

...CURRICULUM VITAE...

KATHLEEN NICOLL

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I. CURRENT POSITION

The University of Utah

Full Professor, Department of Geography 2021 - present
Associate Professor, Department of Geography 2013 - 2021
Assistant Professor, Department of Geography 2006 - 2013
Adjunct Appointment, Department of Geology & Geophysics 2007- 2014
Affiliated Faculty, The Middle East Center 2008 - present

II. FORMAL EDUCATION

Ph.D., Geosciences

The University of Arizona 1998
“Holocene playas as sedimentary evidence for recent climate change in the presently hyperarid Western Desert, Egypt”
Advisor: C. Vance Haynes, Jr, NAS

M.A., Geology

Bryn Mawr College 1997
“Deposition and diagenesis of freshwater spring-deposited travertines from Oklahoma, Arizona, and Egypt”
Advisor: Maria Luisa Crawford

B.A. Hon., *cum laude* , Geology & Environmental Sciences

The University of Pennsylvania 1990
“Landsat analysis of palaeospring deposits from Refûf Pass, Egypt

III. IMMEDIATE PRIOR ACADEMIC & PROFESSIONAL POSITIONS

University of Oxford (UK)

Royal Society Research Fellow 2002-2006 USA Research Fellowship Awardee
Lecturer 2002-2006 Oxford University Centre for the Environment
MSc Programme in Environmental Geomorphology
St. Catherine's, Brasenose, and Jesus Colleges
Organising Tutor & Admissions Officer for Geography 2004-2006
Brasenose College, University of Oxford

Chevron Corporation

Earth Scientist 1998–2002
Expert Consultant in Stratigraphic and Modelling Services
Supported clients of 61 operations in 30 countries
--Brazil --
GIS database development for SE Brazilian margin;
Seismic and well interpretation for licensing bid rounds;
Regional studies for exploration and asset development.
--Thailand --
Reservoir parameterization from cores in fluvial sediments;
Seismic mapping; Sequence architecture analyses.
-- Angola --
Well logging and formation evaluation;
Core studies; reservoir parameterization.
--Middle East --
Seismic stratigraphy; Regional studies and basin analysis;
Integrated regional sequence stratigraphy of carbonates.

bp -Alaska Petroleum Exploration Geologist 1997

-- Alaskan North Slope National Petroleum Reserve Area (NPRA)
Core studies and petrophysical analysis; Geophysical well ties;
Synthetics; seismic interpretation, sequence stratigraphy.

The University of Arizona Teaching Assistant, Department of Geosciences 1996 - 1998 Courses in Geomorphology, Global Change, and Oceanography.

Yellowstone Bighorn Research Association Instructional Staff for Field Methods 1998

-- Basic orienteering, use of a Brunton compass, tape and pace surveying;
-- Topographic reconnaissance of structures, aerial photo interpretation;
-- Mapping projects (Elk Basin, WY; Red Lodge, MT; Yellowstone N.P.).

NB: This section is abbreviated. For further information, ask.

IV. ACADEMIC AWARDS & DISTINCTIONS

International Stature

- Visiting Professor, Fulbright Global Scholar
Università di Cagliari, Sardinia, Italy: 2021-2
- Visiting Professor, University of Insubria, Como, Italy: 2021
- Geological Society of America
“Rip Rapp” Geoarchaeology Division Career Award: 2019
**Note: I am the second woman to have won this award; the first was in 1983.
- Italian Institute of Prehistory and Protohistory
IIPP Prize at the 14th Conference of Environmental Archaeology: 2018
- Geological Society of America
Elected to Fellowship in the Society: 2011
- TÜBİTAK, the Scientific and Technological Research Council of Turkey
Visiting Scientist: 2011
- Geological Society of America
Gladys W. Cole Memorial Research Award: 2010
- Royal Geographical Society (UK)
Peter Flemming Award for Research: 2005
- Royal Society (UK)
USA Fellow Awarded: 2002

National-Regional Stature

- University of Utah, College of Social and Behavioral Sciences
Finalist, Superior Research Award: 2011 - 2012
- University of Utah, College of Social and Behavioral Sciences
Winner, Superior Teaching Award: 2011
- University of Utah College of Social and Behavioral Sciences
Finalist, Superior Teaching Award: 2008-2009, 2009-2010
- Society of Africanist Archaeologists
1st place award for poster presented at the Biennial Meeting: 2002
- Chevron Petroleum Technology Company
Recognition of Achievement Award for Outstanding Service: 2001
- Chevron Overseas Petroleum, Incorporated
Recognition Award for Technical Performance, Brazil Bid Round: 2000
- University of Arizona Department of Geosciences
Outstanding Teaching Award: 1998

V. RESEARCH

Primary Interests Interdisciplinary topics in arid lands geology and archaeology, including hydroclimate change and human adaptation in Saharan North Africa, Southwestern Africa, Turkey, Israel and the US Southwest, including the Great Basin. My research primarily involves extensive fieldwork and mapping landforms like rivers, lakes and playas and archaeological sites. My research is located in remote and extreme locales, and it is often logistically complicated and physically demanding. I employ sedimentary and geochronological analyses to create new datasets and syntheses.

Summary of Research Topics Field-based watershed geomorphology, stratigraphy, (especially fluvio-lacustrine and playa systems, aeolian sand and dust!), surficial processes, physical geography, geomorphology, arid lands, tectonic sedimentation styles and landscape evolution, geomorphology, Quaternary geology, remote sensing, sedimentary facies mapping, geoarchaeology, radiocarbon dating, uranium-series geochronology, optical dating, soil sciences, paleosol petrography, climatology, hydrology, terrestrial-marine system linkages, basin analysis, sequence stratigraphy, philosophy of sciences, and planetary surfaces of Mars.

VI. PUBLICATIONS

Edited Books and Volumes, Peer-Reviewed

5. Nicoll, K. and Zerbini, A. (eds.) 2023 | *Quaternary International*, Volume 657 (30 May 2023) Special Issue: Interdisciplinary Research in Africa: Quaternary Landscapes, Environmental Change and Human Activities. Forthcoming url but see: <https://doi.org/10.1016/j.quaint.2023.03.016>
4. Nicoll, K. and Mandel, R.D. (eds.) 2018. *Quaternary International*. Volume 463, Part A. Pages 1-218 (2 January 2018). Special Thematic Issue: Geoarchaeology at INQUA. Advances in Geoarchaeology Research - Landscape Evolution, Environmental Change & Human Activities. <https://www.sciencedirect.com/journal/quaternary-international/vol/463/part/PA>
3. Nicoll, K. and Murphy, L.R. (eds.) 2014. *Quaternary International* 342. Pages 1-226 (25 August 2014). Thematic Issue: Soil and sediment archives of ancient landscapes, paleoenvironments, and archaeological site formation processes. <https://www.sciencedirect.com/journal/quaternary-international/vol/342/suppl/C>
2. Giosan, L., Fuller, D.Q., Nicoll, K., Flad, R.K., and Clift, P.D., (eds.) 2012. *Climates, Landscapes, and Civilizations*, AGU Geophysical Monograph Series 198. Geopress, American Geophysical Union. Book doi: 10.1029/GM0198. 226 p. <https://agupubs.onlinelibrary.wiley.com/doi/book/10.1029/GM198>

1. Freeman, A.K.L., **Nicoll, K.** and Holliday, V.T. (eds.) 2001. *Geoarchaeology: An International Journal* 16(1). Special Issue: Geoarchaeology in the Western Desert. <https://onlinelibrary.wiley.com/toc/15206548/2001/16/1>

Journal Articles (** denotes student author; OA denotes Open Access)

46. **Nicoll, K.** and Zerboni, A. 2023. Interdisciplinary Research in Africa: Quaternary Landscapes, Environmental Change and Human Activities. *Quaternary International*. 657:1-2 (online – in press for 30 May 2023) <https://doi.org/10.1016/j.quaint.2023.03.016> [Get rights and content](#)
45. **Nicoll, K.**, 2023. Sand, wind, paleosols, war: Late Quaternary aeolian dynamics in the Selima Sand Sheet Region, Darb el Arba'in Desert, Southern Egypt. *Quaternary International*. 657:37-49 (online – in press for 30 May 2023) <https://doi.org/10.1016/j.quaint.2023.02.002>
44. **Nicoll, K.**; Emmitt, J.; Kleindienst, M.R.; Evans, S.L.; Phillipps, R. 2021. Elinor Wight Gardner: Pioneer Geoarchaeologist, Quaternary Scientist and Geomorphologist. *Geosciences* 11, 267. OA <https://doi.org/10.3390/geosciences11070267>
43. Forti, L.**; Perego, A.; Brandolini, F.; Mariani, G.S.; Zebari, M.; **Nicoll, K.**; Regattieri, E.; Barbaro, C.C.; Bonacossi, D.M.; Hasan Ahmed Qasim; Cremaschi, M.; Zerboni, A. 2021. Geomorphology of the northwestern Kurdistan Region of Iraq: landscapes of the Zagros Mountains drained by the Tigris and Great Zab Rivers, *Journal of Maps*. OA DOI: [10.1080/17445647.2021.1906339](https://doi.org/10.1080/17445647.2021.1906339) <https://www.tandfonline.com/doi/full/10.1080/17445647.2021.1906339>
42. Scerri, E.M.L.; Kühnert, D.; Blinkhorn, J.; Groucutt, H.W.; Roberts, P.; **Nicoll, K.**; Zerboni, A.; Orijemie, E.**; Barton, H.; Candy, I.; Goldstein, S.; Hawks, J.; N'Dah, D**.; Niang, K.**; Petraglia, M.D.; Vella, N.C. 2020. Field-based sciences must transform in response to COVID-19. *Nature Ecology and Evolution*. OA <https://doi.org/10.1038/s41559-020-01317-8>
41. **Nicoll, K.**, Hahnenberger, M. and Goldstein, H. 2020. 'Dust in the wind' from source-to-sink: analysis of a strong intermountain cyclone storm and dust-on-snow depositional event in April 2015. *Aeolian Research* 46 (online –art. no. 100532 published October 2020) <https://doi.org/10.1016/j.aeolia.2019.06.002>

