CURRICULUM VITAE

**Gregory C. Wiles**

The Ross K. Shoolroy Professor of Natural Resources, Geology, The College of Wooster

Wooster, Ohio 44691, E-mail: [gwiles@wooster.edu](mailto:gwiles@wooster.edu), Tel: 330-287-1911 <https://www.wooster.edu/bios/gwiles/>

Blog: <https://woostergeologists.scotblogs.wooster.edu/>

Lab: <https://treering.voices.wooster.edu>

[Google Scholar](https://scholar.google.com/citations?user=9vFtn9YAAAAJ&hl=en)

**EDUCATION**

State University of New York at Buffalo Ph.D., Geology, 1992

State University of New York at Binghamton M.S., Geology, 1987

Beloit College B.S., Geology, 1984

**TEACHING**

*Professor (2010-present), Associate Professor (2003-2009), Assistant Professor (1998-2003),* Department of Earth Sciences, The College of Wooster.

*Visiting Assistant Professor*, Department of Geology, Macalester College, 1996-1998.

**RESEARCH EXPERIENCE**

Columbia University, Lamont-Doherty Earth Observatory, Adjunct Senior Research Scientist, 2019-present

Fellow of the Geological Society of America, 2019

Columbia University, Lamont-Doherty Earth Observatory, Associate Research Scientist 1995-2018

Lamont-Doherty Post-Doctoral Fellowship 1993-1995

**RESEARCH GRANTS**

# Keck Geology Consortium - Climate and Tree Growth in a Temperate Coastal Rainforest, Southeast Alaska ($49,625) G. Wiles and N. Wiesenberg, coPIs, Summer 2025, support for 5 students for research in the Wooster Tree Ring Lab and Angoon, Alaska, Summer 2025.

# NSF – EAR 2039939: Collaborative Research: Tapping an unused biomarker for insights of past evaporation ($98,763), 3 years of funding to work on the hydroclimate of the Midwest, G. Wiles, PI, M. Wilson, coPI, 08/01/2021 – 07/31/2025.

**Henry Luce III Fund for Distinguished Scholarship –** Radiocarbon funds for investigating erosion in the Wooster, Ohio region, 2022, $3,500.

**NSF-GP-2023154:** Applied Geosciences at the Soil, Water and Energy Nexus ($295,878), 3 years of funding for increasing participation of underrepresented groups in the Geosciences, M. Pollock. PI, G. Wiles, coPI, 10/01/20 – 09/31/23.

**NSF-AGS-2002454** Collaborative Research P2C2 – RUI – Extending key records of Holocene climate change and glacier fluctuations in the North Pacific region using subfossil wood from Southeastern Alaska ($130,265 Wooster portion), 3 years of funding for work in the Gulf of Alaska. 06/01/20-05/31/23.

**Henry Luce III Fund for Distinguished Scholarship –** Fieldwork and Outreach on Chichagof Island, Hoonah, Alaska, (2019) $3,100.

**Sherman Fairchild Foundation –** Summer support for three students and Nick Wiesenberg (Geological technician). Investigations in tree-ring dating and climate reconstruction, Wooster, Ohio and the Gulf of Alaska, summer 2020, $20,400

**National Geographic Society Grant**: Ancient ghost forests describe how Alaska’s glaciers and cedar trees responded to past warming events: Investigators: B. Gaglioti and L. Andreu-Hayles, Lamont- Doherty Earth Observatory of Columbia University, D. Mann, University of Alaska Fairbanks, Lauren E. Oakes, Stanford University, Greg Wiles, The College of Wooster, $21,100.

**NSF-AGS-1502186** Collaborative Research: P2C2 – Spatiotemporal Variability of Northwestern North American Temperatures in Response to Climatic Forcing ($148,000, Wooster portion), 3 years of funding for work in the Gulf of Alaska and to establish new technologies in the Wooster Tree Ring Lab and travel in coastal regions of Alaska (with R.D’Arrigo, K.Anchikaitus). 5/01/2015 – 4/31/2019.  
**Keck Geology Consortium** - Exploring geochronology: dating young lava flows and old trees in Decline, PI Meagen Pollock ($79,200) 9-student REU for beginning geoscience students from underrepresented groups, Summer 2017 (support for work in Alaska and Utah).  
**National Geographic Grant** – Testing for Divergence During the Medieval Warm Period, Columbia Bay, Alaska: $18,500 (summer 2014, extended to summer 2015).  
**Henry Luce III Fund for Distinguished Scholarship** – Isotopic Analyses of the Cedar Creek Mastodon Bog Core, Ohio, 2014, $4,800.  
**NSF- AGS – 1202218** Collaborative Research: P2C2--Tree-Ring Reconstructions of Western North Pacific Climate Dynamics ($150,000 Wooster portion), 3 years of funding work in the Russian Fareast (with R. D’Arrigo and K. Anchikaitus). 5/01/2012 – 4/31/2016.  
**Hewlett-Mellon Presidential Discretionary Fund –** Funding for technical support for the Department of Geology and Fern Valley, ($36,000; May 2014 – May 2016). Geology’s technician is supported through this grant and NSF research grants. **NSF-ATM-0902799** Collaborative Research: Reconstructing North Pacific Climate Variability using a Multi-Millennial Tree-Ring Resource for Glacier Bay, Alaska ($93,917, Wooster portion) (with Lawson and R. D’Arrigo) 10/16/2008 - 10/15/2012. **Center for Creativity and Innovation** (The College of Wooster) – Tree-Ring Dating of Historical Structures in Somerset Ohio, Spring/Summer 2011 - 2012, $5,200 each year. **NSF – EAR-** [**0958928**](https://www.fastlane-beta.nsf.gov/researchadmin/viewProposalStatusDetails.do?propId=0958928&performOrg=College%20of%20Wooster): Acquisition of an X-Ray Diffractometer (XRD) and X-Ray Fluorescence Spectrometer (XRF) to Enhance Undergraduate Research at a Primarily Undergraduate Institution (PUI), (M. Pollock, PI, S. Judge, G. Wiles, coPIs) 1/1/10 - 12/31/11 $295,961.  
**Mellon Foundation** - A GIS-Based Photographic Archive Chronicling Environmental Change in Northeast Ohio (with S, Judge and J. Clemons), Next Generation Library Grant, $5,500, (archive at http://drc.wooster.edu/handle/2374.COLLW/11).  
**Center for Creativity and Innovation (The College of Wooster**) – Tree-Ring Dating of Historical Structures in Ohio and PA, Summer 2009, $14,000.  
**Keck Geology Consortium** - The Geomorphology and Dating of Holocene high-water levels on the Kenai Peninsula, Alaska (summer 2009) with Alaska Fish and Wildlife Service and the Alaska State Geological Survey, $16,900.   
**Alaska Fish and Wildlife Service:** The Geomorphology and Dating of Holocene high-water levels on the Kenai Peninsula, Alaska (summer 2009) – matching funds requested for support of lake studies in the Kenai Wildlife Refuge, $10,000.   
**Center for Creativity and Innovation (The College of Wooster) –** Tree-Ring Dating of Historical Structures in Ohio, Summer 2008, $9,500.  
**National Geographic Research Grant -** Development and analysis of millennia-long tree-ring records from Glacier Bay National Park and Preserve, Alaska (GRANT #8246-07), $19,500.  
**Keck Geology Consortium Grant –** Paleoclimate of Glacier Bay National Park and Preserve, support for three students for tree-ring and glacier research in Glacier Bay National Park, Alaska, $16,900.  
**Luce Fund for Distinguished Scholarship (The College of Wooster) –** Updating Tree Ring Records and Glacial Histories at Wolverine and Exit Glaciers – Southcentral Alaska, 11/23/08-11/23//09, $5,890.  
**NSF – ATM-0202898** - coPI, Development and Analysis of Climatically-Sensitive Tree-Ring Chronologies from Data Sparse Sites along the North Pacific Rim (with R.D. D'Arrigo and Brendan Buckley, Columbia University), 7/1/02-6/31/06), $339,566.  
**Luce Fund for Distinguished Scholarship (The College of Wooster)** – Development and analysis of millennia-long tree-ring records from Glacier Bay National Park and Preserve, Alaska**,** summer 2006, $4,700.  
**Hewlett-Mellon (The College of Wooster)–** Grant forGeophysical and Geospatial Data Collection for Class Use and Student and Faculty Research (with P. Kardulias, Archaeology and R. Varga, Geology), $33,700.  
**National Geographic Research Grant -** A Thousand Year Glacial and Temperature History from College Fiord, Southern Alaska, with Lucio Cunha (University of Coimbra, Portugal) and Joao Santos (Oklahoma State University). Collaborative project funded by the Global Exploration Fund, NGS, 2004-05, $10,000.

**The Henry Luce Foundation (The College of Wooster)** – Participant,Funds to initiate *The Environmental Analysis and Action Program* at The College of Wooster, an interdisciplinary program built around student faculty research and policy implications of this work, 1/1/05- 12/31/07, $270,000.

