

Chris Guiterman

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*Cooperative Institute for Research in Environmental
Sciences, University of Colorado at Boulder
World Data Service for Paleoclimatology, NOAA's
National Centers for Environmental Information
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Education

- 2016 Ph.D. University of Arizona, School of Natural Resources and the Environment, Tucson, AZ
- 2009 M.S. University of Maine, Orono, School of Forest Resources, Orono, ME
- 2005 B.A. Bates College, Geology (with honors), Lewiston, ME

Work Experience

- 2022– Research Scientist II. Cooperative Institute for Research in Environmental Sciences, University of Colorado at Boulder, Boulder, CO
- 2021–2022 Assistant Research Professor. Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ
- 2017–2021 Research Associate. Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ
- 2010–2016 Graduate Research Associate; Course Instructor; Teaching Assistant. University of Arizona, Tucson, AZ
- 2007–2009 Graduate Research Assistant; Teaching Assistant. University of Maine, Orono, ME
- 2005–2007 Forest Inventory Specialist (FIA, CVS, timber cruises). Camp II Forest Management, Joseph, OR

Publications

- Fraver, S., Bosely-Smith, C., Seirup, C., Guiterman, C. H., Schmeelk, T., Teets, A., Van Kampen, R., & Kenefic, L. S. (2024). Dendrochronological reconstruction of arborvitae leafminer (*argyresthia* spp.) outbreaks on northern white-cedar (*Thuja occidentalis*) in Maine, USA. *Canadian Journal of Forest Research*, 54(4), 479–485. <https://doi.org/10.1139/cjfr-2023-0193>
- Guiterman, C. H., Gille, E., Shepherd, E., McNeill, S., Payne, C. R., & Morrill, C. (2024). The International Tree-Ring Data Bank at Fifty: Status of Stewardship for Future Scientific Discovery. *Tree-Ring Research*, 80(1). <https://doi.org/10.3959/TRR2023-2>
- Harley, G. L., Therrell, M. D., Maxwell, J. T., Bhuta, A., Bregy, J. C., Heeter, K. J.,