40. Sharp, C.** , Šmejda, L., McKinny, C., **Nicoll, K.**, Orendi, A.** and Shai, I., 2020. Bedrock Installations Used and Reused Outside Tel Burna. *Judea and Samaria Research Studies* 29(1): 202 5-24. OA DOI: <https://doi.org/10.26351/JSRS/29-1/5>
39. **Nicoll, K.** and Zerboni, A., 2020. Is the *past* key to the *present*? Observations of cultural continuity and resilience reconstructed from geoarchaeological records. *Quaternary International* 545:119-127
<https://doi.org/10.1016/j.quaint.2019.02.012>
38. Azzoni, R.S.,** Fugazza, D. Garzonio, C.A., **Nicoll, K.**, Diolaiuti, G.A., Pelfini, M., and Zerboni, A., 2019. Geomorphological effects of the 1840 Ahora Gorge Catastrophe on Mount Ararat (Eastern Turkey). *Geomorphology* 332: 10-21.
<https://doi.org/10.1016/j.geomorph.2019.02.001>
37. Zerboni, A. and **Nicoll, K.**, 2019. Enhanced zoogeomorphological processes in North Africa in the human-impacted landscapes of the Anthropocene. *Geomorphology* 331: 22–35. <https://doi.org/10.1016/j.geomorph.2018.10.011>
36. **Nicoll, K.**, 2018. A revised chronology for Pleistocene paleolakes and Middle Stone Age - Middle Paleolithic cultural activity at Bîr Tîrfawi - Bîr Sahara in the Egyptian Sahara, *Quaternary International* 463:18-28.
<http://dx.doi.org/10.1016/j.quaint.2016.08.037>
35. **Nicoll, K.** 2018. What’s new about old cultures? Integrated Geoarchaeological Investigations presented at the 2015 INQUA Congress. *Quaternary International* 463: 1-5. <https://doi.org/10.1016/j.quaint.2017.12.014>
34. **Nicoll, K.** 2017. Prospectando Rochas Fluviais e Artefatos do Paleolítico Médio Descobertos ao Longo do Rio Cunene, Fronteira entre Angola e Namíbia (translated: Sourcing River Rock and Middle Stone Age Artefacts Discovered along the Cunene River, Angola-Namibia border). *Journal of Lithic Studies* [doi:10.2218/jls.v4i3.1645](https://doi.org/10.2218/jls.v4i3.1645)
With English summary OA: <http://journals.ed.ac.uk/lithicstudies/article/view/1645>
33. Maxwell, T.A., Haynes, C.V. Jr, **Nicoll, K.**, Johnston, A.K., Grant, J.A., Kilani, A., 2017. Quaternary history of the Kiseiba Oasis region, southern Egypt. *Journal of African Earth Sciences* 136: 188-200. <https://doi.org/10.1016/j.jafrearsci.2017.04.024>
OA: <http://www.sciencedirect.com/science/article/pii/S1464343X17301681>
32. **Nicoll, K.** and Sallam, E.S., 2017. Paleospring tufa deposition in the Kurkur Oasis Region and implications for tributary integration with the River Nile in southern Egypt. *Journal of African Earth Sciences* 136: 239-251.
<http://dx.doi.org/10.1016/j.jafrearsci.2016.10.014>

31. **Nicoll, K.**, Cova, T.J., Siebeneck, L.K. and Martineau, E., 2016. Preparedness Elevated? Seismic Risk Perception and Household Adjustment in Salt Lake City, Utah. *Journal of Geography & Natural Disasters* 6:2
<http://dx.doi.org/10.4172/2167-0587.1000168>
30. **Nicoll, K.** and Keen-Zebert, A., 2016. Initial Chronological Determinations at an Archaic site discovered near Stockton, Utah. *Journal of Archaeological Science: Reports* 6: 418–423. <https://doi.org/10.1016/j.jasrep.2016.02.026>
29. Clarke, J., Brooks, N., Banning, E.B., Bar-Matthews, M., Campbell, S., Clare, L.** , Cremaschi, M., di Lernia, S., Drake, N., Gallinaro, M.** , Manning, S., **Nicoll, K.**, Philip, G., Rosen, S., Schoop, U-D., Tafuri, M.A., Weninger, B., Zerboni, A., 2016. Climatic changes and social transformations in the Near East and North Africa during the ‘long’ 4th millennium BC: A comparative study of environmental and archaeological evidence, *Quaternary Science Reviews* 136: 96-121. OA:
<https://doi.org/10.1016/j.quascirev.2015.10.003>
28. Macklin, M.G., Tooner, M.J., Woodward, J.C., Williams, M.A.J., Flaux, C., Marriner, N., **Nicoll, K.**, Verstraeten, G., Spencer, N., Welsby, D., 2015. A new model of river dynamics, hydroclimatic change and human settlement in the Nile Valley derived from meta-analysis of the Holocene fluvial archive, *Quaternary Science Reviews* 130: 109-123, <http://dx.doi.org/10.1016/j.quascirev.2015.09.024>
27. Boslough, M., **Nicoll, K.**, Daulton, T.L., Scott, A.C., Claeys, Gill, J.L., Marlon, J.R., Bartlein, P.J., 2015. Incomplete Bayesian model rejects contradictory radiocarbon data for being contradictory. *PNAS* December 8, 2015 volume 112 (49) E6722.
[doi:10.1073/pnas.1519917112](https://doi.org/10.1073/pnas.1519917112)
26. Haldon, J., Cassis, M., Doonan, O., Eastwood, W., Elton, H., Fleitmann, D., Izdebski, A., Ladstätter, S., McCormick, M., Manning, S., Newhard, J., **Nicoll, K.**, Roberts, N., Telelis, I., and Xoplaki, E. 2014. Byzantine Anatolia: a ‘laboratory’ for the study of climate impacts and socio-environmental relations in the past. *Journal of Interdisciplinary History* 45:2, 113–161. [doi: 10.1162/JINH_a_00682](https://doi.org/10.1162/JINH_a_00682)
25. **Nicoll, K.**, and Finkelstein, D.B. 2014. Saline Lakes...A Logical Step in Exploring Habitability of “The Final Frontier.” *Palaios* 29:231-232. DOI:
<http://dx.doi.org/10.2110/pal.2014.s0614>
24. **Nicoll, K.**, and Murphy, L.R.** 2014. Soil and sediment archives of ancient landscapes, paleoenvironments, and archaeological site formation processes. *Quaternary International* 342:1-4. <https://doi.org/10.1016/j.quaint.2014.07.001>

23. **Nicoll, K.**, Yentsch, A., Rood, R., and Jones, K.P., 2014. Site Formation and Archaic geoarchaeology along the Jordan River, Great Salt Lake Valley, Utah USA. *Quaternary International* 342: 214-225. <http://dx.doi.org/10.1016/j.quaint.2013.08.044>
22. Hahnenberger, M.** and **Nicoll, K.**, 2014. Geomorphic and land cover identification of dust sources in the eastern Great Basin of Utah, U.S.A. *Geomorphology* 204: 657–672. <http://dx.doi.org/10.1016/j.geomorph.2013.09.013>
21. **Nicoll, K.** and Küçükuysal, C.** 2013. Emerging Multi-Proxy Records of Late Quaternary Paleoclimate Dynamics in Turkey and the Surrounding Region. *Turkish Journal of Earth Sciences* 22: 126-142. doi: 10.3906/yer-1109-7. <http://journals.tubitak.gov.tr/earth/issues/yer-13-22-1/yer-22-1-6-1109-7.pdf>
20. Blaauw, M., Holliday, V.T., Gill, J.L.**., and **Nicoll, K.** 2012. Age models and the Younger Dryas Impact Hypothesis. *Proceedings of the National Academy of Sciences* www.pnas.org/cgi/doi/10.1073/pnas.1206143109
19. Gill, J.L.**., Blois, J.L.**., Goring, S.**., Marlon, J.R., Bartlein, P.J., **Nicoll, K.**, Scott, A.C., and Whitlock, C. 2012. Paleocological changes at Lake Cuitzeo were not consistent with an extraterrestrial impact. *Proceedings of the National Academy of Sciences* www.pnas.org/cgi/doi/10.1073/pnas.1206196109
18. Hahnenberger, M.** and **Nicoll, K.** 2012. Meteorological characteristics of dust storm events in the Eastern Great Basin of Utah, U.S.A. *Atmospheric Environment* 60: 601-612. <https://doi.org/10.1016/j.atmosenv.2012.06.029>
17. Skorko, K.W.**., Jewell, P. W. and **Nicoll, K.** 2012. Fluvial Response to an Historic Low Stand of the Great Salt Lake, Utah. *Earth Surface Processes and Landforms* 37: 143-156. <http://onlinelibrary.wiley.com/doi/10.1002/esp.2226/abstract>
16. Jewell, P. W. and **Nicoll, K.** 2011. Wind Regimes and Aeolian Transport in the Great Basin, U.S.A. *Geomorphology* 129: 1-13. doi: 10.1016/j.geomorph.2011.01.005. <https://doi.org/10.1016/j.geomorph.2011.01.005>
15. **Nicoll, K.** 2010c. Geomorphic and hazard vulnerability assessment of recent residential developments on landslide-prone terrain: the case of the Traverse Mountains, South Salt Lake Valley, Utah, USA. *Journal of Geography and Regional Planning* 3: 126-141. <https://academicjournals.org/journal/JGRP/article-abstract/71BA08239662>
14. **Nicoll, K.** 2010b. Geomorphic development and Middle Stone Age archaeology of the Lower Cunene River, Namibia–Angola Border. *Quaternary Science Reviews* 29: 1419-1431. <https://doi.org/10.1016/j.quascirev.2009.02.026>

13. **Nicoll, K.** 2010a. Landscape development within a young collision zone: implications for post-Tethyan evolution of the Upper Tigris River system in southeastern Turkey. *International Geology Review*, 52: 404 -422.
<http://dx.doi.org/10.1080/00206810902951072>
12. Parker, B. J., Foster, C.P.** , **Nicoll, K.** Kennedy, J. R., Graham, P., Smith, A., Hopwood, D. E., Hopwood, M., Butler, K., Healey, E., Uzel, M. B., and Jensen, R.** 2009. The Upper Tigris Archaeological Research Project (UTARP): A Preliminary Report from the 2007 and 2008 Field Seasons at Kenan Tepe. *Anatolica: Annuaire International pour les Civilisations de l'Asie Anterieure* v.XXXV: 85-152. doi 10.2143/ANA.35.0.2038073.
<http://poj.peeters-leuven.be/content.php?url=article&id=2038073>
11. **Nicoll, K.** 2009. Evidence of Levallois Technique at a Middle Stone Age open air site along the Angola-Namibia border. *Antiquity*, v. 83 Issue 319. OA: Available online at <http://antiquity.ac.uk/projgall/nicoll/>
10. Viles, H.A., Taylor, M.P., **Nicoll, K.**, and Neumann, S.** 2007, Facies evidence of hydroclimatic regime shifts in tufa depositional sequences from the arid Naukluft Mountains, Namibia, *Sedimentary Geology* 195: 39-53,
<https://doi.org/10.1016/j.sedgeo.2006.07.007>
9. Matney, T., Rainville, L., Demko, T., Kayser, S., Köroğlu, K., McDonald, H., MacGinnis, J., **Nicoll, K.**, Parpola, S., Reimann, R., Roaf, M., Schmidt, P., and Szuchman, J. 2005. Archaeological Investigations at Ziyaret Tepe, 2003 and 2004. *Anatolica: Annuaire International pour les Civilisations de l'Asie Anterieure* v.XXXI: 19-68.
8. Bauer, A.** , **Nicoll, K.**, Park, L., and Matney, T. 2004, Archaeological Site Distributions by Geomorphic Setting in the Southern Cuyahoga River Valley, NE Ohio: Observations from a GIS Database.: *Geoarchaeology: An International Journal* 19: 711-729. [doi:10.1002/gea.20021](https://doi.org/10.1002/gea.20021)
7. Demko, T.M., Currie, B.S., and **Nicoll, K.A.**, 2004, Regional paleoclimatic and stratigraphic implications of paleosols and fluvial-overbank architecture in the Morrison Formation (Upper Jurassic), Western Interior, U.S.A.: *Sedimentary Geology* 167: 117-137. [doi:10.1016/j.sedgeo.2004.01.003](https://doi.org/10.1016/j.sedgeo.2004.01.003)
6. **Nicoll, K.** 2004. Records of Recent Environmental Change and Prehistoric Human Activity in Egypt and Northern Sudan. *Quaternary Science Reviews* 23: 561-580.
<https://doi.org/10.1016/j.quascirev.2003.10.004>
5. Matney, T., MacGinnis, J., Roaf, M., McDonald, H., **Nicoll, K.**, Rainville, L., and Smith, M., 2003. Archaeological Investigations at Ziyaret Tepe, 2002. *Anatolica: Annuaire International pour les Civilisations de l'Asie Anterieure* v. XXIX: 175-203.