**Luce Fund for Distinguished Scholarship –** Climate Change and Geomorphic History of Northeast Ohio, funds for the study of alluviation and its relation to recent climate change, 11/18/03-8/31/05, $4,680. **Keck Geology Consortium Grant** - The Glacial/Interglacial Transition: The Record from Ohio’s Lakes and Bogs: with Donald Pair (University of Dayton) and Thomas V. Lowell (University of Cincinnati), Summer 2002. Support for nine students to travel to Alberta, Canada to study modern glacial environments and to core bogs and lakes in southwestern Ohio, summer 2002. ($65,000).  
**NSF** **- ATM99-10805** PI, Tree-Ring Based Records of Temperature and Glacial Fluctuation Spanning the Past Two Millennia, Prince William Sound, Alaska (collaborative project with P.E. Calkin, University of Colorado), The College of Wooster Participation 5/1/00-4/31/02. This contract supported 7 College of Wooster students for travel to field sites in Alaska and lab work at Wooster. $268,570 total, $40,621 Wooster portion. **NOAA- NA86GP0435** coPI, Development and Analysis of Climatically-Sensitive Tree-Ring Chronologies from Data Sparse Sites along the North Pacific Rim (with G.C. Jacoby and R.D. D'Arrigo) 7/1/98 - 6/30/01. $327,614.  
**NSF** - **ATM97-09095** coPI, Long-Term High-Resolution Paleoclimate in the Wrangell Mountain Range, Alaska (co-PI with G.C. Jacoby), 5/1/97-4/31/01; REU supplement for Ryan McAllister (The College of Wooster). $364,950.  
**Keck Geology Consortium Grant**, Surficial Geologic Mapping and Late Wisconsin Glacial Stratigraphy of Southwest Ohio, with Donald Pair (University of Dayton) and Thomas V. Lowell (University of Cincinnati), Summer 2001. Support for eight students to travel to British Columbia, Canada to study modern glacial environments and to investigate the glacial stratigraphy of southwestern Ohio. $55,000.  
**Soil Science Society of America, U.S. Geological Survey, National Resource Conservation Service and Keck Consortium**, Outreach to the Geoscience Community: A soils workshop aimed at geology faculty from undergraduate, non-land grant institutions (with Edward R. Landa, U.S. Geological  **Survey and Mary Savina, Carleton College), Fall 2001. $18,000 total.  
Hewlett-Mellon Grant** for the Initiation of a Computer Laboratory for Geographic Information Systems, January 2000 (with Lyn Loveless, Biology), The College of Wooster. Contract provided support for hardware, software and student support. $40,000.  
**The College of Wooster Faculty Development Grants** - Continued Investigation of Landscape Development in Northern Ohio, Spring 2000, 2001, 2004, 2005. (total $2700).  
**NSF - NA56GP0235**, coPI, Development and Analysis of Climatically-Sensitive Tree-Ring Chronologies from the North Pacific Rim (with R.D. D'Arrigo and G.C. Jacoby) 4/1/95 - 3/31/97. $298,747.  
**NSF - OPP 93-18872**, coPI, Reconstruction of Climatic History and High Resolution Dating of Glacier Fluctuations Using Tree-Ring Analysis at Icy and Yakutat Bays, Alaska (co-PI with P.E. Calkin) 5/1/94 - 4/31/97. $282,113.  
**NSF - OPP 93-21213**, Researcher, West Antarctic Ice Sheet Stability: The Late Quaternary Record from Nunataks and Coastal Mountains (with H.W. Borns and P.E. Calkin) 6/01/94 - 9/01/95. $43,771.

**Memberships and Service:** Fellow of theGeological Society of America, American Geophysical Union, Tree Ring Society, Associate Editor of Tree Ring Research 2002-present, STATEMAP Advisory Council for the Ohio Department of Natural Resources 2014-present.

**PUBLICATIONS**

Research Papers (Wooster students and staff in *italics*)

*Zhao, W., Fu, J., Wiesenberg, N*., Gaglioti, B. and **Wiles, G.C**., 2024, Optimizing tree-ring blue intensity using hydrogen peroxide: an example from subfossil wood, Gulf of Alaska, USA: in revision Dendrochronologia.

Brush, N., Burks, J. Kardulias, P., **Wiles**, G., Dilyard, J. and Morton, J., 2023, Late Prehistoric Sites in the Lower Walhonding Valley of Coshocton County, Ohio during a Warm and Cool Period: Archaeology of Eastern North America, 51:157-190.

Gaglioti, B.V., Mann, D.H., **Wiles, G.C**., Andreu-Hayles, L., Hansen, W.D. and *Wiesenberg, N.,* submitted, [Forest‐wide growth rates stabilize after experiencing accelerated temperature changes near an Alaskan glacier](https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2024GL109469): Geophysical Research Letters, http: e2024GL109469.

Leland, L.C., D’Arrigo, R., Davi, N., Anchukaitis, K., Andreu-Hayles, L., Porter, T., Galloway, T., Mant, M., **Wiles, G**., Wilson, R., Beaulieu, S., Oelkers, R., Gaglioti, B., Palat Rao, M., Reid, E. and Nixon, T., in press, A spatiotemporal assessment of extreme cold in northwestern North America following the unidentified 1809 CE volcanic eruption: Paleoceanography and Paleoclimatology.

**Wiles, G.C.,** Devereux, K., Gaglioti, B.V., D’Arrigo, R.D., 2023, A 420‐Year Perspective on Winter Lake Erie Levels: Geophysical Research Letters 50 (1), doi.org/10.1029/2022GL099911.

Gaglioti, B.V. Mann, D.H., **Wiles, G.C.**, 2022, Ecosystems at Glacier Margins Can Serve as Climate‐Change Laboratories: Geophysical Research Letters 49 (13), doi.org/10.1029/2022GL098574.

Büntgen, U., A. Crivellaro, D. Arseneault, M. Baillie, D. Barclay, M. Bernabei, ...**Wiles, G**., 2022, Global wood anatomical perspective on the onset of the Late Antique Little Ice Age (LALIA) in the mid-6th century CE, Science Bulletin 67 (22), 2336-2344.

Berg, E.E., DS Kaufman, RS Anderson, **GC Wiles,** TV Lowell, EAD Mitchell, ...2022, Late-Glacial and Holocene Lake-Level Fluctuations on the Kenai Lowland, Reconstructed from Satellite-Fen Peat Deposits and Ice-Shoved Ramparts, Kenai Peninsula, Alaska, Quaternary 5 (2), <https://doi.org/10.3390/quat5020023>.

Gaglioti, B.V., Mann, D., **Wiles**, **G**. and *Wiesenberg*, N., 2021, Is the modern-day dieback of yellow-cedar unprecedented? Canadian Journal of Forest Research 51 (12), 1953-1965.

*Vargo, L*., **Wiles, G**., *Wiesenberg, N*., Williams, C. and Cochran, K., 2020, Dendroclimatic response of Metasequoia glypstroboides, Secrest Arboretum, Wooster, Ohio, USA: Ohio Journal of Science, 120(2):22-29, https://doi.org/10.18061/ojs.v120i2.7037.

# Wiles G, *Charlton J*, Wilson R, D’Arrigo R, Buma B, Krapek J, Gaglioti B, Wiesenberg N, Oelkers R., 2019, Yellow-cedar blue intensity tree ring chronologies as records of climate and forest-climate response, Juneau, Alaska, USA. Canadian Journal of Forest Research, https://doi.org/10.1139/cjfr- 2018-0525

Schijf, J., Garvin, M.C., Kaufman, S.R., Konow, C., Liang, D., Nigra, A.E., Stracker, N.H., Whelan, R.J. and **Wiles, G.,** 2019, A survey of trace metal burdens in increment cores from eastern cottonwood (Populus deltoides) across a childhood cancer cluster, Sandusky County, OH, USA: Chemosphere, <https://doi.org/10.1016/j.chemosphere.2019.124528>

# Buma B, Bisbing S, Wiles G, Bidlack A., 2019, Primary succession observations over a century do not support textbook explanations of facilitation/sequential change. Ecology. https://doi.org/10.1002/ecy.2885.

Gaglioti B.V., Mann D.H., **Wiles, G.,** Jones B.M., *Charlton, J*., Wiesenberg N., Andreu-Hayles L., 2019, Timing and potential causes of 19th-century glacier advances in coastal Alaska based on tree-ring dating and historical accounts: Frontiers in Earth Science, 7, doi:10.3389/feart.2019.00082.

# Gaglioti, B.V., Mann, D.H., Williams, A.P., Wiles, G.C., Oelkers, R., Jones, B.J., and Andreu Hayles, L., 2019. Traumatic resin ducts in Alaska: Mountain hemlock trees provide a new proxy for winter storminess: Journal of Geophysical Research, Biogeosciences, doi:10.1029/2018JG004849.

