Chris Guiterman

Research interests: Forest and fire ecology |
Forest resilience and vulnerabilities to climate
change | Human influences on forest systems |
Applications in dendrochronology

Professional preparation

- 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

Employment history

- 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

Recent publications

- Bigio, E. R., Swetnam, T., Baisan, C. H., Guiterman, C. H., Kisilyakhov, Y. K., Andreev, S. G., Batotsyrenov, E. A., & Ayurzhanaev, 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., ... 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., ... 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., ... Zhang, X. (2022). Reimagine fire science for the anthropocene. *PNAS Nexus*, 1, pgac115. https://doi.org/10.1093/pnasnexus/pgac115
- 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
- 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