4. **Nicoll, K.** 2001. Radiocarbon chronologies for Prehistoric Human Occupation and Hydroclimatic Change, Egypt and Sudan. *Geoarchaeology: An International Journal*. 16: 47-64. [https://doi.org/10.1002/1520-6548\(200101\)16:1<47::AID-GEA5>3.0.CO;2-P](https://doi.org/10.1002/1520-6548(200101)16:1<47::AID-GEA5>3.0.CO;2-P)
3. Freeman, A.K.L., **Nicoll, K.**, and Holliday, V.T. 2001. Introduction to Special Issue: Egyptian Geoarchaeology: Dedicated to C. Vance Haynes, Jr. *Geoarchaeology: An International Journal*. 16: 3-5. OA: : [https://doi.org/10.1002/1520-6548\(200101\)16:1<3::AID-GEA2>3.0.CO;2-Y](https://doi.org/10.1002/1520-6548(200101)16:1<3::AID-GEA2>3.0.CO;2-Y)
2. **Nicoll, K.**, Giegengack, R., and Kleindienst, M.R. 1999. Petrogenesis of Artifact-Bearing Fossil-Spring Deposits from Kharga Oasis, Egypt. *Geoarchaeology: An International Journal* 14: 849-863. [https://doi.org/10.1002/\(SICI\)1520-6548\(199912\)14:8<849::AID-GEA8>3.0.CO;2-L](https://doi.org/10.1002/(SICI)1520-6548(199912)14:8<849::AID-GEA8>3.0.CO;2-L)
1. Haynes, C.V. Jr., Maxwell, T.A., El Hawary, A., **Nicoll, K.A.**, and Stokes, S. 1997. An Acheulian Site Near Bir Kiseiba in the Darb el Arba'in Desert, Egypt. *Geoarchaeology: An International Journal* 12: 819-832. 8 [https://doi.org/10.1002/\(SICI\)1520-6548\(199712\)12:8<819::AID-GEA1>3.0.CO;2-8](https://doi.org/10.1002/(SICI)1520-6548(199712)12:8<819::AID-GEA1>3.0.CO;2-8)

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Published Book Sections or Chapters, Peer-Reviewed

17. **Nicoll, K.**, 2021. What's New about the Old Bonneville Basin? Fresh insights about the modern Limnogeology of Great Salt Lake. In M. R. Rosen, D. Finkelstein, L. Park-Boush, L. & S. Pla-Pueyo (Eds.), *Limnogeology: Progress, Challenges and Opportunities: A tribute to Beth Gierlowski-Kordesch* (Syntheses in Limnogeology no. 2). New York: Springer Nature AG. p.273-294, https://doi.org/10.1007/978-3-030-66576-0_9 (fyi: uploaded to Google Drive here: <https://drive.google.com/file/d/1hPjMawbznMGg2zhbRyjbJ7ew87WfzWvu/view?usp=sharing>)
16. **Nicoll, K.** 2014. Site Entry: Nabta Playa. In: Smith, C. (ed). *Encyclopedia of Global Archaeology*. Springer, New York. [DOI: 10.1007/978-1-4419-0465-2](https://doi.org/10.1007/978-1-4419-0465-2)

5. Boslough, M., **Nicoll, K.**, Holliday, V., Daulton, T. L., Meltzer, D., Pinter, N., Scott, A. C., Surovell, T., Claeys, Ph., Gill, J., Paquay, F., Marlon, J., Bartlein, P., Whitlock, C., Grayson, D., and Jull, A.J.T. 2012. Arguments and Evidence against a Younger Dryas Impact Event. In: Giosan, L., Fuller, D.Q., **Nicoll, K.**, Flad, R.K., and Clift, P.D., (eds.) 2012. *Climates, Landscapes, and Civilizations*, AGU Geophysical Monograph Series 198. Geopress, American Geophysical Union. Book doi: 10.1029/GM0198. p.13-26. [Paper doi: 10.1029/2012GM001209](https://doi.org/10.1029/2012GM001209)
14. **Nicoll, K.** 2012. Geoarchaeological Perspectives on Holocene Climate Change as a Civilizing Factor in the Egyptian Sahara. In: Giosan, L., Fuller, D.Q., **Nicoll, K.**, Flad, R.K., and Clift, P.D., (eds.) 2012. *Climates, Landscapes, and Civilizations*, AGU Geophysical Monograph Series 198. Geopress, American Geophysical Union. Book doi: 10.1029/GM0198. p. 157-162. [Paper doi: 10.1029/2012GM001219](https://doi.org/10.1029/2012GM001219)
13. Giosan, L., Fuller, D.Q., **Nicoll, K.**, Flad, R.K., and Clift, P.D., 2012. Preface. In: Giosan, L., Fuller, D.Q., **Nicoll, K.**, Flad, R.K., and Clift, P.D., (eds.) 2012. *Climates, Landscapes, and Civilizations*, AGU Geophysical Monograph Series 198. Geopress, American Geophysical Union. Book doi: 10.1029/GM0198. [Paper doi: 10.1029/2012GM001426](https://doi.org/10.1029/2012GM001426).
12. Chan, M.A., **Nicoll, K.**, Ormö, J., Okubo, C., and Komatsu, G., 2011, Utah's geologic and geomorphic analogs to Mars—An overview for planetary exploration. In: Garry, W.B., and Bleacher, J.E. (eds.), *Analogues for Planetary Exploration: Geological Society of America Special Paper 483*, p. 349–375, [doi:10.1130/2011.2483\(22\)](https://doi.org/10.1130/2011.2483(22)).
11. **Nicoll, K.** 2011b. Living on a slippery slope: case studies of geologic hazards from the Wasatch front, Utah. Vignette supporting textbook: Bierman, P. and Montgomery, D. (Eds.) *Key concepts in Geomorphology*. W.H. Freeman, Vermont. Online at <http://serc.carleton.edu/58378>
10. **Nicoll, K.** 2011a. Geomorphic Setting & Archaeology of the Cunene River, Namibia. Vignette supporting textbook: Bierman, P. and Montgomery, D. (Eds.) *Key concepts in Geomorphology*. W.H. Freeman, Vermont. <http://serc.carleton.edu/59964>
9. **Nicoll, K.** 2010d. Geomorphic Evolution of the Tigris River, Turkey. Vignette supporting textbook: Bierman, P. and Montgomery, D. (Eds.) *Key concepts in Geomorphology*. W.H. Freeman, Vermont. Online at <http://serc.carleton.edu/47064>
8. **Nicoll, K.** and Lundeen, Z.J. **, 2010. A Case Study on the Geomorphic Effects of Fire: the 2009 Big Pole Fire, Skull Valley, UT. Vignette supporting textbook: Bierman, P. and Montgomery, D. (Eds.) *Key Concepts in Geomorphology*. W.H. Freeman, Vermont. Online at <http://serc.carleton.edu/47063>

7. Ford, R.L., Gillman, S.J., Wilkins, D.E., Clement, W.P., and **Nicoll, K.** 2010. Geology and Geomorphology of Coral Pink Sand Dunes State Park, Utah. In Anderson, P.B.; Chidsey, T.C. and Sprinkel, D.A. (Eds) *Geology of Utah's Parks and Monuments*, Utah Geological Association Publication 28, 3rd Edition, Bryce Canyon Natural History Association and Utah Geological Association. p. 379-406.
6. **Nicoll, K.**, 2008. Geomorphic Features in Little Cottonwood Canyon, UT. *Vignettes - Key Concepts in Geomorphology*. Online piece supporting: Bierman, P. and Montgomery, D. (Eds.) *Key concepts in Geomorphology*. W.H. Freeman, Vermont. Available online at <http://serc.carleton.edu/vignettes/collection/25465.html>
5. **Nicoll, K.**, 2008. “Geographic Overviews: Africa – Central and Nilotic Sudan” invited chapter in Pearsall, D. Ed. *Encyclopedia of Archaeology*. Academic Press/Elsevier. ISBN-13: 978-0-12-548030-7.
4. Demko, T., **Nicoll, K.**, Park, L., Hasiotis, S. And Beer, J.**, 2005, Mesozoic Lakes of the Colorado Plateau: GSA Field Trip Guide. *Geological Society of America Field Trip Guide* 6: 329-356. doi: [10.1130/2005.fld006\(16\)](https://doi.org/10.1130/2005.fld006(16))
3. Matney, T., **Nicoll, K.**, and Donkin, A.** 2003. Geophysical subsurface mapping at Ziyaret Tepe and geomorphological survey in the Upper Tigris River Valley (Diyarbakir Province), 2002. Araştırma Sonuçları Toplantısı 1.Cilt. T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü 21: 97-104
2. Hawkins, A.L., Smith, J.R., Giegengack, R., McDonald, M.A., Kleindienst, M.R., Schwarz, H.P., Churcher, C.S., Wiseman, M.F., and **Nicoll, K.** 2001 New Research on the Prehistory of the Escarpment in Kharga Oasis, Egypt. *Nyame Akuma* 55: 8-14.
1. Kleindienst, M. R., Schwarcz, H. P., **Nicoll, K.**, Churcher, C. C., Frizano, J., Giegengack, R. W. and Wiseman, M. F. 1996. Pleistocene geochronology and palaeoclimates at Dakhleh and Kharga Oases, Western Desert, Egypt, based upon uranium-thorium determinations from spring-laid tufas. *Nyame Akuma* 46: 96.

Published Book Reviews

11. **Nicoll, K.** 2020. Review of “Martin Williams: *The Nile Basin: Quaternary Geology, 6 Geomorphology and Prehistoric Environments* Cambridge University Press, Cambridge, 2019, 405 pp., ISBN 978-1107179196 910” *African Archaeological Review* 37(3):647-649. <https://doi.org/10.1007/s10437-020-09398-3>

10. **Nicoll, K.** 2016. Review of “*Beyond Collapse: Archaeological Perspectives on Resilience, Revitalization, and Transformation in Complex Societies*. RONALD K. FAULSEIT, editor. 2016. Center for Archaeological Investigations Occasional Papers No. 42. Southern Illinois University Press, Carbondale, xix + 552 pp. \$70.00 (paperback), ISBN 978-0-8093-3399-8 (e-book) 978-0-8093-3400-1” American Antiquity 81, 6: p. 599-600. DOI: <http://dx.doi.org/10.7183/0002-7316.81.3.595>
9. **Nicoll, K.** 2014. Review of “Victor D. Thompson and James C. Waggoner, Jr (Eds.). The Archaeology and Historical Ecology of Small Scale Economies. 2013. University Press of Florida, Miami, FL. ISBN-13: 978-0-8130-4242-8, \$74.95 (hardcover) 250 pp.” For *Geoarchaeology: An International Journal* 29, 2: 177–178.
[doi: 10.1002/gea.21466](https://doi.org/10.1002/gea.21466)
8. **Nicoll, K.** 2012. Review of “Renée Hetherington and Robert G.B. Reid, Climate Connection – Climate Change and Modern Human Evolution, Cambridge University Press, NY/UK, 2010 \$44.00 (USD) paperback, 440 pp. ISBN-13: 9780521147231. “ For *Geoarchaeology: An International Journal* 26,7: p 542-544.
[DOI: 10.1002/gea.21424](https://doi.org/10.1002/gea.21424)
7. **Nicoll, K.,** 2011. Review of “Jayne Wilkins and Kirsten Anderson (editors). 2009. Tools of the Trade: Methods, Techniques, and Innovative Approaches in Archaeology, Calgary, Alberta, Canada: University of Calgary Press. 315 pp., ISBN: 978-1-552382-49-3.” For *Geoarchaeology: An International Journal* 26,3: p.455-456.
[DOI: 10.1002/gea.20358](https://doi.org/10.1002/gea.20358)
6. **Nicoll, K.,** 2009. Review of “Barry Cunliffe, 2008. Europe between the oceans: Themes and variations: 9000 BC-AD 1000, New Haven and London: Yale University Press, 480 pp., ISBN: 978-0-300-11923-7”, For *Geoarchaeology: An International Journal* 26,4: p.855-856. [DOI: 10.1002/gea.20292](https://doi.org/10.1002/gea.20292)
5. **Nicoll, K.,** 2009. Review of “D. MacDougall, 2008. Nature's clocks: How scientists measure the age of almost everything, San Diego, CA: University of California Press, 2008, 271 pages.” For *Geoarchaeology: An International Journal* 26,4: p.856-858.
[DOI: 10.1002/gea.20293](https://doi.org/10.1002/gea.20293)
4. **Nicoll, K.,** 2004. Review of ‘A.J. Howard, M.G. Macklin and D.G. Passmore (Eds.), 2003. Alluvial Archaeology in Europe. Lisse, NL: Balkema, 2003, 313 pages.’ For *The Holocene* 14,5: p.797-798.
3. **Nicoll, K.,** 2004. Review of ‘Weedon, G., 2003. Time-Series Analysis and Cyclostratigraphy: Examining stratigraphic records of environmental cycles. Cambridge: Cambridge University Press. 259 pages. For *The Holocene* 14,3: p. 478-479.

