formation. In lecture series, *Reckless Ideas*. Santa Fe Institute, Santa Fe, New Mexico. August 23, 2013.
- 2013 **Bocinsky, R. Kyle**  
The Data Are the Context: A Student's Perspective on the Colorado Contexts, Old and New. In symposium, *Updating the 1999 Colorado Prehistoric Contexts: How a Digital Research Context for Southwestern Colorado Could Be Organized and Assembled*. Colorado Council of Professional Archaeologists, 35<sup>th</sup> Annual Conference, Denver, Colorado.
- 2013 **Bocinsky, R. Kyle**  
The Defensive Coast. In general session, *Landscapes and Spatial Analysis: Global Case Studies*. Society for American Archaeology, 78<sup>th</sup> Annual Meeting, Honolulu, Hawaii.  
**Winner of the 2013 R.E. Taylor Student Poster Award from the Society for Archaeological Sciences.**
- 2013 Reese, Kelsey M., **R. Kyle Bocinsky**, Donna M. Glowacki, Scott G. Ortman and Timothy A. Kohler  
What Are Communities, Really? In symposium, *New Directions in Modeling Dynamics for Coupled Social-Natural Systems*. Society for American Archaeology, 78<sup>th</sup> Annual Meeting, Honolulu, Hawaii.
- 2013 **Bocinsky, R. Kyle**  
Why Landscapes Matter: Inferring Defensiveness around the Salish Sea. In symposium, *Why Salish Sea Archaeology Matters: Current Perspectives from Washington State University*. 66<sup>th</sup> Annual Northwest Anthropological Conference, Portland, Oregon.
- 2012 **Bocinsky, R. Kyle**  
Simulating Archaeological Landscapes using the RePAST Agent Based Modeling Framework. In invited colloquium, Institute of Archaeology and Museology, Faculty of Arts, Masaryk University, Brno, Czech Republic.
- 2012 **Bocinsky, R. Kyle** and Timothy A. Kohler  
Suboptimal Foraging Theory (It's the Best). In symposium, *Socionatural Systems in the Northern U.S. Southwest: A Village Ecodynamics Project II Progress Report*. Society for American Archaeology, 77<sup>th</sup> Annual Meeting, Memphis, Tennessee.

- 2012 Kohler, Timothy A. and **R. Kyle Bocinsky**  
Highly Variable Temperatures in the Northern Hemisphere over the Last Two Millennia: Reconstructions and Possible Effects on Native American Agricultural Systems. In symposium, *What Role did Changing Temperatures Play in the Success of North American Farming Societies in the Last Prehispanic Millennium?* Society for American Archaeology, 77<sup>th</sup> Annual Meeting, Memphis, Tennessee.
- 2012 Newbold, Bradley, **R. Kyle Bocinsky**, William D. Lipe, Phil R. Geib and Brian M. Kemp  
Revising Early Turkey Domestication in the Southwest. In general session, *Archaeology of the Ancestral Puebloans and Paquime*. Society for American Archaeology, 77<sup>th</sup> Annual Meeting, Memphis, Tennessee.
- 2012 Reese, Kelsey M., **R. Kyle Bocinsky**, Kay E. Barnett, Stefani A. Crabtree and Elise Alonzi  
Large, Aggregated Villages in Little Soda Canyon. In general session, *Southwest*. Society for American Archaeology, 77<sup>th</sup> Annual Meeting, Memphis, Tennessee.
- 2011 **Bocinsky, R. Kyle** and Timothy A. Kohler  
Toward [Re]Constructing An Archaeological Legacy of Hunting On the Colorado Plateau. In Evolutionary Anthropology Society invited symposium, *Lasting Legacies and Changing Tides in Human Behavioral Ecology*. American Anthropological Association, 2011 Annual Meeting, Montreal, Quebec, Canada.
- 2011 **Bocinsky, R. Kyle**, Brian Chisholm and Brian M. Kemp  
Basketmaker III Turkey Use: Multiple Lines of Evidence. In symposium, *The Cedar Mesa Project Turns 40: New Results from a Long-Lived Study in SE Utah*. Society for American Archaeology, 76<sup>th</sup> Annual Meeting, Sacramento, California.
- 2011 Newbold, Bradley, **R. Kyle Bocinsky**, Brian M. Kemp and Phil R. Geib  
Ancient Domestic Turkeys at Atlatl Rock Cave. In general session, *Animal Domesticates in the Americas*. Society for American Archaeology, 76<sup>th</sup> Annual Meeting, Sacramento, California.
- 2011 Crabtree, Stefani A., Ziad Kobti, Timothy A. Kohler and **R. Kyle Bocinsky**  
Archaeology Time Machine: Witnessing Social Interactions on the Pueblo Landscape through Agent-based Simulation. In symposium, *Mapping and Technological Experiments in Archaeology*. Society for American Archaeology, 76<sup>th</sup> Annual Meeting, Sacramento, California.
- 2011 Kohler, Timothy A., **R. Kyle Bocinsky**, Stefani A. Crabtree and Denton Cockburn  
The Village Ecodynamics Project: Modeling the Deep Pueblo Past. In symposium, *Modeling Across Millennia: Interdisciplinary Paths to Ancient Socionatural Systems*. 177<sup>th</sup> AAAS Annual Meeting, Washington, D.C.
- 2011 Barron, Doug, **R. Kyle Bocinsky**, Dan Grunspan, Bradley Newbold, Darryl Trumbo and Bryan Roosien  
Mapping the Memetics Meme: Toward a better understanding of the transmission and evolution of scientific concepts. In IGERT Program in Evolutionary Modeling seminar, Washington State University, Pullman, Washington.
- 2010 **Bocinsky, R. Kyle**, Breanne M. Nott and Brian M. Kemp  
Plop! Jump-starting the brown revolution in archaeology. In symposium, *The Village Ecodynamics Project II*. Society for American Archaeology, 75<sup>th</sup> Annual Meeting, St. Louis, Missouri.