- Patterson, T., Rochner, M., Rother, M. T., Stambaugh, M., Zampieri, N. E., Altman, J., Collins-Key, S. A., Gentry, C. M., Guiterman, C., Huffman, J. M., Johnson, D. J., King, D. J., Larson, E. R., Leland, C., Nguyen, H. T., Pederson, N., Puhlick, J. J., Rao, M. P., Rodriguez-Caton, M., Sakulich, J. B., Singh, N., Tucker, C. S., Gevel, S. L. van de, Kaiser, A. L., & Ahmad, S. (2023). The longleaf tree-ring network: Reviewing and expanding the utility of pinus palustris mill. Dendrochronological data. *Progress in Physical Geography: Earth and Environment*, 30913332211476. <https://doi.org/10.1177/03091333221147652>
- Bigio, E. R., Swetnam, T., Baisan, C. H., Guiterman, C. H., Kisilyakhov, Y. K., Andreev, S. G., Batotsyrenov, E. A., & Ayurzhanayev, A. A. (2022). The influence of land-use activities and regional drought on historical fire regimes of Buryatia, Siberia. *Ecological Research Letters*, 17(5), 054043. <https://doi.org/10.1088/1748-9326/ac6964>
- Falk, D. A., van Mantgem, P. J., Keeley, J. E., Gregg, R. M., Guiterman, C. H., Tepley, A. J., Young, D. J., & Marshall, L. A. (2022). Mechanisms of forest resilience. *Forest Ecology and Management*, 512, 120129. <https://doi.org/10.1016/j.foreco.2022.120129>
- Guiterman, C. H., Gregg, R., Marshall, L. A., Beckman, J., van Mantgem, P. J., Falk, D. A., Keeley, J. E., Caprio, A. C., Coop, J. D., Haffey, C., Hagmann, R. K., Jackson, S. T., Lynch, A. M., Margolis, E. Q., Marks, C., Meyer, M. D., Safford, H., Syphard, A. D., Taylor, A. H., Wilcox, C., Enquist, C. A. F., Fornwalt, P. J., Huffman, D. W., Iniguez, J., Molinari, N. A., Restaino, C., & Stevens, J. T. (2022). Vegetation type conversion in the US Southwest: Frontline observation and management responses. *Fire Ecology*, 18(6), 1–16. <https://doi.org/10.1186/s42408-022-00131-w>
- Margolis, E. Q., Guiterman, C. H., Chavardès, R. D., Coop, J. D., Copes-Gerbitz, K., Dawe, D. A., Falk, D. A., Johnston, J. D., Larson, E., Li, H., Marschall, J. M., Naficy, C. E., Naito, A. T., Parisien, M.-A., Parks, S. A., Portier, J., Poulos, H. M., Robertson, K. M., Speer, J. H., Stambaugh, M., Swetnam, T. W., Tepley, A. J., Thapa, I., Allen, C. D., Bergeron, Y., Daniels, L. D., Fulé, P. Z., Gervais, D., Girardin, M. P., Harley, G. L., Harvey, J. E., Hoffman, K. M., Huffman, J. M., Hurteau, M. D., Johnson, L. B., Lafon, C. W., Lopez, M. K., Maxwell, R. S., Meunier, J., North, M., Rother, M. T., Schmidt, M. R., Sherrieff, R. L., Stachowiak, L. A., Taylor, A., Taylor, E. J., Trouet, V., Villarreal, M. L., Yocom, L. L., Arabas, K. B., Arizpe, A. H., Arseneault, D., Azpeleta Tarancòn, A., Baisan, C., Bigio, E., Biondi, F., Cahalan, G. D., Caprio, A., Cerano-Paredes, J., Collins, B. M., Dey, D. C., Drobyshev, I., Farris, C., Fenwick, M. A., Flatley, W., Floyd, M. L., Gedalof, Z., Holz, A., Howard, L. F., Huffman, D. W., Iniguez, J., Kipfmüller, K. F., Kitchen, S. G., Lombardo, K., McKenzie, D., Merschel, A. G., Metlen, K. L., Minor, J., O'Connor, C. D., Platt, L., Platt, W. J., Saladyga, T., Stan, A. B., Stephens, S., Sutheimer, C., Touchan, R., & Weisberg, P. J. (2022). The North American tree-ring fire scar network. *Ecosphere*, 13(7), e4159. <https://doi.org/10.1002/ecs2.4159>
- Roos, C. I., Guiterman, C. H., Margolis, E. Q., Swetnam, T. W., Laluk, N. C., Thompson, K. F., Toya, C., Farris, C. A., Fulé, P. Z., Iniguez, J. M., Kaib, J. M., O'Connor, C. D., & Whitehair, L. (2022). Indigenous fire management and cross-scale fire-