# Shah, S.K., Pandey, P., Mehrota, N., Wiles, G.C., Chandra, R., 2019, Winter temperatures for the Lidder valley, Kashmir, northwest Himalaya based on tree-rings of Pinus wallichiana: Climate Dynamics 53, 4059–4075 (2019). https://doi.org/10.1007/s00382-019-04773-6

# Freimuth, E., Diefendorf, A., Lowell, T.V., Wiles, G.C., 2019, Sedimentary n-alkanes and n-alkanoic acids in a temperate bog are biased toward woody plants: Organic Geochemistry, https://doi.org/10.1016/j.orggeochem.2019.01.006.

# Wilson, R., K Anchukaitis, L Andreu-Hayles, E Cook, R D’Arrigo, N Davi, L Haberbauer, P Krusic, B Luckman, D Morimoto, R Oelkers, G Wiles, C Wood, 2019, Improved dendroclimatic calibration using blue intensity in the southern Yukon. The Holocene, 29(11), 1817-1830, https://doi.org/10.1177/0959683619862037.

**Wiles, G.C.,** and Wiesenberg, N., 2018, Dating Ohio’s history with tree-rings: The Ohio Woodland Journal, v. 25(4), p. 18-22.

Brush, N., Burkes, J., Dilyard, J., Donaldson, R., MacDonald, G., Greenfield, H., Hannan, R., Kardulias, P., Redmond, B., **Wiles, G**. and Yerkes, R., 2018, Description of an American Mastodon  
(Mammut Americanum) Site in Morrow County, Ohio, and Assessment of Evidence for Early Paleoindian Exploitation: Archaeology of Eastern North America, v. 46, p. 215-240.

Büntgen. U. et al., 2018, Tree rings reveal globally coherent signature of cosmogenic radiocarbon events 774 and 993 CE: Nature Communications, (2018)9:3605 | DOI: 10.1038/s41467-018-06036-0 www.nature.com/naturecommunications.

McHugh, K. C., Widom, E., Spitz, H.B., **Wiles, G.C**. and Glover, S.E., 2018, Uranium mobility across annual growth rings in three deciduous tree species: Journal of Environmental Radioactivity, v. 182, p.183-189.

*Deck, D.,* **G. Wiles,** V. Matskovsky, T. M. Kuderina, *Frederick, S.,* O. Solomina, R.D’Arrigo, and N. Wiesenberg, 2017, Climate response of Larch and Birch across an elevational transect and hemisphere-wide comparisons, Kamchatka Peninsula, Russian Far East: Special Issue of Forests [Invited],  8:315; doi:[10.3390/f8090315](http://dx.doi.org/10.3390/f8090315).

Carlson, A., Kilmer, L., J. Stoner, **Wiles, G**., Starr, K., Walczak, M., Colgan, W., Reyes, A., Leydet, D., Hatfield, R. 2017, Unprecedented recent retreat of Columbia Glacier, Alaska relative to the last millennium: Geology, doi:10.1130/G38479.1.

Solomina, O.N., Bradley, R.S., Jomelli, V., Geirsdottir, A., Kaufman, D.S., Koch, J., McKay, N.P., Masiokas, M., Miller, G., Nesje, A., Nicolussi, K., Owen, L.A., Wanner, H., Nesje, A., **Wiles, G.C.,** 2016, Glacier fluctuations during the past 2000 years: Quaternary Science Reviews JQSR- D-15-00298R2.

*Horton, J.,* **Wiles, G**. *Lawson, D., Appleton, S., Wilch, J*., and *Wiesenberg, N*., 2016, Tree Ring Dated Glacial History for the First Millennium CE, Casement Glacier and Adams Inlet, Glacier Bay, Alaska, USA: Arctic, Antarctic and Alpine Research, DOI: http//dx.doi.org/10.1657/AAAR0015-038.

Wilson, R., Anchukaitis, K., Briffa, K., Büntgen, U., Cook, E., D’ Arrigo, R., Davi, N., Esper, J., Frank, D Gunnarson, B., Hegerl, G., Helama, S., Klesse, S., Krusic, P., Linderholm, H., Myglan, V., Osborn, T., Rydval, M., Schneider, L., Schurer, A., **Wiles, G.**, Zhang, P. and Zorita, E., 2016, Last millennium Northern Hemisphere summer temperatures from tree rings: Part I: the long-term context: Quaternary Science Reviews (2016), pp. 1-18 DOI information: 10.1016/j.quascirev.2015.12.005

Wilson, R., D'Arrigo, R., Andreu-Hayles, L., Oelkers, R., **Wiles, G.,** Anchukaitis, K and Davi, N., 2017, [Blue Intensity based experiments for reconstructing North Pacific temperatures along the Gulf of Alaska](http://www.clim-past-discuss.net/cp-2017-26/): Clim. Past Discuss., doi:10.5194/cp-2017-26.

Gaglioti, B. V., Mann, D.H., Wooller, M.J., Jones, B.M., **Wiles, G.C**., Groves, P., Kunz, M.L., Baughman C.A., Reanier, R.E., 2017, Oxygen isotopes from modern and ancient willows record post-glacial climate changes and exceptional rates of recent warming in Arctic Alaska: Quaternary Science Reviews, 169:330-343, <https://doi.org/10.1016/j.quascirev.2017.05.012>.

Anchukaitis, K.J., R. Wilson, K. Briffa, U. Büntgen, E.R. Cook, R.D. D’Arrigo, N. Davi, J. Esper, D. Frank, B. Gunnarson, G. Hegerl, S. Helama, S. Klesse, P.J. Krusic, H. Linderholm, V. Myglan, T. J. Osborn, Z. Peng, M. Rydval, L. Schneider, A. Schurer, **G. Wiles** and E. Zorita, 2017, Last millennium Northern Hemisphere summer temperatures from tree rings: Part II: spatially resolved reconstructions, Quaternary Science Reviews 134: 1-18, JQSR-D-16-00439R1.

Solomina, O.N., Bradley, R.S., Hodgson, D.A., Ivy-Ochs, S., Jomelli, V., Mackintosh, A.N., Nesje, A.,Owen, L.A., Wanner, H., **Wiles, G.C**., *Young, N.E* ., 2015, Holocene glacier fluctuations: Quaternary Science Reviews, doi:10.1016/j.quascirev.2014.11.018.

D'Arrigo, R., Wilson, R., **Wiles, G.**, Anchukaitis, K., Solomina, O. Davi, N., Deser, C., Dolgova, E., 2014, [Tree ring reconstructed temperature index for coastal northern Japan: implications for western North Pacific variability](http://onlinelibrary.wiley.com/doi/10.1002/joc.4230/full), International Journal of Climatology, doi.org/10.1002/joc.4230.

**Wiles, G.C**., Solomina, O., D’Arrigo, R.D., Anchukaitis , K., Gensiarovsky, Y. and Wiesenberg, N., 2014, Reconstructed Summer Temperatures over the Last 400 Years Based on Larch Ring Widths: Sakhalin Island, Russian Far East: Climate Dynamics, DOI:10.1007/s00382-014-2209-2.

**Wiles, G.C**., D’Arrigo, R.D., Barclay, D., Wilson, Jarvis, S. K., Vargo, L., Frank, D., 2014, Surface air temperature variability for the Gulf of Alaska over the past 1200 years: The Holocene, DOI: 10.1177/0959683613516815.

D’Arrigo R, Davi N, Jacoby G, Wilson R, **Wiles G**. 2014, Dendroclimatic Studies: Tree Growth and Climate Change in Northern Forests. AGU Monograph (Book), Wiley, ISBN: 978-1-118-84872-2.

Rakovan, M., Rech, J., Nekola, J., Pigati, J., and **Wiles, G**., 2013, An evaluation of Mesodon and other larger terrestrial gastropod shells for dating late Holocene and historic alluvium in the Midwestern, USA: Geomorphology, p. 47-56.

Jarvis, S. K., Wiles, G.C., Appleton, S.N., D’Arrigo, R.D. and Lawson, D.E., 2013, A warming-induced biome shift detected in tree growth of Mountain Hemlock (Tsuga mertensiana (Bong.) Carrière) along the Gulf of Alaska. Arctic, Antarctic and Alpine Research 45, DOI 10.1657/1938-4246-45.2.

*Malcomb, N.L*. and **Wiles, G.C.,** 2013, Tree-ring based reconstructions of North American glacier mass balance through the Little Ice Age. Quaternary Research, <http://dx.doi.org/10.1016/j.yqres.2012.11.005>.

**Wiles, G.C.,** *Mennett, C., Jarvis, S.K.,,*Lawson, D., Wiesenberg, N., and D’Arrigo, R, 2012, Decline in Alaskan Yellow-Cedar: tree-ring investigations into climatic responses and possible causes: Glacier Bay, Alaska: Canadian Journal of Forest Research, 42: 1–6 (2012) doi:10.1139/X2012-028.

Judge, S., Pollock, M., **Wiles, G.** and Wilson, M. 2012, Mentored undergraduate research in the geosciences. Eos 93(36): 345-346.

**Wiles, G.C.,** Lawson, D.L., *Lyon, E.,* Wiesenberg, N., 2011, Tree-ring dates on two pre-Little Ice Age advances in Glacier Bay National Park and Preserve: Quaternary Research, doi:10.1016/j.yqres.2011.05.005.