2. **Nicoll, K.**, 2003. Review of 'Wendorf, F., R. Schild and Associates, 2001. *Holocene Settlement of the Egyptian Sahara – Volume 1, The Archaeology of Nabta Playa*, Kluwer Press, New York. 707 pages.' *The Holocene* 13,2: p. 299.
1. **Nicoll, K.**, 2003. Review of 'McGuire, W.J., D.R. Giffiths, P.J. Hancock, and I.S. Stewart eds., 2000. *The Archaeology of Geological Catastrophes*, The Geological Society, Bath. 417 pages.' For *Geoarchaeology: An International Journal* 18,3: p. 403-405. DOI: [10.1002/gea.10063](https://doi.org/10.1002/gea.10063)

Published Abstracts, Short Papers and Posters, Peer-Reviewed

Note – I have 3 INQUA abstracts to list here for 2023, but I cannot confirm their urls.

96. **Nicoll, K.**, Mariani, G.S. and Mellis, R.T. 2022. Palaeosol evolution and human disturbance on Mediterranean coastal pedosequences (SW Sardinia, Italy). European Geophysical Union Hybrid General Assembly 23-27 May 2022
<https://meetingorganizer.copernicus.org/EGU22/EGU22-11536.html>
95. **Nicoll, K.** and Zerboni, A. 2019. Geoarchaeology beyond environmental determinism: Observations of cultural continuity & resilience reconstructed from geoarchaeological records, Awards Keynote, Geological Society of America Annual Meeting, 22-25 September 2019. <https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/334143>
94. **Nicoll, K.**, Spinapolice, E.E. and Zerboni, A. 2019. Emerging environmental & geoarchaeological records from the NE Sahara & their relevance in dispersals 'Out of Africa' during the Quaternary. Keynote, Geological Society of America Annual Meeting, 22-25 September 2019.
<https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/334136>
93. Zerboni, A. and **Nicoll, K.** 2019. Emerging hypotheses about the Holocene palaeoclimate in the Sahara: landscape response, biome continuity, and termination of wet and arid phases. 20th INQUA Congress, Dublin, Ireland, 25-31 July 2019.
<https://app.oxfordabstracts.com/events/574/program-app/submission/92139>
92. **Nicoll, K.** and Zerboni, A. 2019. Zoogeomorphic Agency and a geoarchaeological interpretation of the dust increase over North Africa at the termination of the African Humid Period. Keynote, 20th INQUA Congress, Dublin, Ireland, 25-31 July 2019.
<https://app.oxfordabstracts.com/events/574/program-app/submission/91236>

91. **Nicoll, K.** 2019. Lake-Dust-Snow dynamics “from sources to sinks” in the semi-arid Bonneville Basin, Utah, USA. Invited keynote at 20th INQUA Congress, Dublin, Ireland, 25-31 July 2019. <https://app.oxfordabstracts.com/events/574/program-app/submission/91225>
90. Zerboni, A., Zanchetta, G. and **Nicoll, K.** 2019. Archaeological stratigraphies: from the excavation to the laboratory. STRATI 2019 The 3rd International Congress on Stratigraphy, Milan, Italy, 2-5 July 2019.
89. **Nicoll, K.** and Zerboni, A. 2019. A geoarchaeological interpretation of the dust increase over North Africa at the termination of the African Humid Period. EGU, Vienna, Austria, 7–12 April 2019. poster
<https://meetingorganizer.copernicus.org/EGU2019/EGU2019-3585.pdf>
88. **Nicoll, K.** 2019. A decade of “Geomorphology Rules” for science outreach: Persisting through the Trumpocene. EGU, Vienna, Austria, 7–12 April 2019.
<https://meetingorganizer.copernicus.org/EGU2019/EGU2019-3443.pdf>
87. Zerboni, A. and **Nicoll, K.** 2018. New approaches to challenges in Quaternary Geology of North Africa: resolving Holocene palaeoclimatic reconstruction, landform response and human adaptation. PANAF'18 – XV^o Congrès Pan-African Archaeological Association, Rabat, Morocco on 10-14 September 2018.
86. **Nicoll, K.**, Spinapolice, E.E. and Zerboni, A. 2018. GO WEST 'Out of Africa' through the desert side? A review of archaeological and environmental records across the NE Sahara. Union Internationale des Sciences Préhistoriques et Protohistoriques. XVIIe Congrès Mondiale UISPP- Paris. 4-9 June 2018.
<https://uispp2018.sciencesconf.org/browse/author?authorid=550018>
85. **Nicoll, K.** 2018. Lake-Dust-Snow dynamics "from source to sink" in the semi-arid Bonneville Basin, Utah USA. Invited talk, European Geophysical Union General Assembly, Vienna, Austria. 8–13 April 2018.
<https://meetingorganizer.copernicus.org/EGU2018/EGU2018-10813.pdf>
84. **Nicoll, K.** and Zerboni, A. 2018. Geoarchaeological records of landscape change as lessons for the Anthropocene. European Geophysical Union General Assembly, Vienna, Austria. 8–13 April 2018.
<https://meetingorganizer.copernicus.org/EGU2018/EGU2018-10571.pdf>

83. **Nicoll, K.** 2018. "Mind the Gap" to Reconstruct Patchy Records of Archaeology & Environmental Changes in the NE Sahara. 14th Conference of Environmental Archaeology 2018 Modena, Italy – 26-28 February 2018. In: Florenzano A., Montecchi M.C., Rinaldi R. (Eds.). 2018. Humans and environmental sustainability: Lessons from the past ecosystems of Europe and Northern Africa. CEA2018 Abstracts book. Modena, Italy. ISBN: 978-88-943442-0-2. p. 68-71.
http://www.cea2018.unimore.it/wp-content/uploads/2018/02/CEA2018_ebook.pdf
82. Zerboni, A.; **Nicoll, K.**, Cremaschi, M. 2018. A geoarchaeological perspective on human-environmental sustainability in arid lands of North Africa. 14th Conference of Environmental Archaeology 2018 Modena, Italy – 26-28 February 2018. In: Florenzano A., Montecchi M.C., Rinaldi R. (Eds.). 2018. Humans and environmental sustainability: Lessons from the past ecosystems of Europe and Northern Africa. CEA2018 Abstracts book. Modena, Italy. ISBN: : 978-88-943442-0-2. p. 201-202.
http://www.cea2018.unimore.it/wp-content/uploads/2018/02/CEA2018_ebook.pdf
81. Zerboni, A.; Mariani, G.S.; Crouvi, O.; **Nicoll, K.**; Eckardt, F.; Cremaschi, M. 2018. Silts, sands, and lakes: Initial results of a Late Quaternary palaeoenvironmental reconstruction in the Northern Namib Desert. Giornate Assereto 2018-UNIMI, Milan, Italy: 6-8 February 2018.
80. Suriano, M. and **Nicoll, K.** 2017. "Cross-disciplinary perspectives on unprovenanced artifacts: Reexamining the authenticity of the so-called Jehoash Inscription as a case study." Meeting of the Society of Biblical Literature, November 18-21, Boston.
79. **Nicoll, K.** 2017. "Reconstructing climate change, surface water storage & cultural resilience within the NE Sahara." Climate change in Africa: Evidence, Mechanisms and Impacts, Past and Present. Marrakesh, Morocco 6-11 November 2017. p.15
http://docs.wixstatic.com/ugd/d0dbca_19133cec9e1145eabc0ca9b1c21cab3.pdf
78. Zerboni, A.; Cremaschi, M.; Biagetti, S.; Mercuri, A.M.; **Nicoll, K.**; Williams M.A.J. 2017. "North African land surface responses to Holocene climate variability: an assessment." Climate change in Africa: Evidence, Mechanisms and Impacts, Past and Present. Marrakesh, Morocco 6-11 November 2017. p.34
http://docs.wixstatic.com/ugd/d0dbca_19133cec9e1145eabc0ca9b1c21cab3.pdf
77. **Nicoll, K.** 2017. "Sourcing River Rock and Middle Stone Age Artefacts Discovered along the Cunene River, Angola-Namibia border, southern Africa." Geological Society of America Annual Meeting, October 22-25, Seattle.
<https://gsa.confex.com/gsa/2017AM/meetingapp.cgi/Paper/300521>

76. **Nicoll, K.** 2017. Revisiting Karl W. Butzer's "Desert Landforms & Pleistocene Palaeoclimates of the Kurkur Oasis Region, Egypt" American Association of Geographers Annual Meeting, April 5-9, Boston
<http://meridian.aag.org/callforpapers/program/AbstractDetail.cfm?AbstractID=83798>
75. **Nicoll, K.** 2015. Beyond "Historic Trash" Finds – Methodological Approaches and Geoarchaeological Case Studies of Site Formation and Human Agency from the Middle East and the US Southwest. Abstracts Annual Meeting of the Geological Society of America 47 (7), 240. 11/02/2015 Invited talk
<https://gsa.confex.com/gsa/2015AM/webprogram/Paper267787.html>
74. **Nicoll, K.** 2015. Surveying the Past through Modern Means: Where We At? With GIS, LiDAR and "The Internet" Abstracts Annual Meeting of the Geological Society of America 47 (7), 390. 11/02/2015. Invited talk
<https://gsa.confex.com/gsa/2015AM/webprogram/Paper267827.html>
73. **Nicoll, K.,** 2015. Geoarchaeology of Umm Akhtar Playa: Emerging Chronologies for Quaternary Palaeoenvironments of Southern Egypt. XIX INQUA Congress, Nagoya, Japan. Conference Paper, Refereed, Presented, 07/31/2015
72. Hahnenberger, M., **Nicoll, K.,** Perry, K.D., 2014. Geomorphic and Chemical Characteristics of Dust and Soil in the Eastern Great Basin of Utah, U.S.A. American Geophysical Union, San Francisco, CA. 15-19 December.
71. **Nicoll, K.** 2014. A Fresh Look at the Geobiology & Sedimentary Environments of the Hypersaline Great Salt Lake, USA. Invited talk at the 12th International Conference on Salt Lake Research. July 14–18, Beijing, China. *Acta Geologica Sinica* 88:94-95. <https://doi.org/10.1111/1755-6724.12266> 20
70. Thomas, P., Jewell, P., and **Nicoll, K.** 2013. Barrier complexes in the Deep Creek Mountains, UT as G.K. Gilbert's "Intermediate Shorelines" of Pleistocene Lake Bonneville. Geological Society of America 125th Annual Meeting, Denver, CO, 27-30 October.
69. **Nicoll, K.** 2013. Sand & dust dynamics in the Great Basin & Wasatch Plateau. 12th Biennial Conference of Science and Management on the Colorado Plateau: Effects of Rapid Climatic, Social, and Technologic Changes on the Colorado Plateau. Northern Arizona University, Flagstaff, AZ, 16-19 September.
68. **Nicoll, K.** and Holliday, V. 2013. Inadequate Luminescence Dates and Poorly Constrained Age Models Undermine the Younger Dryas Impact Hypothesis. 9th New World Luminescence Dating Workshop. Utah State University, Logan, UT, 15-18 August.