- climate relationships in the southwest united states from 1500 to 1900 CE. *Science Advances*, 8(49), eabq3221. <https://doi.org/10.1126/sciadv.abq3221>
- Shuman, J. K., Balch, J. K., Barnes, R. T., Higuera, P. E., Roos, C. I., Schwilk, D. W., Stavros, E. N., Banerjee, T., Bela, M. M., Bendix, J., Bertolino, S., Bililign, S., Bladon, K. D., Brando, P., Breidenthal, R. E., Buma, B., Calhoun, D., Carvalho, L. M. V., Cattau, M. E., Cawley, K. M., Chandra, S., Chipman, M. L., Cobian-Iñiguez, J., Conlisk, E., Coop, J. D., Cullen, A., Davis, K. T., Dayalu, A., Hamilton, M., Hanan, E. J., Hansen, W. D., Hantson, S., Harvey, B. J., Holz, A., Huang, T., Hurteau, M. D., Ilangakoon, N. T., Jennings, M., Jones, C., Klimaszewski-Patterson, A., Kobziar, L. N., Kominoski, J., Kosovic, B., Krawchuk, M. A., Laris, P., Leonard, J., Loria-Salazar, S. M., Lucash, M., Mahmoud, H., Margolis, E., Maxwell, T., McCarty, J. L., McWethy, D. B., Meyer, R. S., Miesel, J. R., Moser, W. K., Nagy, R. C., Niyogi, D., Palmer, H. M., Pellegrini, A., Poulter, B., Robertson, K., Rocha, A. V., Sadegh, M., Santos, F., Scordo, F., Sexton, J. O., Sharma, A. S., Smith, A. M. S., Soja, A. J., Still, C., Swetnam, T., Syphard, A. D., Tingley, M. W., Tohidi, A., Trugman, A. T., Turetsky, M., Varner, J. M., Wang, Y., Whitman, T., Yelenik, S., & Zhang, X. (2022). Reimagine fire science for the anthropocene. *PNAS Nexus*, 1, pgac115. <https://doi.org/10.1093/pnasnexus/pgac115>
- Brice, B., Guiterman, C. H., Woodhouse, C., McClellan, C., & Sheppard, P. R. (2021). Comparing tree-ring based reconstructions of snowpack variability at different scales for the Navajo Nation. *Climate Services*, 22, 100213. <https://doi.org/10.1016/j.cliser.2021.100213>
- Roos, C. I., & Guiterman, C. H. (2021). Dating the origins of persistent oak shrubfields in northern New Mexico using soil charcoal and dendrochronology. *The Holocene*. <https://doi.org/10.1177/09596836211003255>
- Roos, C. I., Swetnam, T. W., Ferguson, T. J., Liebmann, M. J., Loehman, R. A., Welch, J. R., Margolis, E. Q., Guiterman, C. H., Hockaday, W. C., Aiuvalasit, M. J., Battillo, J., Farella, J., Kiahtipes, C. A., Toya, C., & Tosa, C. (2021). Native American fire management at an ancient wildland-urban interface in the Southwest US. *Proceedings of the National Academies of Sciences*, 118(4). <https://doi.org/10.1073/pnas.2018733118>
- Guiterman, C. H., Baisan, C. H., English, N. B., Quade, J., Dean, J. S., & Swetnam, T. W. (2020). Convergence of evidence supports a Chuska Mountains origin for the Plaza Tree of Pueblo Bonito, Chaco Canyon. *American Antiquity*, 85(2), 331–346. <https://doi.org/10.1017/aaq.2020.6>
- Guiterman, C. H., Lynch, A. M., & Axelson, J. N. (2020). dfoR: An R package for detection and analysis of insect defoliation signals in tree rings. *Dendrochronologia*, 63, 125750. <https://doi.org/10.1016/j.dendro.2020.125750>
- Klesse, S., DeRose, R. J., Babst, F., Black, B. A., Anderegg, L. D. L., Axelson, J., Ettinger, A., Griesbauer, H., Guiterman, C. H., Harley, G., Harvey, J. E., Lo, Y. H., Lynch, A. M., O'Connor, C., Restaino, C., Sauchyn, D., Shaw, J. D., Smith, D. J., Wood, L., Villanueva-Díaz, J., & Evans, M. E. K. (2020). Continental-scale tree-ring-based projection of Douglas-fir growth: Testing the limits of space-for-time substitution. *Global Change Biology*, 26(9), 5146–5163. <https://doi.org/10.1111/gcb.15170>