Glover, K., Lowell, T.V., **Wiles, G.C.,** Pair, D. and Hajdas, I., 2011, Deglaciation, basin formation, and post-glacial climate change patterns extracted from a regional network in Ohio and eastern Indiana: Quaternary Research, doi:10.1016/j.yqres.2011.06.004.

Capps, D.L., **Wiles, G.C**.Clague, J.J. and Luckman, B.H., 2011, Tree-ring dating of the 19th century advance of Brady Glacier and formation and filling of two marginal lakes, Alaska, The Holocene, DOI: 10.1177/0959683610391315.

Santos, J. A., Cunha, L. J., Cordova, C. E., **Wiles, G. C.**, 2010, Holocene Glacial History of College Fjord, South-Central Alaska: Polar Geography, DOI: 10.1080/1088937X.2010.543551

**Wiles, G. C.,** Barclay, D. J. and *Young, N, E*., 2010, Lichenometric Dating of Moraines in Alaska: A Review and Comparison with Independent Glacial Records, Geografiska Annalar, v. 92A, p.101-110.

**Wiles, G.C.,** *Krawiec, A.C.,* and D’Arrigo, R.D., 2009, A 265-Year Reconstruction of Lake Erie Water Levels Based on North Pacific Tree Rings: Geophysical Research Letters, doi: 2008gl037164.

Barclay, D.J., **Wiles, G.C.** and Calkin, P.E., 2009, Holocene glacier fluctuations in Alaska: Quaternary Sciences Review, v. 71, 22-26, doi:10.1016/j.yqres.2008.09.005

Barclay, D.J., **Wiles, G.C**. and Calkin, P.E., 2009, Tree-ring cross-dates for a first millennium AD advance of Tebenk of Glacier, southern, Alaska: Quaternary Research, 71: 22-26, doi:10.1016/j.yqres.2008.09.005.

**Wiles, G.C.,** Barclay, D.J., Calkin, P.E., and Lowell, T.V., 2008, Century to Millennial-Scale Temperature Variations for the Last Two Thousand Years Inferred from Glacial Geologic Records of Southern Alaska: Global and Planetary Change, 57, doi:10.1016/j.gloplacha.2006.07.036

Solomina, O., Haeberli, W., Kull, C. and **Wiles, G**., 2008, Historical and Holocene Glacier-climate variations: general concepts and overview: Global and Planetary Change, 57, doi:10.1016/j.gloplacha.2007.02.001.

*Lutz, B.,* **Wiles, G.C**., Lowell, T.V., and *Michaels, J*., 2007, The 8200 abrupt climate change in Brown’s Lake, Northeast Ohio: Quaternary Research. 67, 292-296, doi:10.1016/j.yqres.2006.08.007

*Moore, T., Malcomb, N. and* **Wiles, G.C.,** 2007, Climate response of Dahurian Larch in Secrest Arboretum, Wooster, Ohio, USA: Tree Ring Research, v 63(2), p. 111-115.

Wilson, R., **Wiles, G.,** D’Arrigo, R. and Zweck, C.. 2007, Cycles and shifts: 1300-years of multidecadal temperature variability in the Gulf of Alaska: Climate Dynamics, 28: 425-440, DOI 10.1007/s00382-006-0194-9.

Solomina, O., **Wiles**, G.C., Shiraiwa, T., and D’Arrigo, R., 2006, Multiproxy records of climate variability for Kamchatka for the past 400 years: Climate of the Past, 2, 1051-1073, SRef-ID: 1814-9359/cpd/2006-2-105.

Reyes, A.V., **Wiles, G.C**. Smith, D.J., Barclay, D.J., Allen, S., Jackson, S., Larocque, S., Laxton, S., Lewis, D. Calkin, P.E. and Clague, J.J., 2006, Expansion of alpine glaciers in Pacific North America in the first millennium AD: Geology, v. 34, p. 57-60, doi:10.1130/G21902.1.

Barclay, D.J., Gloss Barclay, J.L., Calkin, P.E. and **Wiles G.C.,** 2006, A revised and extended Holocene history of Icy Bay, southern Alaska: Arctic, Antarctic and Alpine Research, v. 38, p. 153-162.

D’Arrigo, R.D., Wilson, R.J., Deser, C., **Wiles, G**., Cook, E.R., Villalba, R., Tudhope, A., Cole, J., and Linsley, B., 2005, Tropical-North Pacific climate linkages over the past four centuries: Journal of Climate, v. 18, pp. 5253-5265, doi:10.1175/JCLI3602.1.

*Driscoll, W.,* **Wiles G.C.,** D’Arrigo, R.D., and Wilmking, M., 2005, Divergent tree growth response to recent climatic warming, Lake Clark National Park and Preserve, Alaska: Geophysical Research Letters, v. 32, L20703, doi:10.1029/2005GL024258.

**Wiles, G.C**., D’Arrigo, R.D., Villalba, R., Calkin, P.E. and Barclay, D.J., 2004, Century-scale solar variability and Alaskan temperature change over the past millennium: Geophysical Research Letters, v.31, L15203,doi:10.1029/200GL020050.

Davi, N.K., Jacoby, G.C., and **Wiles, G.C**., 2003, Boreal temperature variability inferred from maximum late wood density and tree-ring width data, Wrangell Mountain Region, Alaska: Quaternary Research, 60, 252-262.

Wiles, G.C., *McAllister, R.P.,* Davi, N.K. and Jacoby, G.C., 2003, Eolian response to Little Ice Age climate change, Tana Dunes, Chugach Mountains, Alaska: Arctic, Antarctic and Alpine Research, v. 35, n.1, p. 67-73.

Barclay, D.J., Wiles, G.C. and Calkin, P.E., 2003, An 850-year record of climate and fluctuations of the tidewater-calving Nellie Juan Glacier, South central Alaska: Annals of Glaciology, v.36, p. 51-56.

**Wiles, G.C.**, Jacoby, G.C., Davi, N.K., and *McAllister, R*.*P.,* 2002, Late Holocene glacial fluctuations in the Wrangell Mountains, Alaska: Geological Society of America Bulletin, v. 114, p. 896-908.

D'Arrigo, R., R. Villalba and **G. Wiles**, 2001, Tree-ring estimates of Pacific decadal climate variability*,* Climate Dynamics, v. 18, p. 219-224.

Calkin, P.E., **Wiles, G.C.**, and Barclay, D.J., 2001, Holocene coastal glaciation of Alaska: Quaternary Science Reviews, 20, p. 449-461.

Barclay, D.J., Calkin, P.E. and **Wiles, G.C**., 2001, Holocene history of Hubbard Glacier in Yakutat Bay and Russell Fjord, Southern Alaska: Geological Society of America Bulletin, v. 113, p.388-402.

Villalba, R., D'Arrigo, Cook, E.R., Jacoby, G.C. and **Wiles, G.C**., 2001, Decadal-scale climatic variability along the extratropical western coast of the Americas: evidence from tree-ring records: In: V. Markgraf (ed.) Interhemispheric Climate Linkages. Academic Press, p. 155-172.

Howe, G.T, and **Wiles, G.C.**, 2001, The story in the rings: Ohio Woodland Journal, v.8, p. 16-18.

D'Arrigo, R. D., **Wiles, G. C**., Jacoby, G. C., and Villalba, R., 1999, North Pacific sea surface temperatures: past variations inferred from tree rings: Geophysical Research Letters, v.26, pp.2757-2760.

**Wiles, G.C**., Post, A., Muller, E.H., and Molnia, B., 1999, Dendrochronology and late Holocene history of the Bering Piedmont Glacier, Alaska: Quaternary Research, v 52, pp. 185-195.

**Wiles, G.C**., Barclay, D., and Calkin, P.E., 1999, Tree-ring dated Little Ice Age histories of maritime glaciers from western Prince William Sound, Alaska. The Holocene, v.9, pp.163-173.

Barclay, D.J., **Wiles, G.C**. and Calkin, P.E., 1999, A 1119-year tree-ring width chronology from western Prince William Sound, southern Alaska: The Holocene, v.9, pp.79-84.

Villalba, R., D'Arrigo, R.D., Cook, E.R., **Wiles, G.C**. and Jacoby, G.C., 1999, Inter-decadal climate oscillations along extra-tropical western coasts of the Americas - evidence from tree rings over the past four centuries, American Meteorological Society 10th Symposium on Global Change Studies, January 1999, pp. 13-16.

**Wiles, G.C**., D'Arrigo, R.D., and Jacoby, G.C., 1998, Gulf of Alaska atmosphere-ocean variability over recent centuries inferred from coastal tree-ring records: Climatic Change, v.38, pp. 289-306.

D'Arrigo, R.D., Yamaguchi, D.K., **Wiles, G.C**., Jacoby, G.J., Osawa, A., and Lawrence, D.M., 1997, A Kashiwa Oak (Quercus dentata) tree-ring width chronology from northern coastal Hokkaido, Japan: Canadian Journal of Forest Research, v. 27, pp. 613-617.