67. **Nicoll, K.** 2013. From Source-to-Sink: meteorological, hydroclimatological, and landscape dynamics of dust mobilization and transport in the Great Basin. University of Utah Air Quality Research Workshop Collaboration. Salt Lake City, UT. 19 July.
66. **Nicoll, K.** 2013. Geoarchaeological insights on the climate of Eastern Turkey during antiquity (invited). The Avkat Archaeological Project: Workshop II – Climate, Environment & History in Anatolia ca 200-1000 CE. Princeton, NJ. 24-25 May.
65. Boslough, M., Morrison, D., Holliday, V., **Nicoll, K.**, Harris, A. and Chapman, C. 2012. Science Documentary Fail: The Last Extinction. Astronomical Society of the Pacific Meeting, Tucson, AZ, 5-8 August.
64. **Nicoll, K.** 2012. Records of urbanism, imperialism, & environmental change in southeastern Turkey. European Geophysical Union (EGU) Meeting, Vienna, Austria, 22-27 April.
63. **Nicoll, K.** 2012. Geoarchaeological Synthesis & emerging chronostratigraphies for Middle Palaeolithic sites in the Egyptian Sahara. Middle Palaeolithic in the Desert, Oxford, UK. 13-14 January.
62. Hahnenberger, M., **Nicoll, K.** and Perry, K.D. 2011. Meteorological and physical characteristics of dust transport events in the Eastern Great Basin of Utah, U.S.A. American Geophysical Union (AGU) Fall Meeting, 5-9 December.
61. **Nicoll, K.** and Küçükuysal, C. 2011. Records of urbanism, imperialism, & environmental change: what is the fidelity and synchronicity of archives from central-southeastern Turkey. AGU Fall Meeting, San Francisco, CA. 5-9 December.
60. **Nicoll, K.**, 2011. Geoarchaeology in the Egyptian Sahara. AGU Chapman Conference on Climate, Past Landscapes & Civilizations, Santa Fe, NM, 21-25 March.
59. **Nicoll, K.** 2011. A new synthesis of records of Quaternary Palaeoenvironmental Change and Geoarchaeology in the NE Sahara. AGU Chapman Conference on Climates, Past Landscapes, and Civilizations, Santa Fe, NM, 21-25 March.
58. Boslough, M., Holliday, V. Meltzer, M., Pinter, N., Scott, A.C., Surovell, T. Claeys, Ph., Gill, J., Paqay, F., Marlon, J., Bartlein, P., Whitlock, C., Daulton, T., **Nicoll, K.**, and Grayson, D. 2011. Impact did not cause climate change, Extinction, or Clovis termination at 12.9 ka. AGU Chapman Conference on Climates, Past Landscapes, and Civilizations, Santa Fe, NM, 21-25 March.

57. Chan M.A., **Nicoll K.**, Jewell P.W., Parker, T.J., Okubo, C. H., Ormö, J., Komatsu, G., Bills, B. G. and Barker, D. 2011. The Significance of a Mars Hydrograph: Shoreline Synthesis Constrained from Integrated Terrestrial Analog Studies [POSTER #2322] 42nd Lunar and Planetary Science Conference, 7-11 March.
56. Park, L.E. and **Nicoll, K.** 2010. New Neogene fluvio-lacustrine faunal archives from the Danakil Depression, East Africa: Implications for human origins, paleoclimate and continental rifting. GSA Annual Meeting, Denver, Colorado, 31 Oct –3 Nov.
55. Chan, M.A., **Nicoll, K.**, Ormö, J., Okubo, C.H., and Komatsu, G. 2010. Utah's geologic and geomorphic terrestrial analogs to Mars: A training ground for future robotic and human missions to Mars. *Lunar and Planetary Science Conference Proceedings* Doc # 1110, <http://www.lpi.usra.edu/meetings/lpsc2010/pdf/1110.pdf>
54. Chan, M. A., **Nicoll, K.**, Jewell, P., Parker, T., Okubo, C. H., Komatsu, G., Ormö, J., Bills, B., and Barker, D., 2010. A Mars Ocean hydrograph: Constraints from integrated terrestrial shoreline analog study. 2010 GSA Denver Annual Meeting, Denver, Colorado, 31 October –3 November.
53. **Nicoll, K.**, 2010. Geoarchaeology, Environmental History, and Tectonic Uplift in Eastern Anatolia (SE Turkey). Geological Society of America International Conference Tectonic Crossroads: Evolving Orogens of Eurasia-Africa-Arabia GSA International Conference, Ankara, Turkey, 4-8 October.
52. Beer, L.L., Pepe-Raney, C., Zvenigorodsky, N., **Nicoll, K.**, Meuser, J.M., Posewitz, M.C., Ghirardi, M., Baxter, B.K. and Spear, J.R. 2010. Biodiversity of Great Salt Lake Beyond Pink Water: Mats, Microbialites and Mud. Poster at the 2010 Great Salt Lake Issues Forum "Keeping the Lake Wet: A Water Appropriation for Great Salt Lake." Salt Lake City, UT 28-30 April.
51. Beer, L.L., Pepe-Raney, C., Zvenigorodsky, N., **Nicoll, K.**, Meuser, J.M., Posewitz, M.C., Ghirardi, M., Baxter, B.K. and Spear, J.R. 2010. Mats, microbialites and mud: biodiversity of Great Salt Lake beyond pink water. Poster at Joint Genome Institute, User's Meeting, Walnut Creek, CA, 24-26 March.
50. Chan, M.A., **Nicoll, K.**, Jewell, P.W., Parker, T.J., Bills, B.G., Okubo, C.H., Komatsu, G. 2010. Geomorphic Evolution of Pleistocene Lake Bonneville: Temporal Implications for Surface Processes on Mars. Lunar and Planetary Institute First International Conference on Mars Sedimentology and Stratigraphy, El Paso, TX, 19-21 April. <http://www.lpi.usra.edu/meetings/marssed2010/pdf/6016.pdf>
49. **Nicoll, K.** and Beer, L.L. 2010. Geobiology and sedimentology of the hypersaline Great Salt Lake, Northern Utah, USA: Analogues for Assessing Watery Environments on Mars? Lunar and Planetary Institute First International Conference on Mars Sedimentology and Stratigraphy, El Paso, TX, 19-21 April. <http://www.lpi.usra.edu/meetings/marssed2010/pdf/6020.pdf>

48. Burrell, K. and **Nicoll, K.**, 2010. If Utah goes nuclear, will Utah Glow nuclear? The University of Utah Undergraduate Research Days 2010. Volume 10, p.13. Poster presented 04/21/2010, University of Utah, Salt Lake City.
47. **Nicoll, K.** 2010. "Collapse" of the Neolithic in the NE Sahara: Reconstructing Hydroclimatic Change from environmental and archaeological evidence in Egypt and Sudan. American Association of Geographers (AAG) Annual Meeting, Washington, DC, 14-16 April.
46. **Nicoll, K.** 2009. The context of Archaic geoarchaeology along the Jordan River, Southern Salt Lake Valley: Site formation processes & hydroclimatic change. Geological Society of America (GSA) Annual Meeting, Portland, OR 18-21 October.
45. **Nicoll, K.** 2009. Archaic Geoarchaeology along the Jordan River, Southern Salt Lake Valley. American Association of Geographers Annual Meeting, Las Vegas, NV, 22-27 March.
44. **Nicoll, K.**, Chan, M.A., Parker, T.J., Jewell, P.W., Komatsu, G., and Okubo, C.H., 2009. Bonneville Basin analogues for large lake processes & chronologies of geomorphic development on Mars. *40th Lunar and Planetary Science Conference, Proceedings* Document # 1962. Online at <http://www.lpi.usra.edu/meetings/lpsc2009/pdf/1962.pdf>
43. **Nicoll, K.**, 2008. Geomorphology Problem Set, contribution to Topical Resources for On the Cutting Edge – Professional Development for Geoscience Faculty: Workshop on Teaching Geomorphology in the 21st Century. 28 July – 1 August
<http://serc.carleton.edu/NAGTWorkshops/geomorph/activities/23793.html>
42. **Nicoll, K.**, 2008. Geo-Savvy Assessment, contribution to Topical Resources for “On the Cutting Edge – Professional Development for Geoscience Faculty: Workshop on Teaching Geomorphology in the 21st Century. 28 July – 1 August
<http://serc.carleton.edu/NAGTWorkshops/geomorph/activities/23465.html>
41. **Nicoll, K.**, 2008. Intro to Geomorphology: Mountains, Rivers, Deserts contribution to Course Goals’ Syllabus Database for On the Cutting Edge – Professional Development for Geoscience Faculty: Workshop on Teaching Geomorphology in the 21st Century. 28 July – 1 August.
<http://serc.carleton.edu/NAGTWorkshops/coursedesign/goalsdb/23505.html>
40. Anderson, S. W., Stofan, E.R., Smrekar, S.E., Finnegan, D., Byrnes, J.M., **Nicoll, K.** 2008. The growth of active flow-lobe tumuli – Field Observations and LiDAR data. International Association of Volcanology and chemistry of the Earth’s Interior (IAVCEI) meeting, Reykjavik, Iceland, 18-25 August.

39. Anderson, S. W., Finnegan, D C, Byrnes, J M, **Nicoll, K.** 2007. Generation of Hummocky Flow Morphology Revealed through Ground-based LiDAR Measurements of Actively Inflating Pahoehoe Lavas. *Eos Trans. AGU*, 88(52), Fall Meeting Supplement, 22-27 August.
38. Byrnes, J.M., Finnegan, D.C., **Nicoll, K.**, and Anderson, S.W. 2007. Ground-based LiDAR measurements of actively inflating pahoehoe flows, Kilauea Volcano, Hawaii: Implications for emplacement of basaltic units on Mars *Eos Trans. AGU*, 88(23) Abstract P41A-04, 22-27 August.
37. Wilkins, D.E., Ford, R.L., and **Nicoll, K.** 2007. Multiproxy evidence for Late Holocene Climate Change, Coral Pink Sand Dunes, Utah. Association of American Geographers National Meeting, San Francisco, California. 17-21 April.
36. **Nicoll, K.**, 2007. Recording a symphony in sand: assessing the fidelity of oceanic archives for terrestrial Quaternary climate change in the NE Sahara. Association of American Geographers National Meeting, San Francisco, California. 17-21 April.
35. **Nicoll, K.** and Park, L.E. 2007. New Neogene Fluvio-lacustrine archives from the Danakil Depression, East Africa. Forthcoming presentation at the 4th International Limnogeology Congress (ILIC), Barcelona, Spain. 11-14 July.
34. Baskin, R.** , and **Nicoll, K.**, 2007. Occurrence and distribution of stromatolitic forms in Great Salt Lake, UT, USA. SAT-P47, p. 230. . 4th International Limnogeology Congress (ILIC), Barcelona, Spain. 11-14 July.
33. **Nicoll, K.**, 2007. What is the fidelity of ocean archives for recording terrestrial Quaternary hydroclimatic change? Insights & new chronologies from the NE Sahara. Forthcoming presentation at the International Quaternary Association Congress (INQUA XVII), Cairns, Australia. 28 July-3 August.
32. **Nicoll, K.**, Demko, T.M., and Marlow, L.M.** , 2006. OSL chronologies for Aeolian activity in the context of lake-level fluctuations, drainage reorganization and glacial retreat, North-Central Minnesota, in Wise, R. A. Ed. *USGS Open-File Report 2006-1351*, Proceedings of the 4th New World Luminescence Dating and Dosimetry Workshop, Denver, Colorado, May 31 - June 2, 2006
31. **Nicoll, K.**, Demko, T.M., and Marlow, L.M., 2006. OSL chronologies for Aeolian activity in the context of lake-level fluctuations, drainage reorganization and glacial retreat, North-Central Minnesota. Presented at the 4th New World Luminescence Dating and Dosimetry Workshop, Denver, Colorado. 31 May – 2 June.