**Forums,  
Workshops,  
& Symposia**

- 2010 Glowacki, Donna M., Charles A. Reed, **R. Kyle Bocinsky**, Shanna Diederichs and Julie Bell  
Making sense of the actual: Settlement trends in the southwestern Colorado VEP study areas. In symposium, *The Village Ecodynamics Project II*. Society for American Archaeology, 75<sup>th</sup> Annual Meeting, St. Louis, Missouri.
- 2010 Reed, Charles A., Ryan Lash and **R. Kyle Bocinsky**  
An Ancestral Puebloan Community in Morefield Canyon, Mesa Verde National Park. In general session, *What's New in Southwestern Archaeology?* Society for American Archaeology, 75<sup>th</sup> Annual Meeting, St. Louis, Missouri.
- 2009 **Bocinsky, R. Kyle**  
In the land of plenty: Agent-based approaches to modeling subsistence in the Puebloan Southwest. In South Carolina Institute of Archaeology and Anthropology seminar, *From Field to Table: Historical Ecology of Regional Subsistence Strategies*. University of South Carolina, Columbia, South Carolina.
- 2009 **Bocinsky, R. Kyle**  
Village Evolving: New directions in VEP research. In NSF Office of Polar Programs: Arctic Social Sciences sponsored conference, *Global Long Term Human Ecodynamics*. Eagle Hill, Maine.
- 2009 **Bocinsky, R. Kyle**  
Understanding and modeling turkey use in the American Southwest: A preliminary simulation module for RePAST. In general session, *General New World and Methods*. Society for American Archaeology, 74<sup>th</sup> Annual Meeting, Atlanta, Georgia.
- 2008 **Bocinsky, R. Kyle**, Terrence Martin and Mark A. Schurr  
Rodent Stable Carbon-isotope Ratios as a Measure of Maize Production. In general session, *Methods and Advances in Zooarchaeology*. Society for American Archaeology, 73<sup>rd</sup> Annual Meeting, Vancouver, British Columbia, Canada.
- 2023 Planning team & working group facilitator, *Workshop for Building Drought Resilience in a Changing Climate with Upper Columbia and Missouri Basin Tribes*. Workshop Co-hosted by NOAA NIDIS and the Confederated Salish and Kootenai Tribes, Polson, MT. September 26–28, 2023.
- 2022 Co-Organizer, *Maize Database Project All-hands Meeting with Hopi Cultural Preservation Office*. Workshop, Flagstaff, AZ. September 7–10, 2022.
- 2022 Co-Organizer, *All Climate Is Local: A resilience workshop for TCU extension, faculty, and students*. Workshop, 2022 First American Land Grants Consortium Annual Conference, Albuquerque, NM.
- 2019 Participant, *Healthy Forests, Healthy Watersheds*, Workshop, Laboratory of Tree Ring Research, University of Arizona, Tucson, AZ. November 13–15, 2019.
- 2019 Organizer, *Plenary Workshop – Native Waters on Arid Lands: Using wisdom from the past to guide the future of traditional practices, farming, ranching, forestry, and natural resource management*. Workshop, Fifth Annual Native Waters on Arid Lands Tribal Summit, Reno, Nevada.
- 2018 Organizer, *Building Research Capacity at Tribal Colleges and Universities and in Tribal Communities*. Forum, Fourth Annual Native Waters on Arid Lands Tribal Summit, Reno, Nevada.
- 2018 Discussant, *SKOPE: How we are making paleoenvironmental data useful and accessible*. Forum, Society for American Archaeology, 83<sup>rd</sup> Annual Meeting, Washington, DC.