**Wiles, G.C**., 1997, North Pacific climate change for the last millennium: the record from coastal glaciers and trees: February 2, 1997, American Meteorological Society, Proceedings of the 8th Symposium on Global Changes Studies, Long Beach, CA, pp. 218-220.

Barclay, D.J., Gloss, J.L., Calkin, P.E. and **Wiles, G.C.**, 1997, Late Holocene advance and retreat of tidewater glaciers in Yakutat Bay and Icy Bay, Gulf of Alaska: in C.J. van der Veen, (ed.) Calving Glaciers: Report of a Workshop, Feb. 28-Mar. 2, 1997, BPRC Rep. No. 15, Byrd Polar Research Center, Ohio State University, Columbus, Ohio, pp.61-66.

Gostev, M., **Wiles, G.C**., D'Arrigo, R.D., and Jacoby, G.C., 1996, Early summer temperatures reconstructed since 1670 A.D. for central Kamchatka based on Siberian Larch tree-ring width data: Canadian Journal of Forest Research, v. 26, p. 2048-2052.

Jacoby, G.C., **Wiles, G.C**., and D'Arrigo, R.D., 1996, Alaskan dendroclimatic variations for the past 300 years along a north-south transect: in J.S. Dean, D.M. Meko and T.W. Swetnam, Tree Rings, Environment and Humanity, Radiocarbon, p. 235-248.

**Wiles, G.C**., D'Arrigo, R.D., and Jacoby, G.C., 1996, Summer temperature changes along the Gulf of Alaska and the Pacific Northwestern coast modeled from coastal tree rings: Canadian Journal of Forest Research, v. 26, p. 474-481.

**Wiles, G.C.**, Jacoby, G.C., and Calkin, P.E., 1996, Tree-ring analysis and geomorphology: principles and recent applications: Geomorphology, v. 16, pp. 259-272.

Borns, H.W., Jr., Dorion, C., Calkin, P.E., **Wiles, G.C.**, and Barclay, D.J., 1995, Evidence for thicker ice for interior West Antarctica: Antarctic Journal of the United States, v.30, n.5, p.100-101.

**Wiles, G.C**., D'Arrigo, R.D., and Jacoby, G.C., 1995, Modeling north Pacific temperature and pressure changes from coastal tree-ring chronologies, in C.M. Isaacs and V.L. Tharp, Proceedings of the Eleventh Annual Pacific Climate Workshop, pp. 67-78.

**Wiles, G.C**., Calkin, P.E., and Post, A., 1995, Glacial fluctuations in the Kenai Fjords, Alaska, U.S.A.: an evaluation of controls on iceberg-calving glaciers: Arctic and Alpine Research, v. 27, pp. 234- 245.

**Wiles, G.C**. and Calkin, P.E., 1994, Late Holocene, high resolution glacial chronologies and climate, Kenai Mountains, Alaska: Geological Society of America, Bulletin, v. 106, pp. 281-303.

**Wiles, G.C**. and Calkin, P.E., 1993, Neoglacial fluctuations and sedimentation of an iceberg-calving glacier resolved with tree rings: Quaternary International, v.18, pp. 35-42.

**Wiles, G.C**. and Calkin, P.E., 1992, Reconstruction of a debris slide-initiated flood in the southern Kenai Mountains, Alaska: Geomorphology, v. 5, pp. 535-546.

Calkin, P.E. and **Wiles, G.C,** 1992, Little Ice Age glaciation in Alaska: A record of recent global change: in G. Weller and C. Wilson, eds., The Role of the Polar Regions in Global Change, Proceedings of an International Conference, Fairbanks, Alaska, UAF Geophysical Institute and the Center for Global Change, Fairbanks, Alaska, pp. 617-625.

**Wiles, G.C**. and Calkin, P.E., 1990, Neoglaciation of the southern Kenai Mountains, Alaska: Annals of Glaciology, v. 14, pp. 319-322.

**Books and Book Chapters**

D’Arrigo R, Davi N, Jacoby G, Wilson R, **Wiles G**. 2014, Dendroclimatic Studies: Tree Growth and Climate Change in Northern Forests. AGU Monograph (Book), Wiley, ISBN: 978-1-118-84872-2

Villalba, R., Luckman, B. H., Boninsegna, J.A., D'Arrigo, R.D., Lara, A., Villanueva-Diaz, J., Masiokas, M., Argollo, J., Soliz, C., LeQuesne, C., Stahle, D., Roig, F., Aravena, J.C., **Wiles, G**., Hartsough, P., Wilson, R.J.S., Watson, E., Cook, E.R., Cerano-Paredes, J., Therrell, M. , Cleaveland, M., Morales, M.J., Moya, J., Pacajes, J., Massacchesi, G., Biondi, F., Urrutia, R., and Martinez Pastur, G. 2011, Dendroclimatology from regional to continental scales: Understanding regional processes to reconstruct large-scale climatic variations across the Western Americas. In Hughes, M.K., Swetnam, T.W. and Diaz, H.F. (eds.) Dendroclimatology: Progress and Prospects, Springer. 2011.

Barber, V.A., Juday, G.P., Osterkamp, T., D'Arrigo, R., Berg, E., Buckley, B., Hinzman, L, Huntington, H., Jorgensen, T., McGuire, D., Riordan, B., Whiting, B., Wiles, G. Wilmking, M., 2009, Synthesis of Recent Climate Warming Effects on Terrestrial Ecosystems of Alaska: in Climate Warming in Western North America/Evidence and Environmental Effects, Ed. Frederic H. Wagner, University of Utah Press

**Abstracts** (last 10 years, Wooster students and staff in *italics*)

Jull, T., Panyushkina, I, MihMolnár, M., Varga, T., Livina, V., Cheng, L., Baisan, C., Myglan, V., Sljusarenko, I., **Wiles, G.C.,** *Wiesenberg, N.* Miyake, F., 2025, Large solar-flares and other events recorded in carbon-14 in tree rings: 2025 Sun-Climate Symposium: Exploring the Sun’s Role in a Changing Cryosphere, Fairbanks, Alaska.

Diefendorf, A., Corcoran, M.C., Dietrich, W.L., Lowell, T.V., Kmetz, A.J., Naake, H., Schenk, M., **Wiles, G.C**. and Wilson, M.A, 2024, Diatom-derived highly branched isoprenoids and their carbon and hydrogen isotopes across a wide range of lakes are influenced by diatom community, metabolism, and lake water: 2024 Goldschmidt Conference, Chicago, IL.

Kmetz, A.J., Diefendorf, A.F., Corcoran, M.C., Dietrich, W.L., Lowell, T.V., Naake, H., Schenk, M., **Wiles, G.C**. and Wilson, M.A., 2024, [Partitioning the sourcing of lake sediment organic matter using isotopic, elemental, and biomarker-based approaches](https://conf.goldschmidt.info/goldschmidt/2024/meetingapp.cgi/Paper/23658): 2024 Goldschmidt Conference, Chicago, IL.

Schenk, M., Diefendorf, A.F., Corcoran, M.C., Dietrich, W.L., Kmetz, A.J., Lowell, T.V., Naake, H., **Wiles, G.C**. and Wilson, M.A., 2024, [Characterizing the controls on lake water isotopes for diatom biomarker paleohydrology calibrations](https://conf.goldschmidt.info/goldschmidt/2024/meetingapp.cgi/Paper/24360): 2024 Goldschmidt Conference, Chicago, IL.

Corcoran, M.C., Diefendorf, A.F., Lowell, T.V., *Wiesenberg, N.,* **Wiles, G.C.,** Wilson, M.A., Dietrich, W. and Naake, H., 2023, [Seasonal trends in diatom-derived highly branched isoprenoids (HBIs) and plant wax hydrogen isotopes over two years](https://ui.adsabs.harvard.edu/abs/2023AGUFMPP21F1351C/abstract): AGU Fall Meeting 2023, San Francisco, CA, 11-15 December 2023.

Naake, H., Diefendorf, A.F., Lowell, T.V., **Wiles, G.C.,** Wilson, M.A., Bird, B.W., Corcoran, M.C., Dietrich, W., Kmetz, A. and Beekhuizen, A., 2023, [Establishing the Influence of Diatom Community on HBI as a Paleoclimate Proxy](https://ui.adsabs.harvard.edu/abs/2023AGUFMPP21F1348N/abstract): AGU Fall Meeting 2023, San Francisco, CA, 11-15 December 2023.

Jull, T., Panyushkina, I, MihMolnár, M., Varga, T., Livina, V., Cheng, L., Baisan, C., Myglan, V., Sljusarenko, I., **Wiles, G.C.**, *Wiesenberg, N.* Miyake, F., 2023, Solar flare and other cosmic-ray effects on 14C production rates in tree rings from high- and mid-latitudes: Sun and Climate, Conference, Flagstaff, AZ.