30. **Nicoll, K.**, 2006. A Geoarchaeologist, A Salvage Project, and A War Zone: Reconstructing Landscape Change in Prehistoric-to-Iron Age Human Activity in the Upper Tigris Basin, Turkey. Presented at the Archaeological Sciences of the Americas Symposium, Tucson, Arizona. 13-16 September.
29. Park, L.M., Black, D., **Nicoll, K.**, and Downing, K. 2006. The World encompassed: Using invertebrate fossils to reconstruct paleohydrologic conditions. Geological Society of America, North-Central Section–40th Annual Meeting, Akron, Ohio. 20–21 April.
28. Viles, H.A., **Nicoll, K.**, and Taylor, M. 2005. Climatic and sedimentological regimes exposed in megatufa sequences in the Naukluft Mountains, Namibia. Joint BGRG-BSRG Drylands Conference on ‘Linking Landscape Processes to Sedimentary Environments’ at the Geological Society, London. UK. 2-4 February.
27. Viles, H.A. and **Nicoll, K.** 2004. Tufa as an archive of Late Quaternary environmental and hydroclimatic change, Naukluft Mountains, Namibia. Conference on ‘Trees, Rain and Politics in Africa: The dynamics and politics of climatic and environmental change’ at the University of Oxford, Oxford, UK. 29-30 September.
26. **Nicoll, K.** 2003. An invited talk for the GSA Hydrogeology Division. Of Oracles, Oases, & Isotopes: Reconstructing palaeoclimates and cultural histories from springs in the Egyptian Sahara. Geological Society of America Abstracts Programme. Seattle, WA. 2-5 November.
25. **Nicoll, K.** 2003. Hydroclimatic change in the eastern Sahara: The lithostratigraphic record from Umm Akhtar Playa, southern Egypt. *In XVI INQUA Congress Programme Abstracts* p. 141.
24. **Nicoll, K.** and Stokes, S. 2003. Sandsea Evolution: Dune Morphology & Optical Dating Methodology, Gran Desierto, Mexico. Windy Day, Loughborough, UK. 15 March.
23. Stokes, S., Bailey, R., **Nicoll, K.**, Armitage, S., Haynes, C.V., and Maxwell, T.A., 2003. Environmental responses to climate changes in the eastern Sahara since the penultimate glacial. . *In XVI INQUA Congress Abstracts* p.127.
22. **Nicoll, K.**, 2003. Palustrine palaeoenvironments in NE Africa: The early Holocene record at Umm Akhtar Playa. *In ILIC Conference Programme*. Tucson, AZ
21. **Nicoll, K.**, Matney, T. and McDonald, H., 2003. 2002 Field Survey of the Upper Tigris Valley: Geomorphic Setting, Palaeoclimatic Change, and Archaeological Occupation in SE Anatolia. Poster presented at the British Association for Near Eastern Archaeology, Manchester, UK. 5-7 January.

20. **Nicoll, K.**, 2002. GIS of the “Neolithic wet phase:” Palaeoenvironmental and cultural evidence in W. Egypt and N. Sudan. Society of Africanist Archaeologists Conference Programme. Tucson, AZ. Poster.
19. Bauer, A.**, **Nicoll, K.**, Matney, T., and Park, L. 2002. Geomorphic setting and prehistoric occupation of the southern Cuyahoga River valley, NE Ohio: observations from a GIS database. *In* GSA Program with Abstracts. Vol 34. Denver, CO. 27-30 October. Poster. ** Student
18. **Nicoll, K.** 2001. Geoarchaeology of Umm Akhtar Playa: Early Holocene Palaeoenvironments of S. Egypt. *In* GSA Program with Abstracts Volume 33. Boston, MA. 5-8 November.
17. **Nicoll, K.** 2000. Evaluating the petrogenesis of fossil-spring tufa deposits from geoarchaeological sites in Kharga Oasis. *In* GSA Program with Abstracts Volume 32, Geological Society of America, Reno, NV. 9-18 November. p. A-275.
16. Park, L.E., **Nicoll, K.**, Bauer, A., Downing, K., Solomon, S., Gebregiorgis, M. 2000. Plio-Pleistocene Pluvial Lake Deposits in the Afar Region, Eritrea: Implications for Landscape Development and Climate Change in East Africa. AGU 81(48) 1127, San Francisco, CA. 15-19 December.
15. Komatsu, G. and **Nicoll, K.** 1999. Interpreting Martian paleoclimates from valley network morphologies: Insights from terrestrial analogues in Egypt. Lunar and Planetary Sciences Conference. Houston, TX, 15-19 March.
14. **Nicoll, K.** 1999. From the Arba'in Desert to Zezura: Emerging chronologies of rapid hydroclimatic change in Egypt and northern Sudan. University of Arizona Symposium convened for the *Festschrift* for C.V. Haynes. p. 10. Tucson, AZ.
13. **Nicoll, K.**, Schwarcz, H.P., Kleindienst, M.R., Wiseman, M.F., Frizano, J., and Giegengack, R. 1997. U-Series Geochronology of Middle Pleistocene Spring Activity and Human Occupation, Refûf Pass, Egypt. *In* Program with Abstracts Volume 29, GSA, Salt Lake, UT. 20-23 October. p. A-319.
12. Maxwell, T.A., Haynes, C.V., **Nicoll, K.**, Stokes, S., and El-Hawary, A.M. 1997. Buried channels and aeolian gradation in the Kiseiba region, southern Egypt. *In* GSA Program with Abstracts Volume 29, Geological Society of America, Salt Lake, UT. October 20-23. p. A-141.

11. Kleindienst, M.R., Schwarcz, H.P., **Nicoll, K.**, Churcher, C.S., Frizano, J., Giegengack, R., and Wiseman, M. 1997. Manuscript: Water in the Desert: Uranium-series dating of Caton-Thompson's and Gardner's "classic" Pleistocene sequence at Refûf Pass, Kharga Oasis. *In* M.F. Wiseman (Ed.) Oasis Papers 2: The Second Dakhleh Oasis Project Research Seminar, Royal Ontario Museum and Department of Anthropology, Toronto, 16-20 June 1997.
10. **Nicoll, K.**, Kleindienst, M.R., Schwarcz, H.P., Giegengack, R., and Wiseman, M.F. 1996. New Uranium-Series Ages for Quaternary Travertines at Refûf Pass, Kharga Oasis. Abstract Volume Proceedings p.141-142. Egyptian Geological Survey Centennial Meeting, Cairo, Egypt 19-22 November.
9. Maxwell, T.A., Haynes, C.V., **Nicoll, K.**, and Stokes, S. 1996. Newly Discovered Fluvial Channels in the Kiseiba-Nabta Region, Southern Egypt. Abstract Volume Proceedings p.117-119, Egyptian Geological Survey Centennial Meeting, Cairo, Egypt 19-22 November.
8. Stokes, S. and **Nicoll, K.**, 1996. Constraints on Mid-Late Pleistocene and Holocene Palaeoenvironmental Changes in the Western Desert of Egypt. Abstract Volume Proceedings p.118-190, Egyptian Geological Survey Centennial Meeting, Cairo, Egypt 19-22 November.
7. Demko, T.M., Currie, B.S., and **Nicoll, K.A.**, 1996. Paleosols at sequence boundaries in the Upper Jurassic Morrison Formation, Colorado Plateau and Rocky Mountain Regions, USA. *In* GSA Program with Abstracts Volume 28, p. A-185. Geological Society of America, Denver, CO. October 28-31.
6. Kleindienst, M.R., Schwarcz, H.P., **Nicoll, K.**, Churcher, C.S., Frizano, J., Giegengack, R., and Wiseman, M. 1996a. Pleistocene geochronology & paleoclimates at Dakhleh & Kharga Oases, Western Desert, Egypt based upon uranium-series determinations from water-lain tufas. 13th Biennial Meeting, Society of Africanist Archaeologists, International Commission of the Later Prehistory of NE Africa.
5. Kleindienst, M.R., Schwarcz, H.P., **Nicoll, K.**, Churcher, C.S., Frizano, J., Giegengack, R., and Wiseman, M. 1996b. Pleistocene geochronology and paleoclimates at Dakhleh and Kharga Oases, Western Desert, Egypt based upon uranium-series determinations from water-lain tufas (revised abstract). *In* Nyame Akuma vol. 46, p. 96. Annual Meeting of the Society for the Study of Egyptian Antiquities, Toronto, 8 November 1996.
4. Kleindienst, M.R., Schwarcz, H.P., **Nicoll, K.**, Churcher, C.S., Frizano, J., Giegengack, R., and Wiseman, M., 1996c. Water in the Desert: Uranium-series dating of Caton-Thompson's and Gardner's "classic" Pleistocene sequence at Refûf Pass, Kharga Oasis. Annual Meeting of the Society for the Study of Egyptian Antiquities, Toronto, 8 November 1996.

3. **Nicoll, K.** and Achyuthan, H. 1995. Evolution of Quaternary Paleosols from Aeolian Sediments in the Western Desert of Egypt and the Thar Desert of India: A Comparison of Soil Micromorphological Characteristics. *In* Proceedings of the Paleopedological Conference, Russian Journal of Science, p. 156-176.
2. **Nicoll, K.**, Haynes, C.V., and Maxwell, T.A. 1995. Identification of "pluvial lakes" in the hyperarid Bîr Kiseiba region of the Western Desert of Egypt: Observations from Landsat images and field reconnaissance, in Abstract Volume of the 1st International GeoLimnogeology Congress. Geological Institute, University of Copenhagen, Denmark, 1-5 August. p. 94.
1. **Nicoll, K.**, Haynes, C.V., and Maxwell, T.A. 1994. Identification of "pluvial lakes" in the hyperarid Bîr Kiseiba region of the Western Desert of Egypt: Observations from Landsat images and field reconnaissance. *In* GSA Program with Abstracts Volume 26, Geological Society of America. Seattle, Washington 24-27 October. p. A-150.

Other Contributions and Technical Reports, Non-Peer-Reviewed

26. **Nicoll, K.** 2014. Report to Utah State History Registry. Archaic Rock Shelter Site in the Deep Creek Mountains. 10 p.
25. **Nicoll, K.** 2009. Report to Global Rights (NGO). Footprint of Industrial Development in the Congo (ROC): Review of Observed Environmental Degradation, Pollution, and Human Rights Violations. November, 2009. 73 p and 50 page ppt.
24. **Nicoll, K.** 2008. Geomorphic Setting and Geoarcheology of 42SL186 "the Prison Site" located east of the Jordan River, Southern Salt Lake Valley. Technical report for the State of Utah, Antiquities, Division of State History. 24 p.
23. **Nicoll, K.** and Demko, T.M., 2004. Ground-Penetrating Radar (GPR) acquisition and geomorphic field survey at Ziyaret Tepe and environs, N. Tigris River, Turkey – Report to Ministry of Tourism and Culture. 3 p.
22. **Nicoll, K.** and Stokes, S. 2003. Sandsea Evolution: Dune Morphology & Optical Dating Methodology, Gran Desierto, Mexico -- Report to NASA 30 p.
21. Leiggi, P, Haack, R, and **Nicoll, K.** 2002. Report of the Opportunities Assessment in Southeastern Brazil. PDF format report on website, and C-T EPTC Technical Report, 525 p.