- Rother, M. T., Huffman, J. M., Guiterman, C. H., Robertson, K. M., & Jones, N. (2020). A history of recurrent, low-severity fire without fire exclusion in southeastern pine savannas, USA. *Forest Ecology and Management*, 475, 118406. <https://doi.org/10.1016/j.foreco.2020.118406>
- Guiterman, C. H., Margolis, E. Q., Baisan, C. H., Falk, D. A., Allen, C. D., & Swetnam, T. W. (2019). Spatiotemporal variability of human – fire interactions on the Navajo Nation. *Ecosphere*, 10(11), e02932. <https://doi.org/10.1002/ecs2.2932>
- Evans, M. E. K., Gugger, P. F., Lynch, A. M., Guiterman, C.H., Fowler, J. C., Klesse, S., & Riordan, E. C. (2018). Dendroecology meets genomics in the common garden: new insights into climate adaptation. *New Phytologist*, 218(2). <https://doi.org/10.1111/nph.15094>
- Guiterman, C. H., Margolis, E. Q., Allen, C. D., Falk, D. A., & Swetnam, T. W. (2018). Long-Term Persistence and Fire Resilience of Oak Shrubfields in Dry Conifer Forests of Northern New Mexico. *Ecosystems*, 21(5), 943–959. <https://doi.org/10.1007/s10021-017-0192-2>
- Klesse, S., DeRose, R. J., Guiterman, C. H., Lynch, A. M., O'Connor, C. D., Shaw, J. D., & Evans, M. E. K. (2018). Sampling bias overestimates climate change impacts on forest growth in the southwestern United States. *Nature Communications*, 9(1), 5336. <https://doi.org/10.1038/s41467-018-07800-y>
- Malevich, S. B., Guiterman, C. H., & Margolis, E. Q. (2018). burnr: Fire history analysis and graphics in R. *Dendrochronologia*, 49(February), 9–15. <https://doi.org/10.1016/j.dendro.2018.02.005>
- Betancourt, J. L., & Guiterman, C. H. (2016). Revisiting human-environment interactions in Chaco Canyon and the American Southwest. *Past Global Change Magazine*, 24(2), 64–65. <https://doi.org/10.22498/pages.24.2.64>
- Brewer, P. W., & Guiterman, C. H. (2016). A new digital field data collection system for dendrochronology. *Dendrochronologia*, 38, 131–135. <https://doi.org/10.1016/j.dendro.2016.04.005>
- Guiterman, C. H., Swetnam, T. W., & Dean, J. S. (2016). Eleventh-century shift in timber procurement areas for the great houses of Chaco Canyon. *Proceedings of the National Academy of Sciences*, 113(5), 1186–1190. <https://doi.org/10.1073/pnas.1514272112>
- Creasman, P. P., Baisan, C. H., & Guiterman, C. H. (2015). Dendrochronological Evaluation of Ship Timber from Charlestown Navy Yard (Boston, MA). *Dendrochronologia*, 33, 8–15. <https://doi.org/10.1016/j.dendro.2014.10.001>
- Guiterman, C. H., Margolis, E. Q., & Swetnam, T. W. (2015). Dendroecological methods for reconstructing high severity fire in pine-oak forests. *Tree-Ring Research*, 71(2), 67–77. <https://doi.org/10.3959/1536-1098-71.2.67>
- Brice, B., Lorion, K. K., Griffin, D., Macalady, A. K., Guiterman, C. H., Speer, J. H., Benakoun, L. R., Cutter, A., Hart, M. E., Murray, M. P., Nash, S. E., Shepard, R., Stewart, A. K., & Wang, H. (2013). Signal strength in sub-annual tree-ring chronologies from *Pinus ponderosa* in northern New Mexico. *Tree-Ring Research*, 69(2), 81–86. <https://doi.org/10.3959/1536-1098-69.2.81>
- Guiterman, C.H., Seymour, R. S., & Weiskittel, A. R. (2012). Long-term thinning effects on the leaf area of *Pinus strobus* L. as estimated from litterfall and

- individual-tree allometric models. *Forest Science*, 58(1), 85–93. <https://doi.org/10.5849/forsci.10-002>
- Guiterman, C. H., Weiskittel, A. R., & Seymour, R. S. (2011). Influences of conventional and low-density thinning on the lower bole taper and volume growth of eastern white pine. *Northern Journal of Applied Forestry*, 28(3), 123–128. <https://doi.org/10.1093/njaf/28.3.123>