Jull, T., Panyushkina, I, MihMolnár, M., Varga, T., Livina, V., Cheng, L., Baisan, C., Myglan, V., Sljusarenko, I., **Wiles, G.C**., *Wiesenberg, N*. Miyake, F., 2023, Records of space weather found in 14C production rates in tree rings and connections to solar activity and solar flare events: Sun and Climate, Conference, Flagstaff, AZ.

Fisher, T., **Wiles, G**. and *Wiesenberg. N.,* 2023, [An Exceptionally Low Water Level in Lake Huron during the 17 TH Century](https://ui.adsabs.harvard.edu/abs/2023GSAA...5586608F/abstract):  57th Annual GSA North-Central Section Meeting - 2023, 04-05 May 2023, Vol. 55, id.386608.

*Palmieri, M., Metz, I.J., Pham, M., Smith, D. C.-M., Cooper, T. J.,* Pollock, M. and **Wiles, G.,** 2023, Understanding land use and climate changes on conserved farmlands on Northeast Ohio through community collaboration: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, doi: 10.1130/abs/2023AM-389277.

*Robertson, G. R.,* *Pozefsky, M.E*., Wilson, Mark, **Wiles, G.,** Wiesenberg, N., Lowell, T. V., Diefendorf, A. F. and Corcoran, M., 2023, Preliminary analysis and paleoenvironmental assessment of the sponges and diatoms preserved in a late Holocene to recent sediment core from Browns Lake, Wayne County, Ohio: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, doi: 10.1130/abs/2023AM-392825.

*Fox, N., Lyon, E.,* Wiesenberg, N. and **Wiles, G**., 2023, A record of anthropogenically-driven landscape change and preliminary fire history over the historical period, Browns Lake, Ohio: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, doi: 10.1130/abs/2023AM-394679

*Hinkley, L.W., Cooper, T*., Gaglioti, B., Navareaz, J., Wiesenberg, N. and **Wiles, G.C**., 2023, The intersection of oral histories and tree-ring chronologies in Southeast Alaska: Geological Society of America Abstracts with Programs. Vol. 55, No. 6, doi: 10.1130/abs/2023AM-392714

*Cooper, T., Hinkley, L.*, Gaglioti, B., Narvaez, J., *Wiesenberg, N*. and **Wiles, G**., 2023, [The Intersection of Oral Histories and Tree Ring Chronologies in Southeast Alaska](https://ui.adsabs.harvard.edu/abs/2023GSAA...5592714C/abstract): GSA Connects 2023, Pittsburgh, Pennsylvania, 15-18 October 2023, Vol. 55, id.392714

*Hinkley, L., W. Zhao,* N. *Wiesenberg, E*. Peabbles, B. Gaglioti, *J. Fu* and **G. C. Wiles**, 2022, Cedar Tree Ring Histories from Southeast Alaska: A Collaborative Student Project: The national meeting of the American Geophysical Union (AGU), Chicago.

*Denes, C.A*. and **G. C. Wiles**, 2022, It’s Getting Wetter in Wooster: Climatic Influences on Pluvial Conditions in Northeast Ohio: The national meeting of the American Geophysical Union (AGU), Chicago.

*Zhao, W., N*. Wiesenberg, *J. Fu*, and **G.C. Wiles**, 2022, Improving on the Blues: Investigating Subfossil Wood Color Removal with Hydrogen Peroxide in Blue Intensity Tree Ring Chronologies: The national meeting of the American Geophysical Union (AGU), Chicago.

*Smith, D., Barnett, P., Cooper, T.,* Pollock., M., **Wiles, G.C**., 2022, Three Age Cohorts of White Oaks and their Response to Climate Change in Wooster, Ohio: The national meeting of the American Geophysical Union (AGU), Chicago.

Corcoran, M.C., Diefendorf, A.F., Lowell, T.V., *Wiesenberg, N*., **Wiles, G.C.** and Wilson, M.A. (2021). *Seasonal trends of hydrogen isotopes and concentrations of highly branched isoprenoids (HBIs) produced by lake diatoms*. American Geophysical Union Annual Meeting. New Orleans, LA.

Corcoran MC, Diefendorf AF, Lowell TV, *Wiesenburg N,* **Wiles G**, Wilson M, Dietrich, W, *Berina JPA* (2022). *Seasonality of concentrations of highly branched isoprenoids (HBIs) produced by lake diatoms.* Gordan Organic Geochemistry Conference. Plymouth, NH.

Corcoran, M., Diefendorf, A.F., Lowell, T., *Wiesenberg, N*., **Wiles, G**., Wilson, M., Dietrich, W., and *Berina, J.P* (2022). *Seasonality of hydrogen isotopes and concentrations of highly branched isoprenoids (HBIs) produced by lake diatoms*. North Central and Southeastern Geological Society of America Meeting. Cincinnati, OH.

*Berina, J.P.,* **Wiles, G.,** Wilson, M., Lowell, T., Diefendorf, A.F., Corcoran, M., Dietrich, W., and *Wiesenberg, N*. (2022). *Unearthing the effects of European-American settlement on a northeast Ohio kettle hole through diatom stratigraphy*. North Central and Southeastern Geological Society of America Meeting. Cincinnati, OH.

Pollock, M., Schen, M., and **Wiles, G**. (2022). *A coordinated experiential learning program to broaden participation by enhancing self-efficacy, geoSTEM identity, and career awareness*. Earth Educators’ Rendezvous.

*Abercrombie, C., Hodges, G., Wilson, L., Yoon, E., Braun, E., Leisher, K., Chikomo, M., Banna, L*., Pollock, M., Wiesenberg, N., and **Wiles, G**. (2022). *The community water project: Student exploration of geosciences in the context of stormwater management in Northeast Ohio*. Geological Society of America.

Gaglioti, B., Mann, D., **Wiles, G.** and Andreu-Hayles , L. (2022). *Holocene Records of the Aleutian Low Pressure System*. virtual Workshop on SE Alaska, and neighboring regions along the British Columbia coast, climate change, ice sheet dynamics, volcanic geohazards, Ice Age refugia, biodiversity, and biogeographic history.

**Wiles, G.C**, Gaglioti, B. and Wiesenberg, N. (2022). *Putting the Recent Pluvial into Context: Tree-Ring Records of Midcontinental North American Hydroclimate*. Geological Society of America. Cincinnati, OH.

*Papay, R.,* Wiesenberg, N., Gaglioti, B., and **Wiles, G**. (2022). *The Glacial History of Wolf Lake Valley and the Development of a 4000-year Tree Ring Record in Glacier Bay National Park and Preserve, Alaska*. Geological Society of America. Cincinnati, OH.

Leland, C., D'Arrigo, R., Davi, N., Porter, T., Andreu-Hayles, L., Oelkers, R., **Wiles, G**., Wilson, R., Anchukaitis, K., Rao, M., Gaglioti, B., Reid, E., Beaulieu, S., Nixon, T. (2022). *The Unidentified ~1809 Volcanic Event: Evidence from Tree Rings and Historical Data*. 6th Pages Open Science Meeting. Online.

*Zhao, W., Papay, R*., Wiesenberg, N., *Fiala, L*., Gaglioti, B., and **Wiles, G.**(2022). Voices in the Trees: Seeking Common Stories from Tree Rings in a Remote Collaboration. The Geological Society of America. Cincinnati, OH.

*Cerne, C.,* **Wiles G.C**., Wiesenberg, N., Gaglioti, and Lapke, A*., 2020,* Tree-ring and Oral History Together Guide the Prehistory of Hoonah and Glacier Bay, Al*aska:* Annual Meeting of the American Geophysical Union, December 2020.

*Pearson, J.,* Gaglioti, B., **Wiles G.C**., and Mann, D., 2020, How Does the Proximity of Mountain Glaciers Affect the Microclimates of Adjacent Forests in Southeast Alaska? Annual Meeting of the American Geophysical Union, December 2020.

*Chaudhari, S.,* **Wiles, G.C***., Wenshuo Zhao and* Wiesenberg, N*.,* 2020, Varying Tree Response to Pluvial Conditions by Natural and Exotic Species, Northeast Ohio, USA*:* Annual Meeting of the American Geophysical Union, December 2020.

*Chikomo, M*., **Wiles, G.C**., Gagiloti, B., Wiesenberg, N. *Wenshuo Zhao*, 2020, Growth Decrease Linked to Warming Minimum Temperatures at Coastal Mountain Hemlock Sites, Gulf of Alaska: Annual Meeting of the American Geophysical Union, December 2020.

**Wiles, G.,** *Devereux, K*., and Gaglioti, B., 2020, Tree Ring Reconstruction Places Exceptionally High Modern Lake Erie Water Levels into a 350 Year Perspective: Annual Meeting of the American Geophysical Union, December 2020.