20. **Nicoll, K.**; Schiffer, R.; Calazans, M; Klotz, M. December 2001. Volcanic facies in the area of block BC-20, and the results of the “Brava” well 1-HESS-2-RJS. C-T EPTC Technical Report, 69 p.
19. **Nicoll, K.** and Leiggi, P. October 2001. Southeastern Brazil Opportunities Evaluation: regional setting of sedimentation in the Campos and Santos Basins. CPTC Technical Report, 103 p.
18. **Nicoll, K.** July 2000. Volcanism and reservoir risk in SE Brazil: implications for exploration. CPTC Technical Meeting and Partner Tech-Com. Presentation.
17. **Nicoll, K.** August 2001. Barremian-Pliocene Palaeoenvironmental Reconstructions and Sedimentation Styles in the area of block BMS-7, SW Santos Basin. CPTC Technical Report, 87 p.
16. **Nicoll, K.** December 2000. Well RJS-538 -- Synthetic well tie to seismic data, Campos Basin, Brazil. CPTC Technical Report, 37 p.
15. **Nicoll, K.**; Shepherd, S.; Leiggi, P. December 2000. Web-based Field Atlas, SE Brazil. CPTC Technical Report, 15 p (and intracompany web site).
14. **Nicoll, K.** and Preece, R. December 2000. Early-to-Mid-Cretaceous Sequence Stratigraphy of the Arabian Gulf Region (Iraq to the UAE): An integrated assessment using Wireline and Biostratigraphic Datasets. CPTC Technical Report generated for the Africa-Middle East Business Unit, 204 p.
13. **Nicoll, K.** November 2000. Mesozoic paleogeography and the opening of the South Atlantic: Implications for Regional Assessment and Exploration Strategy. CPTC Technical Report, 26 p.
12. **Nicoll, K.** and Shepherd, S. November 2000. Field statistics database for SE Brazil -- Campos and Santos fields. CPTC Technical Report, 12 p.
11. **Nicoll, K.** and Kiekhefer, R. October 2000. Analysis of "Santos Cluster" Blocks BMS 8, 9, 10, 11 in SE Brazil: ANP-Round 2. CPTC Technical Report, 356 p.
10. **Nicoll, K.**; Bauer, A.; Park, L. October 2000. Field reconnaissance of geoarchaeological sites in the Hampton Hill Area, Summit County, Ohio. Report submitted to Dr. T. Matney and the Department of Classical Studies, Anthropology, and Archaeology at the University of Akron. 5 p.
9. **Nicoll, K.** and Preece, R. May 2000. Update for Africa-Middle East Business Unit: Progress on Arabian Gulf Cretaceous Sequence Stratigraphic Project. CPTC Technical Report, 27 p.

8. **Nicoll, K.** and Preece, R. October 2000. Initial stratigraphic column and sequence boundary assignments for the Arabian Gulf region. Report for Africa-Middle East Business Unit. 55 p.
7. **Nicoll, K.** March 2000. Analysis of 2-D and 3-D seismic data from Block BMC 9, Campos Basin for ANP-Round 2 license round. CPTC Technical Report, 23 p.
6. **Nicoll, K.** 1999. Pore-Perm trends measured from core from Benchamas region, Thailand. Technical report to Thailand Business Unit. 17 p.
5. **Nicoll K.** 1999. Seismic ties for Benchamas region, Thailand; OpenWorks database interpretation. 21 pages.
4. **Nicoll, K.** 1999. Mapped sequences and review of Potential Prospectivity in the Amazon Delta, Foz Do Amazonas Basin: ANP-Round 1. Technical Report to Latin America Business Unit. 34 p.
3. **Nicoll, K.** 1998. Core descriptions and Petrography of the Chela Formation, offshore Angola. Technical report for Southern Africa Business Unit. 15 p.
2. **Nicoll, K.** 1996. Report to the Dakhleh Oasis Project for the 1996 Field Season. Report submitted to Dr. A. Mills, Dakhleh Oasis Project. 3 p.
1. **Nicoll, K.** 1995. Report to the Dakhleh Oasis Project Council for the 1995 Field Season. Report submitted to Dr. A. Mills, Dakhleh Oasis Project. 5 p.

Additional Contributions to the Arts and Letters

More than 80 pieces of published non-academic works, including these:

AAG *Geomorphorum*; GSA Division Newsletters

Editorial Columnist, *The Daily Pennsylvanian*;

Reporter, *34th Street Magazine*: 1986 - 1989

Freelance Journalist: 1984 - 1986

Miami Herald, San Francisco Examiner, Chicago Tribune, USA Today

Papers in Progress **denotes student author

4. Fensham, R.J. et al. including **Nicoll, K.** 2023. MS STOTEN-D-22-30917R1 in revision. Fellowship of the Spring: an initiative to document and protect the world's oases. *Science of the Total Environment*

3. Okur Erturaç, H., Erturaç, M.K. and Nicoll, K. 2022 manuscript ANR-22-0067 in review. Geomorphic Changes and Socio-Environmental Impacts of Recent Sand Mining in the Sakarya River, NW Turkey. *Anthropocene Review*
2. **Nicoll, K.** and Zerboni, A. 2022 in draft, Human Agency in Desert Geomorphology -- a legacy of the Anthropocene? For the journal *Geomorphology*
1. **Nicoll, K.**, Sidwell, P.**, and Wu, X. 2020 status is in abeyance *** due to COVID-19. Initial observations about sedimentation and microfossil preservation near Kyzyltepa, an Iron Age – Achaemenid site in Uzbekistan. Submitted to *Journal of Archaeological Sciences*.

VI. FUNDING

Recently Submitted Grants, Rejected and ready for Revision

- National Geographic Research Grants Program (submitting 12 April 2023)
Title: Oral Histories Of The Monolith Of Silwan In Jerusalem
Principal Investigator: Matthew Suriano, University of Maryland
Team Member: Katheen Nicoll
University of Utah Budget Requested -- ~\$28,000
- NSF – Global Land Use Dynamics (submitted 2021; rejected)
Title: Collaborative Proposal 2137321 - Collaborative Research: "Dating at the Stockton Bar" - Refining the chronostratigraphy of G.K. Gilbert for a bay-mouth bar and spit complex in the Lake Bonneville Basin, Utah
Principal Investigator: Kathleen Nicoll
University of Utah Budget Requested -- \$208,722
- Guggenheim Foundation (submitted 9/16/2019; rejected; resubmission 9/15/2021)
Title: Of Sandstone Spires And Rock Art Canvasses: A Prehistory of the Ennedi, Chad in the Central Sahara
Solo-PI: Kathleen Nicoll
- National Geographic Society (submitted 01/2022; rejected)
Title: "Wild" Cunene River Project: Reconstructing Paleo-Megafloods and *Hominin* Migrations through Desert Corridors in southern Africa
Solo-PI: Kathleen Nicoll

Successful Principal Grants and Fellowships

- Fulbright Foundation "Fulbright-Fondazione CON IL SUD Award." Submitted 9/15/20
Title: Rock Chalk, Vine and Time – Ecotourism and Archaeology in Sardinia's Wine Country
PI: Kathleen Nicoll
in collaborations with Università degli Studi di Cagliari in Sardegna, Dipartimento di Scienze chimiche e geologiche
- University of Utah College of Humanities, Award: 2018-2019
Aziz Atiya Comparative Religion Research Award
Title: Uncovering Biblical Libnah - Excavation & Landscape Archaeology Studies at Tel Burna
Solo-PI: Kathleen Nicoll
\$4,000 Awarded
- University of Utah College of Social and Behavioral Sciences, Seed Grant: 2017
Interdisciplinary Research Pilot Program (IRPP)
Title: Community Survey: USA Perceptions of Immigrants and Refugees
CO-PIs: **Kathleen Nicoll** and Caren Frost (College of Social Work)
\$10,000 Awarded
- National Center for Airborne Laser Mapping (NCALM) Seed Grant: 2015
Title: The Stockton Bar: A Geoantiquity in Peril – LiDAR Preservation of the Stockton Bar: Assessment of Lake Bonneville Highstand Hydrodynamics
Student-PI: Lawrence Kellum; **Faculty Advisor: Kathleen Nicoll**
- NASA Utah Space Grant: 2012
Title: Wind and Water Features of Gale Crater, the next Mars Landing Site
Solo-PI: Kathleen Nicoll
\$7,500 Awarded
- NSF Geomorphology & Land Use Dynamics Research Grant: 2011-2013
Collaborative Research Title: Undocumented Shorelines of Lake Bonneville: Paleoclimatic and Hydrodynamic Interpretations
PI: Paul Jewell (Utah)
CO-PIs: **Kathleen Nicoll** and Charles Oviatt (Kansas State)
\$310,000 Awarded
- NASA Utah Space Grant: 2011
Title: From Red Rocks to Red Planet: Connecting Utah's Landscapes to Mars Science
Co-PIs: Marjorie Chan, **Kathleen Nicoll**, Paul Jewell (all Utah)
\$5,000 Awarded

- TÜBİTAK, the Scientific and Technological Research Council of Turkey: 2011
Title: Late Quaternary Paleoclimates in Turkey
CoPI with Ceren Küçükuysal, Mineral Research & Exploration General Directorate of Turkey -- in Turkish: Maden Tetkik ve Arama Genel Müdürlüğü (commonly known as MTA)
\$16,050 Awarded
- Geological Society of America Gladys W. Cole Memorial Research Award: 2010
Title: Revisiting G.K. Gilbert's "Great Bar at Stockton, Utah" -- Documenting a Geoantiquity Site in Peril
Solo-PI Kathleen Nicoll
\$6500 Awarded
- NASA Opportunities in Education and Public Outreach for Earth & Space Sciences: 2010
Title: "Mars for Earthlings:" A terrestrial analog approach for Earth and Planetary Science teaching and outreach
PI: Marjorie Chan (Univ. Utah); 4 Collaborators, including **Kathleen Nicoll**
\$2000 Awarded
- University of Utah University Research Committee, Research and Creative Grant: 2009
Title: Reconstructing Persia's "Silk Road" during Antiquity: An Initial Environmental and Geoarchaeological Survey of the Sharur-Araxes River Plain in the Naxçıvan Exclave, Azerbaijan
Solo-PI Kathleen Nicoll
\$6000 Awarded
- University of Utah Individual Teaching Grant: 2008
Title: Where are we now? Employing GPS technologies in field-based active learning exercises within the physical geography curriculum
Solo-PI Kathleen Nicoll
\$3000 Awarded
- Royal Geographical Society: 2005
Title: Landscape Evolution and Hydroclimatic Change in the Cunene Sand Sea, NW Namibia
Co-PI with Heather Viles (University of Oxford)
\$80,000 Awarded
- US Consortium for the Advancement of Hydrologic Sciences, Inc.: 2004-2005
Title: Research Vision: The Fundamental Problem of Up-Scaling when Modeling a Watershed
Co-PIs J. McCray (Univ.TX-Austin), G.D. Thyne (Colorado School of Mines), K.E. Murray (USGS), A.A. Bodour (Univ.TX-San Antonio), **Kathleen Nicoll**