Other publications and reports

- Roos, C. I., Swetnam, T. W., & Guiterman, C. H. (2023). Indigenous Land Use and Fire Resilience of Southwest USA Ponderosa Pine Forests. In *Climatic and Ecological Change in the Americas* (1st ed., pp. 87–103). <https://doi.org/10.4324/9781003316497-6>
- Guiterman, C. H., & Baisan, C. H. (2019). The origins of great house construction timbers at Chaco Canyon. *Southwest Archaeology Magazine*. Retrieved from <https://www.archaeologysouthwest.org/product/asw32-3/>
- Guiterman, C. H., & Margolis, E. Q. (2019). *Vulnerabilities of Navajo Nation Forests to Climate Change*. Retrieved from https://chguiterman.github.io/Nav_report/
- Eusden, J., Anderson, B., Castro, C., Gardner, P., Guiterman, C., Higgins, S., Kugel, K., Rodda, C., & Tamposi, C. (2017). Bedrock Geology of Mt. Washington, Presidential Range, NH. In B. Johnson & J. Eusden (Eds.), *Guidebook for Field Trips in Western Maine and Northern New Hampshire: New England Intercollegiate Geological Conference* (pp. 177–196). Bates College.
- Guiterman, C. H. (2015). *Climatic sensitivities of Navajo forestlands: use-inspired research to guide tribal forest management*. Final report for Climate & Society Fellowship, Climate Assessment of the Southwest.
- Guiterman, C. H., Margolis, E. Q., & Swetnam, T. W. (2015). *Dendroecological analyses of fire-origin shrublands in former conifer forests of the Jemez Mountains, New Mexico*. Final report to NPS Bandelier National Monument (DS CESU project UAZDS-402). Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ.
- Guiterman, C. H., Swetnam, T. W., Dean, J. S., & Creasman, P. P. (2014). *Dendrochronological sourcing of timbers from the Great Houses of Chaco Canyon, New Mexico* (p. 25). Final report to Chaco Culture National Historical Park and Western National Parks Association (WNPA Grant 13-02). Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ.

Software

- 2021 **rIMPD: An R package and Shiny App to search and explore tree-ring fire history data on the WDS-Paleo International Multi-proxy Paleofire Database**, CH Guiterman, EQ Margolis, and M Crimmins, <https://github.com/chguiterman/rIMPD>.

2020 **dfoliatR: Detection and analysis of insect defoliation signals in tree rings**, CH Guiterman, AM Lynch, JN Axelson, <https://chguiterman.github.io/dfoliatR/>.

2016 **burnr: Advanced fire history tools in R**, SB Malevich, CH Guiterman, EQ Margolis, <https://cran.r-project.org/web/packages/burnr/index.html>.

Grants & Fellowships

Total research funding: \$1,901,357

Note: I served as the project lead and/or PI unless otherwise specified

2024–2027 **Assessing fire-dependency in natural red pine forests of the Northeast**, Northeast States Research Cooperative, \$308,891.

○ with Simon Pendleton (PI, Plymouth State Univ.), Lisa Doner, John Neely

2023–2024 **DRSA: Wildfire Records Management of Historical Fire Conditions**, NOAA's NCEI, \$105,182.

2023–2024 **Augmenting fire history data on the Mogollon Rim**, USFS, subawarded from NAU's Ecological Research Institute, \$50,477.

2021–2023 **Resilience in a longleaf savanna: Historical tree recruitment in response to frequent disturbance and climate variability**, Wade Research Foundation, \$75,000.

○ with Monica Rother

2021–2023 **Developing data and knowledge toward the preservation, protection, and forest management of culturally modified trees on the Navajo Nation**, BIA Navajo Regional Office, \$100,000.

○ with William Tsosie (Navajo Heritage and Historic Preservation Department)

2022–2023 **Synthesis of the new North American tree-ring fire-scar network: using past and present fire-climate relationships to improve projections of future wildfire**, USGS Powell Center for Analysis and Synthesis, \$155,381.

○ with Ellis Margolis, Sean Parks, and Rachel Loehman

2022–2023 **Designing climate adaptation plans for the forests of the Navajo Nation (supplemental award to 2020 grant)**, USGS Southwest Climate Adaptation Science Center, \$80,760.

○ with Margaret Evans (PI), Erin Riordin, and Justin DeRose

2021–2022 **Delivering the North American tree-ring fire history network through a web application and an R package**, USGS Community for Data Integration (CDI), \$50,000.

○ with Ellis Margolis and Mike Crimmins

2022–2022 **Fire history synthesis of the southwestern US**, USFS, subawarded from NAU's Ecological Research Institute, \$47,000.