- 2018 Participant, *Conceptualizing a Geospatial Software Institute (GSI)*. Workshop 2: Geospatial Use Cases and Core Technical Capabilities, CyberGIS Center for Advanced Digital and Spatial Studies, Chicago, Illinois.
- 2017 Guest editor, *First Farmers, First Farms: Landscape Ecology of the Early Neolithic*. Edited Section, Journal of Ethnobiology.
- 2017 Organizer, *Traditional Knowledge & Ecology—Building Agri-Cultural Resilience through Traditional Values*. Forum, Third Annual Native Waters on Arid Lands Tribal Summit, Reno, Nevada.
- 2017 Co-organizer, *Connecting Mesa Verde and the Rio Grande through the Study of Pueblo Foodways*. Forum, New Mexico History Museum, Santa Fe, New Mexico. 22 April 2017.
- 2017 Discussant, *Aztec at the Crossroads and in the Crosshairs: 101 Years of Research in One Convenient Symposium*. Forum, Society for American Archaeology, 82<sup>nd</sup> Annual Meeting, Vancouver, British Columbia, Canada.
- 2017 Discussant, *How to do Archaeological Science using R*. Forum, Society for American Archaeology, 82<sup>nd</sup> Annual Meeting, Vancouver, British Columbia, Canada.
- 2017 Participant, *Whole Tale: Computing environments for reproducibility*. Prov-a-Thon and architecture workshop, Santa Ana Pueblo, New Mexico.
- 2016 Discussant, *Traditional Knowledge & Ecology*. Forum, Second Annual Native Waters on Arid Lands Tribal Summit, Las Vegas, Nevada.
- 2016 Organizer, *Archaeologies of Inclusion: Towards a Politics of Engagement*. Forum, Society for American Archaeology, 81<sup>st</sup> Annual Meeting, Orlando, Florida.
- 2015 Organizer, *Out in the Field: Queer Experiences and Challenges in Archaeology*. Forum, Society for American Archaeology, 80<sup>th</sup> Annual Meeting, San Francisco, California.
- 2014 Discussant, *Error, Sensitivity Analysis, and Uncertainty in Archaeological Computational Modeling*. Forum, Moderated by Marieka Brouwer Burg. Society for American Archaeology, 79<sup>th</sup> Annual Meeting, Austin, Texas.
- 2012 Chair, *What Role did Changing Temperatures Play in the Success of North American Farming Societies in the Last Prehispanic Millennium?* Symposium, Society for American Archaeology, 77<sup>th</sup> Annual Meeting, Memphis, Tennessee.
- 2011 Participant, *Graduate Workshop in Computational Social Science*. Directed by John Miller and Scott Page. Santa Fe Institute, Santa Fe, New Mexico.
- 2010 Co-organizer, *The Village Ecodynamics Project II*. Symposium, Society for American Archaeology, 75<sup>th</sup> Annual Meeting, St. Louis, Missouri.

## Academic Service

### Peer-review

*American Antiquity* — 2019, 2016  
*Frontiers in Earth Science* — 2021  
*Journal of Anthropological Archaeology* — 2019  
*Journal of Archaeological Method and Theory* — 2022, 2018, 2016, 2015  
*Journal of Archaeological Science* — 2020, 2017, 2016  
*Journal of Archaeological Science: Reports* — 2021, 2020, 2015

*Journal of Ethnobiology* – 2015  
*KIVA: Journal of Southwestern Anthropology and History* – 2022, 2020  
*PLoS ONE* – 2018  
*Proceedings of the National Academy of Sciences* – 2019

*Panel Service*

NOAA National Integrated Drought Information System – 2024  
National Science Foundation – 2023

*Proposal review*

Graduate Women in Science – 2020  
National Science Foundation – 2022, 2019

*Society for American Archaeology*

2023–present Chair, Committee on Awards and Scholarships  
2019–present Member, Bylaws Committee  
2019–2022 Chair, Investment Committee  
2020, 2021 Member, Program Committee  
2010 Organizer, *Exploratory Meeting for the Creation of an LGBT Archaeologists Interest Group*,  
75<sup>th</sup> Annual Meeting, St. Louis, Missouri

