

#### WILLIAM TIMOTHY TREAL TAYLOR

Archaeozoology Laboratory, CU Museum of Natural History Henderson Building 210, UCB 218, Boulder, CO 80309 william.taylor@colorado.edu 406.273.1484 (mobile)

#### PROFESSIONAL PREPARATION

University of New Mexico, Ph.D. Anthropology with Distinction, May 2017

- "The Origins of Horse Herding and Riding in the Eastern Steppe"

University of New Mexico, M.S. Anthropology, May 2013

 "High Latitudes, High Stakes: Arctic Conservatism, Biogeography, and the 'Collapse' of Norse Settlement in Greenland During the Little Ice Age"

Carleton College, B.A. International Relations Magna cum Laude, 2011

#### PROFESSIONAL EXPERIENCE

2019-present	Assistant Professor and Curator of Archaeology, CU Boulder Department of
	Anthropology/CU Museum of Natural History
2019 -present	Research Affiliate, Max Planck Institute for the Science of Human History
2017-2019	Postdoctoral Research Fellow, Max Planck Institute for the Science of Human
	History
2018-present	Adjunct Assistant Professor of Anthropology, University of New Mexico

#### **FUNDING**

Active

2021-present. University of Colorado Research and Innovation Seed Grants, "Exploring Pastoral Prehistory and Climate Dynamics in the Mongolian Altai Through Glacial Archaeology.", \$50,000 2021-present. Council of American Overseas Research Centers (CAORC) Multi-Country Research Fellowship, "Understanding pastoral prehistory in Inner Asia's mountain zones through glacial archaeology.", \$12,500.

2021-present. Franklin Research Grant, American Philosophical Society. "Frozen Heritage and Pastoral Prehistory in Mongolia's Altai Mountains." \$6000.00

2020-present. National Science Foundation, Senior Research Fellowship (Archaeology). "Horses and Human Societies in the American West" \$300,000

2020-present. University of Colorado Center for Arts and Humanities, "Horses and Human Societies in New World Argentina." \$2000.00

2018-present. DAAD Joint Australia-Germany Research Cooperation Scheme, "Horses and Human Societies in New World Australia" EUR 20,000.00

Prior

2019. HKW/"Mississippi:An Anthropocene River" Initiative. "Horses, Donkeys, and the Anthropocene in the Greater Mississippi." EUR 7,000.00

2016 Ambassador's Grant, U.S. Embassy in Mongolia – "Tracing the Origins of Mongolia's Early Horse Culture" \$5,000.00

2015-16 Fulbright U.S. Student Research Award (#34154234), Mongolia, "Exploring Ancient Horse Use in the Mongolian Steppe"

2015 National Geographic Young Explorer's Grant (#9713-15), "Bronze Age Riders? Evaluating Evidence for Horse Herding and Transport in Ancient Mongolia"

2015 National Science Foundation Doctoral Dissertation Improvement Grant (#1522024),

"Domestic Horse Use in Ecological and Historical Context" \$20,000.00

#### SELECTED PUBLICATIONS

**Taylor, WTT,** Juan Wang, Juan, Jinping Cao, Yue Li, Chengrui Zhang, Helena Miton, Igor Chechushkov, et al.

2021. Understanding early horse transport in eastern Eurasia through damage to the equine dentition. *Antiquity,* published ahead of print September 2021 (https://doi.org/10.15184/aqy.2021.146)

**Taylor, WTT**, Isaac Hart, Caleb Pan, Jamsranjav Bayarsaikhan, James Murdoch...**Muhammad Zahir**, et al.

2021. High altitude hunting, climate change, and pastoral resilience in eastern Eurasia. *Nature: Scientific Reports* 11:14287 (<a href="https://doi.org/10.1038/s41598-021-93765-w">https://doi.org/10.1038/s41598-021-93765-w</a>)

Taylor, WTT and Christina Barron-Ortiz.

2021. Rethinking the evidence for early horse domestication at Botai. *Nature: Scientific Reports* 11(7440).

Taylor, WTT, et al.

2021. Evidence for Early Dispersal of Domestic Sheep into Central Asia: genetic, archaeozoological, and biomolecular insights from Obishir V. *Nature: Human Behavior*, published ahead of print 8 April 2021 (<a href="https://www.nature.com/articles/s41562-021-01083-v">https://www.nature.com/articles/s41562-021-01083-v</a>)

Taylor, WTT, et al.