- 2019–2021 **Integrated watershed hazard assessment for wildfire, floods, and debris flows on the Navajo Nation**, *BIA Tribal Resilience Program*, \$150,000.
 ○ with Ann Youberg
- 2020–2021 **Designing climate adaptation plans for the forests of the Navajo Nation**, *USGS Southwest Climate Adaptation Science Center*, \$225,328.
 ○ with Margaret Evans (PI) and Justin DeRose
- 2020–2021 **A grove of stories: Dendrochronology of the Wheatfields Lake peel-tree grove on the Navajo Nation**, *University of Arizona Foundation Small Grants Program*, \$20,000.
 ○ with William Tsosie (Navajo Heritage and Historic Preservation Department)
- 2017–2018 **Dendrochronology study for Wupakti Residence 1 viga preservation**, *National Park Service, Wupakti National Monument*, \$14,377.
 ○ with Ron Towner (PI)
- 2017–2018 **Sourcing construction timbers at Aztec Ruins National Monument**, *Western National Parks Association. Grant #17-01*, \$7,400.
 ○ with Ron Towner (PI)
- 2017–2018 **Ancient trees and global change: A vulnerability assessment of old-growth forests on the Navajo Nation**, *BIA Tribal Climate Resilience Program*, \$216,694.
 ○ with Ellis Margolis, Craig Allen, and Alex Becenti
- 2015–2017 **Climate drivers of tree growth across Navajo Forestlands: Incorporating dendrochronology into Continuous Forest Inventory to improve management strategies for a future climate**, *Navajo Nation*, \$99,632.
 ○ with Ellis Margolis and Thomas Swetnam
- 2014–2016 **Fire regimes, demography, and climatic sensitivities of Navajo forestlands: Insights from the past to inform tribal forest management**, *EPA STAR Fellowship # F13F51318*, \$84,000.
- 2013–2015 **Forest-to-shrub type conversions: climate-disturbance interactions in the southwestern U.S.**, *USGS Cooperative Agreement G13AC00247*, \$53,000.
 ○ with Ellis Margolis (PI) and Craig Allen
- 2014–2015 **Climatic sensitivities of Navajo forestlands: Use-inspired research to guide tribal forest management**, *Climate Assessment of the Southwest (CLIMAS) Fellowship, University of Arizona*, \$5,000.
- 2012–2014 **Dendrochronological sourcing of timbers from the Great Houses of Chaco Canyon, New Mexico**, *Bandelier National Monument, Desert Southwest CESU. #UAZDS-381*, \$10,735.
 ○ with Thomas Swetnam, Jeffrey Dean, and Craig Allen
- 2013–2014 **Dendroecological analyses of fire-origin shrublands in former conifer forests of the Jemez Mountains, New Mexico**, *Bandelier National Monument, Desert Southwest CESU #UAZDS-402*, \$35,000.
 ○ with Ellis Margolis, Thomas Swetnam, and Craig Allen

2012–2013 **Dendrochronological sourcing of timbers from the Great Houses of Chaco Canyon, New Mexico**, *Western National Parks Association*. Grant #13-02, \$7,500.

○ with Thomas Swetnam, Jeffrey Dean, and Pearce Paul Creasman

2012 **Conference travel grant**, *University of Arizona Graduate and Professional Student Council*, \$500.

Presentations

Workshops

Nov 2021 **Exploring tree-ring fire history across North America**, *Guiterman, C.H. and Margolis, E.Q.*, AFE Fire Congress, Online.

Invited seminars

Sep 2022 **Vegetation type conversion in the US Southwest: Frontline observations and management responses**, Southwest Fire Science Consortium, Online.

Sep 2021 **Tracing the origins of Chacoan beams**, Crow Canyon Archaeological Center, Available on YouTube: <https://www.youtube.com/watch?v=8CdqcYmrI6o&t=4048s>.

Sep 2020 **dfoliatR empowers analyses of forest defoliator outbreak chronologies**, Laboratory of Tree-Ring Research seminar series, via Zoom.

Mar 2020 **Unearthing the story of JPB-99, the Plaza Tree of Pueblo Bonito**, Laboratory of Tree-Ring Research seminar series, via Zoom.

Feb 2018 **Shifting timber sources signal socioecological change at the descendant Chacoan cultural center, Aztec Ruins, New Mexico**, Laboratory of Tree-Ring Research seminar series, Tucson, AZ.

Nov 2017 **On the vulnerabilities of Navajo forests to climate change**, Navajo Nation Department of Natural Resources Annual Summit, Twin Arrows Casino, AZ.