**Wiles, G**., Gaglioti, B., *Race, V., Charlton*, J., Alley, K., *Gunderson, J*. and Wiesenberg, N. 2019,Advances in understanding Holocene Alpine Glaciation, Southern Coastal Alaska: Geological Society of America Abstracts with Programs. Vol. 51, No. 5 doi: 10.1130/abs/2019AM-333049

*Charlton, J., Race, V.,* Alley, K., **Wiles, G**. and Wiesenberg, N., 2018, Forcing a glacier flow model using mass balance reconstructed based on blue intensity tree-ring records: Exploring the millennium-long advance of Columbia Glacier, south-central Alaska: Geological Society of America Abstracts with Programs. Vol. 50, No. 6, doi: 10.1130/abs/2018AM-323434.

*Lanier, A., Devereux, K., Shabazz, J., Race, V., Charlton, J*., Wiesenberg, N. and **Wiles, G**., 2018, Using tree ring data as a proxy for summer precipitation and the timing of land use changes in Northeast Ohio: Geological Society of America Abstracts with Programs. Vol. 50, No. 6 doi: 10.1130/abs/2018AM-315791

**Wiles, G.,** Wilson, R., D’Arrigo, R., Race, V., Charlton, J., Hayles, L., Oelkers, R., Davi, N., Gaglioti, B., Wiesenberg, N. and Anchukaitis, K. 2018, Blue intensity tree ring proxies breathe new life into Northeast Pacific Climate Studies: Geological Society of America Abstracts with Programs. Vol. 50, No. 6 doi: 10.1130/abs/2018AM-323242

Gaglioti, B., Mann, D., Andreu-Hayles, L., Wiles, G., Streverler, G., Williams, P., Field, R., D'Arrigo, R., 2017, The last millennium of Aleutian low variability based on dendrochronology and water isotope proxies: presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 December.

Shah, S., **Wiles, G**., Mehrotra, N., Pandey, U. and Chandra, R., 2018, Shingo River flow reconstruction from Upper Indus Basin using ring-widths of Abies pindrow: abstract Worldendro, Bhutan.

Gaglioti, B., Mann, D., Williams, P., Wiles, G., Oelkers, R., Jones, B. and Andreu-Hayles, L., 2018, Sudden shifts in wintertime Aleutian Low variability revealed in a 550-year record of storm-damaged trees from Southeast Alaska: Worldendro, Bhutan.

Oelkers, R., Andreu-Hayles, L., D’Arrigo, R., Wilson, R., **Wiles, G**., Davi, N. and Anchukaitis, K., 2018, A blue intensity temperature record from a drought sensitive White Spruce site in central Alaska:Worldendro, Bhutan.

Muschitiello, F., Wiles, F., Lowell, T. and Kromer, K., 2018, New tree-ring chronologies from northeastern USA reveal decadal climate variability in the North Atlantic during the Last Glacial Maximum: European Geoscience Union, 8–13 April 2018, Vienna, Austria.

Gaglioti, B.V., Rao, M.P., Wiles, G.C., D’Arrigo, R.D., LAndreu-Hayles, L., Wilson, R., Oelkers, R., Mann, D., 2018, Tree-ring response to volcanic events in the Gulf of Alaska over the past millennium: Abstract, Volcanic Impacts on Climate and Society (VICS) 2018 Meeting 12 - 14 January 2018, University of Arizona, Tucson, Arizona USA.

Barclay, D., Luckman, B. and **Wiles, G**., 2018, A test of intrinsic climate variability as the causes of late Holocene valley glacier fluctuations: Artic Workshop, Buffalo NY, 22-24 March.

*Lanier, A., Devereux, K., Shabazz, J., Race, V., Charlton, J*., Wiesenberg, N.and **Wiles, G**., Using tree ring data as a proxy for summer precipitation and the timing of land use changes in Northeast Ohio: Geological Society of America Abstracts with Programs. Vol. 50, No. 6 doi: 10.1130/abs/2018AM-315791

Buma, B., Bisbing, S., Krapek, J., Wiles, G., Bidlack, A. and Wright, G., 2018, [Space, Stochasiticity, Succession, and the Limits of Chronosequence Methods: Why 101-year-old History Matters to Primary Succession Communities and Ecosystems: US-IALE, Chicago, IL, 8-12 April.](https://usiale2018.sched.com/event/DeOl/disturbance-legacies-and-resilience-space-stochasiticity-succession-and-the-limits-of-chronosequence-methods-why-101-year-old-history-matters-to-primary-succession-communities-and-ecosystems?iframe=yes&w=&sidebar=yes&bg=no)

*Charlton, J., Race, V.,* Alley, K., **Wiles, G**. and Wiesenberg, N., 2018, Forcing a glacier flow model using mass balance reconstructed based on blue intensity tree-ring records: Exploring the millennium-long advance of Columbia Glacier, south-central Alaska: Geological Society of America Abstracts with Programs. Vol. 50, No. 6, doi: 10.1130/abs/2018AM-323434.

*Charlton, J., Cruz, A., Lummus, M., Loadholt, K., Messerich, C*., **Wiles, G**., Buma, B., Krapek, J., 2018, Yellow cedar growth response to decadal climatic shifts at Cedar Lake, Juneau, Alaska: Abstract, Geological Society of America, Seattle.

*Gunderson, J*., Wiles, G., Wiesenberg, N. and *Wayrynen, A*., Lawson, D., 2018, [Tree-Ring Dating Neoglaciation in Muir Inlet, Glacier Bay National Park and Preserve, Southeast Alaska, USA](https://aag.secure-abstracts.com/AAG%20Annual%20Meeting%202018/abstracts-gallery/11903): National Meeting of the American Association of Geographers, New Orleans.

Galioti, B., Mann. D.H.,Farquharson, L.M., Jones, B.M., Wooller, M.J., Baughman, C.A., Groves, P., Kunz, M., Pohlman, J., **Wiles., G.** and Reanier, R., 2016, Peat insulation moderates the sensitivity of permafrost carbon to climate warming in Arctic Alaska: presented at 2016 Fall Meeting, AGU, San Francisco, Calif., 12-16 Dec.

**Wiles, G.C.,** Lawson, D.E., Wiesenberg, N., Gaglioti, B., D'Arrigo, R.D., *Wayrynen, A*. and *Misinay, D*., 2016, Tree Ring Studies in Glacier Bay National Park and Preserve: Progress and Future Work: National Park Service Alaska Region Centennial Science and Stewardship Symposium in Fairbanks, AK October 19-20 [invited].

*McGrath, S., Luna, E*., Wiesenberg. N., and **Wiles, G.C**., 2016, Examining the effects of a changing climate on Alaska Yellow Cedar: Analyses of ring width and blue intensity tree ring chronologies: Geological Society of America Abstracts with Programs. Vol. 48, No. 7 doi: 10.1130/abs/2016AM-280922.

[*Deck, C. B*.](mailto:cdeck17@wooster.edu), **Wiles, G**., Matskovsky, V., Kuderina, T., D'Arrigo, R., Solomina, O. and Wiesenberg, N., 2016, Dendroclimatic response of larch and birch across an elevational transect and large-scale climate comparisons, Kamchatka Peninsula, Russian Fareast: Geological Society of America Abstracts with Programs. Vol. 48, No. 7, doi: 10.1130/abs/2016AM-280930.

*Hilton, A.,* **Wiles, G.C**., *Happ, M*. and Wiesenberg, N., 2016, Analysis of new blue intensity and ring width tree ring chronologies as proxies for North Pacific climate change, Columbia Bay, Alaska: Geological Society of America Abstracts with Programs. Vol. 48, No. 7, doi: 10.1130/abs/2016AM-282738.

Jimerson, C.R., Freimuth, E.J., Pollock, M. and **Wiles, G.C.**, 2016, Land use changes over the past 200 years in Northeast Ohio recognized in lake cores from Browns Lake Bog: Geological Society of America Abstracts with Programs. Vol. 48, No. 7, doi: 10.1130/abs/2016AM-285878.

[*Bell, B. B.*](mailto:bbell18@wooster.edu)*, Luna, Eduardo T., Deck, C. B*., Wiesenberg, N. and **Wiles, G**., 2016, North Pacific Climate and the C.E. 1741 Vitus Bering Expedition to Alaska: Geological Society of America Abstracts with Programs. Vol. 48, No. 7, doi: 10.1130/abs/2016AM-285664:

*Gunderson, J.,* **Wiles, G.C**., and Wiesenberg, N., 2016, Investigating blue light intensity as a new parameter for tree ring-based glacier mass balance reconstructions in Alaska: Geological Society of America Abstracts with Programs. Vol. 48, No. 7, doi: 10.1130/abs/2016AM-282813.

*Wayrynen, A*., **Wiles, G.C**., and Bourne, D., 2016, Coincidence or prophecy? A geological analysis of John Muir’s famous account in Glacier Bay in the late 19th century: Geological Society of America Abstracts with Programs. Vol. 48, No. 7, doi: 10.1130/abs/2016AM-285819.

D’Arrigo, R., R. Wilson, L. Andreu-Hayles, R. Oelkers, **G. Wiles** and N. Davi. 2016. High-sensitivity climate signatures in a northwestern North American Blue Light Intensity tree-ring data network. Ameridendro, Mendoza, spring 2016.