*University of Montana*

2023 Member, Scholarship Committee

*Department of Society and Conservation, University of Montana*

2023–present Committee chair, Masters – Paige Johnson (Environmental Studies)  
2023–2024 Department Representative, University Faculty Association  
2023–2024 Committee member, Masters – Sophie Morris  
2019–2022 Committee member, Doctoral – Ada Smith (Degree granted December 2022)

*Montana Climate Office, University of Montana*

2018 Mentor, Baccalaureate – Carly Kuske, Montana Drought & Climate project intern  
2018 Mentor, Baccalaureate – Colin Brust, Montana Space Grant Consortium intern

*Crow Canyon Archaeological Center, Cortez, Colorado*

2019–2020 Mentor, Post-doctoral – Michelle Turner

*Department of Anthropology, University of Colorado, Boulder*

2019–2022 Mentor, Doctoral – Kaitlyn Davis

*Department of Anthropology, Washington State University*

2020–2024 Committee member, Doctoral – Darcy Bird  
2018–2023 Mentor, Doctoral – Andrew Gillreath-Brown  
2013 Co-organizer, Interdisciplinary Research in Anthropology and the Sciences Conference  
2011 Chair, Banquet Committee, Anthropology Graduate Organization  
2009 Chair, Lipe Scholar Committee, Anthropology Graduate Organization  
2008–2009 President, Anthropology Graduate Organization

*Whole Tale: Computing environments for reproducibility*

2017 Mentor, Whole Tale Summer Internship, Chicago, Illinois – Pratik Shrivastava

*National Science Foundation IGERT.org Trainee Advisory Board*

2011–2012 Board member, The National Science Foundation and TERC

**Outreach,  
Press, &  
Broader Impacts**

*Enhancing Climate-smart Disaster Relief in FSA Programs*

**Public data**

- **2023** *Annual County Eligibility Data from the Livestock Forage Disaster Program, 2012–2022*. An archive of the annual county-level eligibility data for the Livestock Forage Disaster Program, acquired via Freedom of Information Act (FOIA) request 2023-FSA-00937-F made

to the US Department of Agriculture (USDA) Farm Production and Conservation Business Center (FPAC-BC). The request was submitted on December 5, 2022, and was fulfilled on January 6, 2023.

HTML: <https://github.com/mt-climate-office/fsa-lfp-eligibility>

#### *Native Drought Resilience: CSKT Actions for Climate-Drought Adaptation*

##### **Public lecture**

- **2022-12-13** *Interweaving Traditional Knowledge and mainstream science to address long-term drought resilience priorities of the Confederated Salish and Kootenai Tribes*, The Wilderness Society.

##### **Press coverage**

- **2023-06-12** New Mesonet Station Records & Delivers Climate Data at the Confederated Salish and Kootenai Tribes Bison Range. *Drought.gov*. 12 June 2023. [html]
- **2023-05-30** New Mesonet station records and shares weather data at CSKT Bison Range. *KPAX (CBS)*. [html]
- **2023-05-25** New Mesonet station will bring up to date weather information to the CSKT Bison Range. *Charkoosta News*. [html]
- **2023-05-25** New Meteorological Station Delivers Real-time Climate Data to CSKT Bison Range. *Flathead Beacon*. [html]
- **2023-05-22** Weather tower to go in on CSKT Bison Range. *NBC Montana*. [html]
- **2023-05-17** New Montana Mesonet Station Installed on the CSKT Bison Range. *Native Climate*. [html]

#### *Native Climate: Strengthening the role of Climate Hubs in Indian Country*

##### **Public data**

- **2022** *Native Climate Tribal College CMIP6 Agricultural Climate Projections*. Downscaled projections for 35 Tribal colleges and universities across the contiguous US. A product of the Native Climate Project. [html]

##### **Guest lecture (classroom)**

- **2023-07-25** *Strengthening the Role of the Climate Hubs in Indian Country*, invited lecture, Environmental Biology (BIO 105, Prof. Mark Clytus).
- **2023-07-13** *Wildfire Smoke Resilience Workshop*, TRIO Upward Bound, University of Montana.
- **2023-04-26** *Strengthening the Role of the Climate Hubs in Indian Country*, invited lecture, Environmental Biology (BIO 105, Prof. Mark Clytus).
- **2023-03-27** *Climate Data in R*, invited lecture, GEOG 701, University of Nevada, Reno (Prof. Christine Albano).