Nov 2017 **Timber procurement patterns of the Aztec great houses**, Aztec Ruins National Monument, New Mexico.

Mar 2017 **Ancient origins for construction timbers of the Chacoan world (850-1240 CE)**, US Geological Survey seminar series, Tucson, AZ.

- May 2016 **Landscape-scale variability in forest response to climate, Navajo Nation, US Southwest**, William G. McGinnies Graduate Scholarship in Arid Land Studies annual lecture, Tucson, AZ.
- Mar 2016 **Persistence and fire regimes of oak shrubfields suggest increasing dominance with climate change**, Southwest Fire Science Consortium, Webinar.
- Mar 2015 **Distant and shifting sources of Chaco timbers**, Tucson Festival of Books, Tucson, AZ.
- Oct 2014 **An integrated field data collection system for dendrochronology**, Laboratory of Tree-Ring Research seminar series, Tucson, AZ.
- Apr 2014 **Dendrochronological sourcing of timbers from the Great Houses of Chaco Canyon, New Mexico**, Laboratory of Tree-Ring Research seminar series, Tucson, AZ.
- Mar 2014 **The Beams of Chaco Culture: Unraveling an ancient environment in the Southwest**, Tucson Festival of Books, Tucson, AZ.
- Sep 2013 **Dendrochronological sourcing of timbers from the Great Houses of Chaco Canyon**, Visitors Center, Chaco Culture National Historical Park.
- Mar 2013 **Tree-ring research and chronology building in the Chuska Mountains of the Navajo Nation**, Navajo Forestry Department, Ft Defiance, AZ.
- Apr 2012 **Three seasons of FIA adventures in the Pacific Northwest**, Southern Arizona Chapter of the Society of American Foresters, Tucson, AZ.

Conference presentations (*last five years*)

- Jun 2023 **Groves of stories: Dendrochronology of culturally-modified trees on the Navajo Nation**, Guiterman, C.H. and Campbell, W., Dine Studies Conference, Farmington, NM.
 ○ Delivered by W. Campbell
- Dec 2022 **Blending paleoclimate data with observations for a long-term perspective on hydroclimatic extremes**, Morrill, C., E. Gille, C.H. Guiterman, A.E. Lawman, C. Payne, I. Durre, R.S. Vose, AGU Fall Meeting, Chicago, IL.
- Jun 2022 **Historical diversity of fire regimes across Arizona and New Mexico**, Guiterman, C.H. and Margolis, E.Q., Ameridendro 2022, Montreal, Canada.

- Dec 2021 **The seasonal impact of climate on wildfire in the American Southwest (1600-1900)**, *Groeneveld, D., Morrill, C., Gross, W., Guiterman, C., and Margolis, E.*, AGU Fall Meeting, New Orleans, LA.
 ○ Daniel Groeneveld is an undergraduate intern at NOAA's National Centers for Environmental Information
- Dec 2021 **Drivers, types, and management responses to vegetation type conversions in the US Southwest**, *Guiterman, C.H., Gregg, R.M., Marshall, L.A.E., Beckmann, J.J., van Mantgem, P., Falk, D.A., and Keeley, J.E.*, AFE Fire Congress, Online.
- Dec 2021 **The North American tree-ring fire-scar network**, *Margolis, E., Guiterman, C. and 84 co-authors*, AFE Fire Congress, Online.
- Dec 2021 **Mechanisms of forest resilience**, *Falk, D.A., van Mantgem, P., Keeley, J.E., Guiterman, C.H., Gregg, R.M., Marshall, L.A.E., Tepley, A., and Young, D.*, AFE Fire Congress, Online.
- Dec 2021 **Quantifying fire regime divergence at tree-ring fire history sites in dry forests of the American southwest**, *McClure, E.J., Coop, J.D., Guiterman, C.H., Margolis, E.Q., and Parks, S.A.*, AFE Fire Congress, Online.
 ○ Emma McClure is a Masters student at Western Colorado University
- Aug 2021 **The North American tree-ring fire-scar network**, *Margolis, E. and Guiterman, C.*, ESA Virtual Meeting, Online.
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