Oelkers, R., R. D’Arrigo, L. Andreu-Hayles, **G. Wiles**, R. Wilson, N. Davi and B. Buckley. 2016. The temperature signal of Blue Light Intensity tree-ring data sets from trees growing under distinct environmental conditions. Ameridendro, Mendoza, spring 2016.

**Wiles, G**., M. Happ, R. Oelkers, R. Wilson, R. D’Arrigo, O. Solomina, N. Davi, L. Andreu-Hayles and K Anchukaitis. 2016. Development of Blue Intensity chronologies along the North Pacific rim. Ameridendro, Mendoza, spring 2016.

Andreu-Hayles, R. D’Arrigo, R. Oelkers, K. Anchukaitis, D. Frank, N. Davi, R. Wilson and **G. Wiles**. 2016. Comparison of Blue Light Intensity and Maximum Latewood Density tree-ring chronologies from Alaska and the Yukon Territory. Ameridendro, Mendoza, spring 2016.

Matskovsky, V., **Wiles, G.C**. and Helama, S., 2015, Using the DIRECT method of standardization for the Gulf of Alaska millennial-scale temperature reconstruction, Ameridendro, Mendoza, spring 2016.

**Wiles, G.C**., D'Arrigo, R. D., Wilson, R., and Barclay, D. J., 2015, Coastal Northeast Pacific Proxy Records and their role in understanding regional climate forcing: Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.488. (invited talk)

**Wiles, G.C**., *Deck, C. B*., D'Arrigo, R. D., Solomina, O., Anchukaitis, K., Dolgova, E., 2015, North Pacific decadal climate variability: comparison of tree ring records and climate reconstructions from the eastern and western basins: Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.128

*Starr, K., Happ, M*., **Wiles, G**. and Wiesenberg, N., 2015, Reconstructing ice dynamics from forests preserved in the wake of the catastrophic retreating Columbia Glacier, Alaska: Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.788

*Misinay, D.,* **Wiles, G**., Lawson, D. and Wiesenberg, N., 2015, Late Holocene Glacial History of Muir Inlet, Glacier Bay National Park and Preserve, Alaska: Geological Society of America Abstracts with Programs. Vol. 47, No. 7, p.130

Diefendorf, A.F., Freimuth, E., Lowell, T.V., and **Wiles, G.**, 2015. Invited: The influence of source biases on sedimentary leaf waxes and their stable isotope compositions. American Geophysical Union Annual Meeting, San Francisco, USA.

Freimuth, E*.,* Diefendorf, A.F*.,* Lowell, T.V., and **Wiles, G.** 2015. Quantifying hydrogen isotope fractionation in modern leaf waxes for improved paleohydrological reconstructions using sedimentary leaf waxes. Midwest Geobiology Conference, Bloomington, IN, USA.

McNulty, K.E., Lowell, T.V., Diefendorf, A.F., *\**Freimuth, E.J., and **Wiles, G.C**., 2015. Evidence of drying in northern Ohio during the early Holocene. Northeastern Section Geological Society of America Meeting, Bretton Woods, NH, USA.

# Solomina, O.N., Bradley, R.S., Hodgson, D.A., Ivy-Ochs, S., Jomelli, V., Mackintosh, A.N., Nesje, A., Owen, L.A., Wanner, H., Wiles, G.C., *Young, N.E*., 2015, Orbital, solar, volcanic and anthropogenic forcings in the Holocene glacier fluctuations

Wilson, R., Anchukaitis, K., Briffa, K., Buntgen, U. Cook, E. D’Arrigo, Esper, J., Frank, D. Gunnarson, B., Hegerl, G., Krusic, P., Linderholm, H., Rydval, M., Tett, S., **Wiles, G**. amd Zorita, E. 2015, Are tree-ring based estimates for Northern Hemisphere medieval temperatures fit for purpose?: Geophysical Research Abstracts, Vol. 17, EGU2015-14062, EGU General Assembly.

Menounos, B., Vogt, R. Aengenheyster, M., Koch, J., Smith, D., Barclay, D., **Wiles, G**., Clague, J., Osborn, G. Anslow, F.: 2014, A synthesis of record of Holocene Glacier Fluctuations from Western North America: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.664

*Starr, K****,* Wiles, G.C**. and Wiesenberg, N., 2014, Extending the tree ring record and glacier chronology for the Columbia Glacier, Alaska: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p. 557.

[*Frederick, S. E*.](mailto:sfrederick15@wooster.edu), Solomina, O., D'Arrigo, R. D., Anchukaitis, Kevin J.4, Dolgova, E., Matskovsky, V., Kuderina, T. K., Grabenko, E. A., Davi, N., and **Wiles, G.**, 2014, Tree ring reconstruction of the paleoclimatic history of the Russian Far East: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p.124.

*Nelson, W.,* **Wiles, G.C,** Downes, Z., D’Arrigo, R.D., Barclay, D., Wilson, R., Lawson, D., Matsovsky, V., and Wiesenberg, N., 2014, Extending the reconstruction of surface air temperatures using tree rings from the Gulf of Alaska: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p. 558.

Downes, Z., Wiles, G., Lawson, D., Wiesenberg, N., Connor, C. L., Buma, B., Barclay, D., Frank, D., and Nelson, W., 2014, Dating glacial history of the first millennium CE in Muir Inlet, Glacier Bay National Park and Preserve, Southeast, Alaska: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p. 805.

[*McGrath, S*](mailto:smcgrath17@wooster.edu)., Howell, W., Wiesenberg, N., Mennett, C., and **Wiles, G**., 2014, Three hundred years of continuity: a yellow cedar bark stripping site on Pleasant Island, Icy Strait, Southeast Alaska: Geological Society of America Abstracts with Programs. Vol. 46, No. 6, p. 247.

Wilson, R., Kevin Anchukaitis, Keith Briffa, Ulf Büntgen, Rosanne D' Arrigo, Jan Esper, Dave Frank, Björn Gunnarson, Tom Melvin, **Greg Wiles** and Eduardo Zorita, 2014, Not another tree-ring based Northern Hemisphere reconstruction! What's the point?: Worlddendro Meeting Melbourne Australia, 13-17 January 2014, 9th International Conference on Dendrochronology.

*Nash, T.A*., **Wiles, G.C**., Lawson, D. *VanLeuven, A*. 2013, Tree – Ring Dating ice advance in Wachusett Inlet, Glacier Bay National Park and Preserve, Alaska: Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.551.

*VanLeuven, A*., **Wiles, G.C**., D’Arrigo, R.D., Wiesenberg, N., Anchukaitis, K., Solomina, O. and *Nash, T.* A., 2013, Case Studies of divergence along the North Pacific Rim: Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p.618.

Pollock, M., Judge, S., Wilson, M. and **Wiles, G.C.**, 2013, The history and current best practices of independent study at The College of Wooster: Geological Society of America Abstracts with Programs. Vol. 45, No. 7, p. 366.

*Appleton, S.N.,* **Wiles, G.C**., Lawson, D.E., and *Wilch, J.,* 2013, Tree-Ring Dating Ice Advances in Glacier Bay National Park and Preserve, Alaska, USA: Ameridendro, Tucson, AZ, June 2013.

Lawson, D.E., **Wiles, G.C**., Wiesenberg, N., and *Appleton, S*., 2012. Glacier response to climatic changes in Glacier Bay, Alaska, International Glaciological Society, Symposium on Glaciers and Ice Sheets in a Warming Climate, Fairbanks, AK.

*Appleton, S. N.,* **Wiles, G.C**., Lawson, D.E., *Wilch, J*., and Wiesenberg, N., 2012, Tree-Ring Dating and Glacial Stratigraphy of the Mid Holocene History of Wachusett Inlet, Glacier Bay National Park and Preserve, SE Alaska: The 42nd International Arctic Workshop, Winter Park, CO.

*Vargo, L*. **Wiles, G**., *Horton, J., Nash, T.A. Jr*, D’Arrigo, R. D., and Lawson, D., 2012, Tree-ring evidence of North Pacific volcanically forced cooling and drought in Midwestern North America: Geological Society of America Abstracts with Programs. Vol. 44, No. 7, p.440.

*Horton, J.,* **Wiles, G**., *Vargo, L*., Lawson, D., and Wiesenberg, N., 2012, Dating the first millennium AD glacial history of Adams Inlet, Glacier Bay National Park and Preserve, Southeast: Geological Society of America Abstracts with Programs. Vol. 44, No. 7, p.440.

**Wiles, G.C.,** *Jarvis, S.K*., D'Arrigo, R., *Vargo, L.J*., Lawson, D.E., and *Appleton, S.N*., 2012, Recognizing Non-Stationary Climate Response in Tree Growth for Southern Coastal Alaska, USA: Abstract 1495389, presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.

Sewell, A.R., Burkett, M., Durst, C., Lee, A.B. and **Wiles G.C**., 2012, Multidisciplinary investigations at the David Deardurff House, Columbus, Ohio: 30th Annual Ohio Valley Urban and Historical Archaeology Moundsville, West Virginia, April 14th.