##### **Public lecture**

- **2024-05-29** *Nevada Drought Update*, Nevada Tribal Ag and Food Summit.
- **2024-05-08** *Agriculture Risk in a Changing World: Climate Outlooks for the United States*, Climate Action for Agriculturalists short course, Farmer Campus.
- **2024-04-19** *Living in a Changing World: Climate at the Crown of the Continent*, CSKT Earth Action Day, Pablo, MT.
- **2024-04-09** *Agriculture Risk in a Changing World: Climate Outlooks for the United States*, 2024 ERME National Conference, Salt Lake City, UT.
- **2024-02-20** *Western Drought Update*, Native Climate Working Group webinar.
- **2023-11-28** *Living in a Changing World: Climate at the Crown of the Continent*, Regional Climate Symposium, Polson, MT.
- **2023-11-28** *Living in a Changing World: Climate at the Crown of the Continent*, Regional Climate Symposium, Polson, MT.
- **2023-09-26** *Drought in a Changing World: The Past, Present, and Future of Drought Adaptation and Resilience in the Columbia and Missouri River Basins*, Workshop for Building Drought Resilience in a Changing Climate with Upper Columbia and Missouri Basin Tribes.
- **2023-09-19** *Western Drought Update*, Native Climate Working Group webinar.
- **2023-08-23** *Western Drought Update*, Native Climate Working Group webinar.

- 2023-06-20 *Western Drought Update*, Native Climate Working Group webinar.
- 2023-03-17 *Western Drought Update*, Native Climate Working Group webinar.
- 2023-03-14 *Observed Trends and Climate Outlook: A review of Montana's past, present, and future*, AgroClimate Workshop for Agricultural & Forestry Professionals and Partners, Billings, MT.
- 2023-02-06 *Observed Trends and Climate Outlook: A review of Montana's past, present, and future*, Mountain Rain or Snow Workshop, Missoula, MT.
- 2022-09-20 *Western Drought Update*, Native Climate Working Group webinar.
- 2022-06-28 *Nevada Drought Update*, Nevada Tribal Ag and Food Summit.
- 2022-06-23 *AZ Drought Update and FRTEP Drought Monitoring Program*, AZ Federally Recognized Tribes Extension Program monthly call.
- 2022-05-13 *Western Drought Update*, Native Climate Working Group webinar.

#### **Mentorship**

- 2023 *All Climate is Local*. Mentored 20 students through their ACL projects; recorded and edited their final presentations. [html]

*Drought Assessment has been Outpaced by Climate Change: Empirical Arguments for a Paradigm Shift*

#### **Public lecture**

- 2023-04-04 *The Futures and Fortunes of Drought Relief under Climate Change*, University of Montana WA Franke College of Forestry and Conservation, Conservation Social Science Seminar.
- 2022-10-06 NOAA National Integrated Drought Information System Executive Committee meeting, Washington, DC.
- 2022-09-13 Webinar and discussion, Drought Monitoring in a Changing Climate.

*Sustainable Agricultural Systems in the Past, Present, and Future*

2023-02-03 *Reconstructing Climates of the Past*. Radio/Podcast interview. Science Moab. [html]

#### **Guest lecture (classroom)**

- 2022-11-07 *Visions of Desert Futures in Arid Pasts*, University of Montana WA Franke College of Forestry and Conservation, Climate & Society.
- 2022-11-03 *Visions of Desert Futures in Arid Pasts*, Harvard University Graduate School of Design, Desert Futures.

#### **Public lecture**

- 2020-01-24 Crow Canyon Webinar Series.
- 2019-08-12 Four Corners Lecture Series, Cortez, Colorado. Invited by the Hisatsinom Chapter of the Colorado Archaeological Society.
- 2016-05-21 In Smithsonian Associates Weekend Program: *Vanished! Behind the Mystery of Mesa Verde*, S. Dillon Ripley Center, Washington, DC.

*Experimental Farming: The Pueblo Farming Project and Beyond*

#### **Public lecture**

- 2017-04-22 In Crow Canyon Research Seminar: *Connecting Mesa Verde and the Rio Grande through the Study of Pueblo Foodways*, New Mexico History Museum, Santa Fe, NM.

*Origins: The Journey of Humankind*

2017-04-17 Featured expert, The National Geographic Channel. Featured in Season 1, Episode 6: *Building the Future*. Aired April 17, 2017. [html].