2021. Interdisciplinary Analysis of the Lehi Horse: Implications for Early Historic Horse Cultures of the North American West. *American Antiquity,* published ahead of print 4 Feb 2021 (https://doi.org/10.1017/aaq.2020.109)

## Taylor, WTT.

2021. Building a scientific model for East Asian pastoral origins: A reply to Honeychurch et al. *Archaeological Research in Asia* 26(100286).

Spengler, Robert, Alicia Ventresca Miller, Tekla Schmaus, Giedrė Motuzaitė Matuzevičiūtė, Bryan K. Miller, Shevan Wilkin, **WTT Taylor**, Yugi Li, Patrick Roberts, and Nicole Boivin.

2021. An Imagined Past? Nomadic Narratives in Central Asian Archaeology. *Current Anthropology*, published ahead of print 12 May 2021 (https://www.journals.uchicago.edu/doi/10.1086/714245)

Li, Yue, Chengrui Zhang, WTT Taylor, et al.

2020. Early evidence for mounted horseback riding in northwest China. *Proceedings of the National Academy of Sciences*. Published ahead of print 3 November 2020. <a href="https://www.pnas.org/cgi/doi/10.1073/pnas.2004360117">www.pnas.org/cgi/doi/10.1073/pnas.2004360117</a>

Jeong, Choongwon, Ke Wang, Shevan Wilkin, WTT Taylor, et al.

2020. A dynamic 6,000-year genetic history of Eurasia's Eastern Steppe. *Cell*, published ahead of print 5 November 2020. <a href="https://doi.org/10.1016/j.cell.2020.10.015">https://doi.org/10.1016/j.cell.2020.10.015</a>

**Taylor, WTT,** Fantoni, M., Marchina, C., Lepetz, S., Bayarsaikhan, J., Houle, J.-L., Pham, V., Fitzhugh, W.,

2020. Horse sacrifice and butchery in Bronze Age Mongolia. *J. Archaeolog. Sci.*: Rep. 31, 102313. https://doi.org/10.1016/j.jasrep.2020.102313.

# Taylor, WTT, Wang, J., Hart, I.

2020. Understanding the prehistory of domestic animals in East and Central Asia through scientific archaeozoology. J. Archaeolog. Sci.: Rep. 32, 102397. https://doi.org/10.1016/j.jasrep.2020.102397

### Taylor, WTT, et al.

2020. Early Pastoral Economies and Herding Transitions in Eastern Eurasia. *Nature: Scientific* Reports 10:1001. <a href="https://doi.org/10.1038/s41598-020-57735-y">https://doi.org/10.1038/s41598-020-57735-y</a>

Wilkin, S., Ventresca Miller, A., Miller, B.K. Spengler III, Robert, **Taylor, WTTT**, et al. 2020. Economic Diversification Supported the Growth of Mongolia's Nomadic Empires. *Sci Rep* 10, 3916 (2020). https://doi.org/10.1038/s41598-020-60194-0

Wilkin, S., Ventresca Miller, A., Taylor, W.T.T. et al.

2020. Dairy pastoralism sustained eastern Eurasian steppe populations for 5,000 years. Nat Ecol Evol 4, 346–355 (2020). https://doi.org/10.1038/s41559-020-1120-y

## Taylor, WTTT, et al.

2019. Investigating Reindeer Pastoralism and Exploitation of High Mountain Zones in Northern Mongolia through Ice Patch Archaeology, *PLoS One*.

#### Taylor, WTTT, et al.

2019. Radiocarbon dating and cultural dynamics across Mongolia's early pastoral transition. *PLoS One.* 

### Taylor, William, et al.

2019. Investigating ancient animal economies and exchange in Kyrgyzstan's Alay Valley. *Antiquity (Project Gallery)* 93(367). <a href="https://doi.org/10.15184/aqv.2019.4">https://doi.org/10.15184/aqv.2019.4</a>