*Exploration and exploitation in the macrohistory of the pre-Hispanic Pueblo Southwest*

#### **Popular article**

- 2016-04-06 Do prehistoric Pueblo populist revolutions presage American politics today? Kyle Bocinsky and Tim Kohler, *The Conversation*. [html]

#### **Press coverage**

- 2016-04-08 Climate and the Collapse of Ancient Civilizations. Interview on NPR's *Science Friday*. [html]



- **2016-03-31** From drought, seeds of discontent. Staci Matlock, *Santa Fe New Mexican*. [html]
- **2016-04-01** Social collapse in ancient Pueblo civilization linked to climate change. Hannah Osborne, *International Business Times*. [html]
- **2016-04-10** Researchers: Four Corners pueblo culture sensitive to climate. Emery Cowan, *Arizona Daily Sun*, Flagstaff, Arizona. [html]

*Can Pueblo Corn Save Ethiopian Farms? Employing 1,400 Years of Agricultural Knowledge in Service of the Future*

**Public lecture**

- **2016-07-25** Southwest Seminar, Santa Fe, New Mexico.
- **2016-01-18** Arizona Archaeological and Historical Society, Tucson, Arizona.
- **2015-08-04** Four Corners Lecture Series, Cortez, Colorado. Invited by the Hisatsinom Chapter of the Colorado Archaeological Society.

*FedData: Functions to Automate Downloading Geospatial Data Available from Several Federated Data Sources*

**Blog coverage**

- **2016-03-15** Using the new R package, FedData, to access federal open datasets (including interactive graphics). ZevRoss. [html]

**Travel,  
Outreach, &  
Training Grants**

*The Crow Canyon Ochre Project: Building Online Communities for Heritage Research and Education*  
2020 Outreach grant, Colorado Humanities CH-CARES program, \$5,250 awarded to CCAC

*Toward Cultural Models of the Development of Ancestral Maize Landraces*  
2014 Travel grant, Graduate & Professional Student Association, Washington State University, \$375

*Understanding and modeling turkey use in the American Southwest: A preliminary model for RePAST*  
2009 Travel grant, Graduate & Professional Student Association, Washington State University, \$390

*Archaeological Field School with Brooklyn College, City University of New York*  
2007 Travel grant, Undergraduate Research Opportunity Program, University of Notre Dame, \$1,000  
2007 Travel grant, Glynn Family Honors Program, University of Notre Dame, \$1,500  
2007 Learning Beyond the Classroom Grant, University of Notre Dame, \$711

*The similarity of treatment needs between the chemically addicted and HIV+ populations: Emphasizing relationships*  
2007 Travel grant, Undergraduate Research Opportunity Program, University of Notre Dame, \$1,000  
2006 Americorps Service Grant, \$1,000

**Additional  
Training**

*Beyond Archaeology—Realities of Cultural Resource Management*  
2013 Participant in seminar presented by the Confederated Tribes of the Colville Reservation History/Archaeology Program. October 4–5, 2013, Pullman, Washington.

**Courses  
Taught**

**University of Montana, Missoula, Montana**  
Fall 2024 Instructor, *FORS 350 / GPHY 488: (Forestry) Applications of GIS*, 3 credits, 48 students  
An advanced GIS course in thematic mapping, offered as part of the Certificate in GIS  
Spring 2023 Co-facilitator (with Jennifer Thomsen), *NRSM 594: Conservation Social Science Seminar*, 1 credit, graduate  
Presentations by student, faculty, and associates on issues and topics in their field

**Washington State University**, Pullman, Washington

Fall 2015 Co-instructor (with Edward Hagen), *ANTH 600: Exploratory Data Analysis in R*, 3 credits, graduate

Using graphical and numeric computational methods to explore different types of data, including survey, experimental, textual, spatial, and network data

Fall 2014 Instructor, *ANTH 101: General Anthropology*, 3 credits, 90 students

An introduction to the four fields of anthropology

Spring 2013 Instructor, *ANTH 490: Themes in Anthropology*, 3 credits, 15 students

The capstone seminar in the anthropology major at WSU; a review of important themes in anthropological thought and several controversial issues in anthropology

Spring 2012 Instructor, *ANTH 331: The Americas Before Columbus*, 3 credits, 40 students

A review course covering North and South American prehistory, and emphasizing model-based approaches in archaeology

## **Professional Affiliations**

*Register of Professional Archaeologists*, Registrant ID 46729296

*Society for American Archaeology*

*American Association for the Advancement of Science*