Fages A, Kristian Hanghoej K, Gaunitz C, Naveed Khan N, Gamba C, Seguin-Orlando A Leonardi M, Al-Rasheid KAS, Albizuri S, Alfarhan AH, Allentoft M, Alquraishi S, Anthony D, Benecke N, Bernáldez Sánchez E, Biglari F, Boessenkoel S, Boldgiv B, Brem G, Brown D, Burger J, Clavel B, Crubézy E, Daugnora L, de Barros Damgaard P, de Juan D, Deschler-Erb S, Ellingvåg S, Erdenebaatar D, Fathi H, Felkel S, Germonpré M, Hallson JH, Hofreiter M, Roya Kazaeli R, Khazanov M, Kosintsev P, Kristiansen K, Tabaldiev K, Kuderna L, Kuznetsov P, Laleh H, Leonard J, Lepetz S, Lhuillier J, Liesau von Lettow-Vorbeck C, Lougas L, Ludwig A, Luis C, Marques Bonet T, Mashkour M, Azadeh Mohaseb A, Morales A, Nieto Espinet A, Nistelberger H, Palsdottir AH, Pitulko V, Pizchelauri K, Pruvost M, Rajic Sikanjic P, Rannamäe E, Roslyakova N, Sauer E, Schafberg R, Scheu A, Schlumbaum A, Nathalie Serrand N, Serres Armero A, Beth Shapiro B, Shevnina I, Shidrang S, Southon J, Star B, Sykes N, Taheri K, **Taylor WTT**, et al..

2019. Tracking five millennia of horse management with extensive ancient genome timeseries. *Cell* 176(6):1419-1435.

Jeong, Choongwon, and Shevan Wilkin, Judith Littleton, Richard Hagan, Tsend Amgalantugs, Cheryl Makarewicz, **William Taylor**, et al.

2018. Population migration and dairy pastoralism in the Mongolian Steppe. *Proceedings of the National Academy of Sciences* 115 (48) E11248-E11255 (2018).

## Taylor, William, et al..

2018. Early Pastoral Economies along the Ancient Silk Road: Biomolecular evidence from the Alay Valley, Kyrgyzstan. *PLoS ONE* 13(10):e0205646.

Taylor, William, et al.

2018. Origins of Equine Dentistry. *Proceedings of the National Academy of Sciences*, 115 (29) E6707-E6715 (2018) DOI:10.1073/pnas.1721189115

Shnaider S.V., Abdykanova A., Taylor W., Kolobova K.A., Krivoshapkin A.I.

2018. Early human occupation of high altitude in western Central Asia: new evidence from the Alay valley, Kyrgyzstan. *Antiquity* Vol 92 (June 2018).

#### Taylor, William, et al.

2017. A Bayesian Chronology for Early Domestic Horse Use in the Eastern Steppe. *Journal of Archaeological Science* 81:49-58

## Taylor, William.

2017. Horse demography and use in Bronze Age Mongolia, *Quaternary International* 436:270-282.

Taylor, William, Tuvshinjargal Tumurbaatar, and Bayarsaikhan Jamsranjav.

2016. Reconstructing Equine Bridles in the Mongolian Bronze Age. *Journal of Ethnobiology* 36(3):554-570

Taylor, William, Bayarsaikhan Jamsranjay, and Tuvshinjargal Tumuurbaatar.

2015. Equine Cranial Morphology and the Archaeological Identification of Riding and Chariotry: Applications to Mongolia's late Bronze Age. *Antiquity* 89(346): 854-871.

#### **MONOGRAPH CHAPTERS**

Taylor, William and Tumurbaatar Tuvshinjargal.

2018. Horseback riding, asymmetry, and anthropogenic changes to the equine skull: evidence for mounted riding in Mongolia's late Bronze Age. In Bartosiewicz and Gal (eds.), Care or Neglect? Evidence of Animal Disease in Archaeology. Oxford, Oxbow Books.

#### **BOOK REVIEWS**

### Taylor, William.

2019. Review: The Donkey in Human History: An Archaeological Perspective. Peter Mitchell. Oxford: Oxford University Press, 2018, 306 pp. £65.00, paper. ISBN 9780198749233. *Journal of Anthropological Research* (forthcoming).

### Taylor William.

2017. Review: The Diffusion of a Postal Relay System in Premodern Eurasia. Didier Gazagnadou. Paris: Editions Kimé, 2016, 188 pp. €20.00, paper. ISBN 9782841747771. Journal of Anthropological Research 74(2):278-279

## **NON-REFEREED**

#### Taylor, William.

2021. **M**elting Mongolian ice reveals fragile artifacts that provide clues about how past people lived. *The Conversation*. 11 August 2021. <a href="https://theconversation.com/melting-mongolian-ice-reveals-fragile-artifacts-that-provide-clues-about-how-past-people-lived-164657">https://theconversation.com/melting-mongolian-ice-reveals-fragile-artifacts-that-provide-clues-about-how-past-people-lived-164657</a>

## Taylor, William.

2020. Pandemics and the Post: Mongolia's Pony Express. *The Diplomat*. 16 October 2020. https://thediplomat.com/2020/10/pandemics-and-the-post-mongolias-pony-express/

Taylor, William.

2020. Humans domesticated horses – new tech could help archaeologists figure out where and why. *The Conversation*. 2 March 2020. <a href="https://theconversation.com/humans-domesticated-horses-new-tech-could-help-archaeologists-figure-out-where-and-when-131831">https://theconversation.com/humans-domesticated-horses-new-tech-could-help-archaeologists-figure-out-where-and-when-131831</a>

# Taylor, William.

2019. How Dan the Zebra Stopped An Ill Fated Government Breeding Program In Its Tracks. *Smithsonian Magazine*. 4 December 2019.

https://www.smithsonianmag.com/smithsonian-institution/how-dan-zebra-stopped-ill-fated-governent-breeding-program-tracks-180973542/

#### Taylor, William.

2018. Exploring the Origins of Horse Herding and Riding in the Mongolian Steppe. *The Silk* Road 15:153-155.

### Taylor, William.

2018. How Ancient Exchanges in Central Asia Shaped the Modern World. *The Diplomat.* 11 Apr 2018. <a href="https://thediplomat.com/2018/04/how-ancient-exchanges-in-central-asia-shaped-the-modern-world/">https://thediplomat.com/2018/04/how-ancient-exchanges-in-central-asia-shaped-the-modern-world/</a>

# Taylor, William.

2017. Beyond Genghis Khan: how looting threatens to erase Mongolia's history. *The Guardian*, Science Notes & Theories. 26 October 2017.

https://www.theguardian.com/science/blog/2017/oct/26/beyond-ghengis-khan-how-looting-threatens-to-erase-mongolias-history

## Taylor, William.

2016. Archaeology sheds light on Mongolia's uncertain nomadic future. *The Guardian*, Science Notes & Theories. 7 December 2016.

https://www.theguardian.com/science/blog/2016/dec/07/archaeology-sheds-light-on-mongolias-uncertain-nomadic-future

#### PRIZES AND AWARDS

2021 Mary Ellen Lane Multi-Country Research Award, Council of American Overseas Research Centers

2019 Tom L. Popejov Doctoral Dissertation Research Prize, University of New Mexico

2016-2017 Ruth Kennedy Dissertation Prize, University of New Mexico

2014 International Council for Archaeozoology Open Zooarchaeology Prize

2014 International Council for Archaeozoology Stine Rossel Dissertation Prize

2014 Society for Archaeological Sciences R.E. Taylor Student Poster Award

2013 Patrick Orion Mullen Award in Archaeological Science, University of Wyoming Frison Institute

2011 NCAA Postgraduate Research Fellowship

2011 Phi Beta Kappa, Minnesota Beta Chapter, Carleton College

2011 Warren L. Beson Memorial Award (for academic excellence in athletics), Carleton College

2010 ESPN/CoSida Academic All-America Award, 2<sup>nd</sup> Team

2007 United States National Merit Scholar

2007 United States Presidential Scholar

### **CERTIFICATIONS**

2020. National Geographic Certified Educator

2017. ArcGIS: Introduction to GIS 10.4, ESRI Deutschland

2015. A Comprehensive Guide to Bayesian Analysis of Radiocarbon Dates Using OxCal, University of Arizona Accelerator Mass Spectrometry Lab, Time Series: Seminars on Dating and Chronology, Tucson, Arizona.

2014. 4th Transmitting Science Workshop in 3D Geometric Morphometrics, Barcelona, Spain.

### **LANGUAGES**

Advanced proficiency, Mongolian Intermediate proficiency, Spanish Beginner proficiency, Mandarin Chinese

#### **SERVICE**

**Editorships** 

Editor, Journal of Glacial Archaeology

Editorial Board

Editorial Board, American Center for Mongolian Studies

Editorial Board, Cheiron

English Language Editor, Archaeology, Ethnology, and Anthropology of Eurasia

Professional Memberships

Member, International Council for Archaeozoology (ICAZ)

Member, Society for American Archaeology (SAA)