\$7500 Awarded

- University of Oxford ASTOR Travel Fund: 2004
Title: Travel to INQUA Conference
Solo-PI Kathleen Nicoll
\$8000 Awarded
- Royal Society-USA Research Grant: 2002-2005
Title: Chronologies for Saharan Palaeoenvironmental Change & Hominid Occupation, SW Egypt
Solo-PI Kathleen Nicoll
\$420,000 Awarded
- NASA Global Change Fellowship: 1993 - 1996
Title: Sedimentary Evidence for Recent Climate Change, Western Desert, Egypt
Solo-PI Kathleen Nicoll
\$100,000 Awarded
- University of Arizona Graduate College Summer Research Award: 1995
Solo-PI Kathleen Nicoll
\$5500 Awarded
- University of Arizona Inter-Disciplinary Programs Research Award: 1995
Title: Sedimentary Evidence for Recent Climate Change, Western Desert, Egypt
Solo-PI Kathleen Nicoll
\$1500 Awarded
- 1st International Geo-Limnological Congress Student Travel Award: 1995
Title: Playa Lakes in the Bir Kiseiba region, Egypt
Solo-PI Kathleen Nicoll
\$1000 Awarded
- Chevron USA Fund for Summer Research Grant: 1992
Title: Sedimentary Evidence for Recent Climate Change in the Western Desert, Egypt Remote Sensing Studies and Field Reconnaissance
Solo-PI Kathleen Nicoll
\$2500 Awarded
- Smithsonian Institution Pre-Doctoral Fellowship Award: 1991
Title: Recognition and location of fossil-spring travertine using satellite images of the Kharga Oasis, Western Desert, Egypt
Solo-PI Kathleen Nicoll
\$13000 Awarded

- Nassau Fund for Undergraduate Research Award: 1989-1990
Title: Analysis of inactive spring deposits as a basis for paleoclimatic interpretation: recognition and location of fossil-spring travertine using satellite images of the Kharga Oasis, Western Desert, Egypt
Solo-PI Kathleen Nicoll
\$15,000 Awarded
- Mellon Fund for Student Research Award: 1988- 1990
Title: Fossil-spring deposits in and adjacent to the Kharga Oasis, Western Desert, Egypt
Solo-PI Kathleen Nicoll
\$10,000 Awarded

VIII. SERVICE 2018-

International-National Professional Leadership

- Fulbright Association of Utah Board, 2022-current
- Fulbright Commission Italia Post-Doc Selection Committee, 2022
- INQUA Roma 2023 Congress Planning Committee, 2021-2023
- Editorial Board, Elsevier Journal *Geomorphology*, 2018-2022
- Editorial Board, *Annals of the American Association of Geographers*, 2017-2022
- Geological Society of America Taskforce for Diversity & Inclusion, 2020 - current
- International Association of Geomorphologists (IAG) Conference Review Panel, 2019
- Association for Women Geoscientists Distinguished Lecturer Program, 2017-2018
- Geological Society of America Archaeological Geology Division, Public Relations Committee and Social Media Outreach Administrator, 2013-present
- Planning Committee, 6th International Limnogeological Conference (ILIC), 2015
- Foundations Liason, International Association for Geoscience Disability, 2013
- Journal of Archaeology Editorial Board: 2012 – 2015
- Geological Society of America Limnogeological Geology Division, Russell Award Committee, 2017-2018
- Geological Society of America Quaternary Geology & Geomorphology Division Selection Committee for Students Awards & Scholarships: 2014-2015
- Climate Change Consultant for TÜBİTAK, the Scientific & Technological Research Council of Turkey – August 2011
- American Association for the Advancement of Science (AAAS)-appointed “Scientist on Call” working with NGOs (e.g., Global Rights and others in the Republic of Congo: 2009-present http://www.aaas.org/news/releases/2009/1210human_rights.shtml)
- National Academy of Sciences-National Research Council Workshop Panelist on “Earth System Context for Hominin Evolution” (February 21-22, 2008)
- Joint Program Technical Committee, Geological Society of America: 2011-2013

- International Organizing Committee for 2010 conference "Tectonic Crossroads: Evolving Orogens of Eurasia-Africa-Arabia," held 4-8 October 2010 in Ankara, Turkey.
- Steering and Scientific Meeting Planning Committee for the American Quaternary Association (AMQUA) for the Biannual meeting August 2010.
- Chair, Geological Society of America, Archaeological Geology Division: 2009-2011
- Vice-Chair, Geological Society of America, Archaeological Geology: 2007-2009
- US National Research Council Panelist on Hydrology and Public Policy: 2007
- Geological Society of America Archaeological Geology Division Awards Selection Committee: 2005-2007
- Geological Society of America National Meeting Field Trip Co-Leader: 2005
- 3rd International Limnogeological Conference (ILIC) Field Trip Organizer: 2002-2003
- Reviewer of >234 grant proposals since 2007, for various organizations:
 National Science Foundation (NSF); NASA; American Chemical Society
 Helmholtz-Association of German Research Centres; Icelandic Research Fund
 NSERC – UK; NSF-Israel USA Joint Research; Israel Science Foundation
 Fulbright Foundation; Leakey Foundation
 German-Israeli Foundation for Scientific Research and Development (GIF)
 Geological Society of America; Sigma Xi; National Geographic Society
 Petroleum Research Fund; Geological Society of America
- Reviewer of >300 manuscripts and book proposals since 2007 for presses and journals:
W.H. Freeman Publishers; University of Cambridge Press
University of Oxford Press; University of Utah Press
Quaternary Science Reviews; Quaternary International
Science; Nature, Proceedings of the National Academy of Sciences
Journal of Arid Environments; Quaternary Research
Geology; Geological Society of America (GSA) Special Volumes
Geological Society of America (GSA) Bulletin; SAGE,
Palaeogeography, Palaeoclimatology, Palaeoecology
AGU – Geopress; AGU- EOS; Journal of Limnology, Chemosphere
Geomorphology; The Holocene; Catena; International Geology Review
American Antiquity; Geoarchaeology: An International Journal
Journal of Archaeology; Journal of Archaeological Science; Antiquity
Journal of Human Evolution; Journal of Archaeological Sciences Report
Current Anthropology; Journal of African Archaeology; Arid Zone Archaeology
African Archaeological Review; Proceedings of the Geologists' Association;
Aeolian Research; Icarus; Frontiers
Natural Hazards; Geography of Natural Hazards
Climatic Change; Global & Planetary Climate Change; Boreas
Journal of African Studies; Journal of Arabian Studies
Journal of African Earth Sciences; African Business Review
International Journal of Petroleum Geology & Engineering, MesoAmerica
- Chair of >47 Topical Sessions at various International Meetings: 2003 – 2019
 GSA, AMQUA, AAG, AGU, EGU, INQUA 2015, INQUA 2019
- Discussant at the American Association of Oriental Research (ASOR) 'Archaeology and Climate Change workshop': 2020
- Discussant at the American Geophysical Union (AGU) Chapman Conference: 2011

- More than 20 invited colloquium talks. Highlights:
 - Università degli Studi di Cagliari, Italia – December 2021
 - Università degli Studi dell'Insubria, Italia – October 2021
 - University of Texas, Austin, Texas – February 2018
 - Ariel University, Israel – May 2017
 - Louisiana State University, Baton Rouge, LA – April 2016
 - Geological Society of America, Baltimore, MD – November 2015
 - International Society Saline Lakes Research, Beijing, China -- July 2014
 - Tel Burna – Ariel University, Israel – July 2014
 - Utah Valley University Colloquium Speaker -- October 2013
 - Princeton University – April 2013
 - University of Oxford Art & Archaeology talk – January 2012
 - University of East Anglia, Norwich UK talk– June 2011
 - MTA Mapping Agency, Turkey Speaker -- August 10, 2011
 - Middle East Technical University (METU), Turkey colloquium – August 11, 2011
 - Cambridge University Colloquium Speaker – October 2011
 - University of Texas at El Paso Colloquium Speaker, -- March 2010
 - Archaeological Institute of America lecturer, Portland, Oregon -- December 2, 2010
 - Willamette University Seminar Speaker – December 1, 2010
 - University of Arizona Colloquium Speaker – September 2009
 - USGS invited talk “Petroleum systems of Brazil” – February 2008
 - Utah Geological Association Talk – December 2006
 - Hutton Club, University of Edinburgh, UK Colloquium – October 2005
 - University of Manchester, UK Talk– November 2004
 - University of Akron Colloquium Speaker – February 2002
 - Trinity College, Dublin, Ireland Colloquium– February 2000
 - Northwestern University Colloquium Speaker – January 1999

University of Utah Service

- Global Engagement Office, Fulbright Advising and Selection Panels, 2022-2023
- Academic Senate Executive Committee, 2017 - 2020
- Elected Academic Senator, Department of Geography, 2017 – 2020; substitute in 2016
- SafeU Planning Committee, 2019
- Senate Committee on Academic Freedom and Faculty Rights (SCAFFR) – 2016 - 2019
- Global Learning Faculty Working Group, 2016 – present
- Faculty Mentor of student group, Utah Water Warriors, 2016 - present
- Member – University Faculty Senate Committee Academic Freedom, 2015 - present
- Committee Chair of the CSBS Academic Awards Committee, 2014 - present
- Design, Coordination and Move of Kennecott Physical Geography Labs to Paradigm II
- Advisory Board, The Middle East Center Journal (student-run), 2010 - 2013
- Advisory Board, Rio Mesa (formerly Entrada Ranch), 2008-2011
- Delegate to the Utah Campus Compact, with Bennion Center, 2008
- “University Research Opportunity Program” (UROP) proposal reviewer, 2010, 2015-2017
- College of Social and Behavioral Sciences
 - College Council, 2016-2018

- Superior Research Award Committee Chair, 2015; Committee, 2009-2011; 2019
- Research Advisory Committee, 2013 – present
- Superior Teaching Award Committee, 2008, 2015, 2018
- Adjunct Faculty Review Committee, 2012-2013
- Curriculum Committee Representative, 2012
- College Proposal Initiative Grant Awards Panel, 2007-2010; 2014-2015
- Middle East Center (MEC)
 - Scholarship Awards Committee, 2015-present
 - Executive Interim Committee, 2009-2011
 - Title VI –Department of Education Grant Writing Team, 2010
 - Graduate Admissions Committee, 2009-2011
 - FLAS Awards Committee, 2009-2011
 - Curriculum Committee, 2010-present
- Department of Geography
 - Leadership Committee, 2019 - 2020
 - Graduate Committee, 2015 – present
 - Undergraduate Committee, -?_ - 2020
 - Retention, Promotion, & Tenure Committee, 2013 - present
 - Committee of the Whole, Graduate Admissions, 2007 – present
 - Committee of the Whole Faculty for several faculty position searches since 2007
 - Undergraduate Curriculum Committee, 2011- 2019
 - Don Currey Award Committee, 2009 – 2011, 2018

Additional Service

- Fulbright Association of Utah Board: 2022 - present
- Outreach via Facebook page Geomorphology Rules (204K followers): 2007 - present
- Social media coordinator for GSA Archaeological Geology Division: 2013 – present
- Facebook Administrator for the International Association for Limnogeology (IAL)
- Guest editor for Special Issue of *Quaternary International*: 2013-2014, 2016, 2018, 2020
- >8 hours total talking to citizens' groups, developers, city planners, city council in Farmington, Utah. *Pro bono* opinions about the hazards potential in the mountain front area and a certain subdivision being planned in Farmington: 2015
- Affiliate, Great Salt Lake Institute <http://greatsaltlakeinstitute.org/>: 2008 - present
- Fundraising Committee, local Chapter of the Association of Women Geoscientists: 2008
- Panel for Environmental Studies Department Student Activities Council: 2008
- Volunteer advisor, Veteran's Hospital: 2007 - 2019
- Volunteer consultant for NGO, Jewish Partisan Educational Foundation: 2005
- Guest editor for Special Issue *Geoarchaeology: An International Journal*: 2000-2001
- Volunteer at Chevron Overseas Petroleum, Incorporated
 - United Way Coordinator: 1999 – 2000; Safety Rep/ Fire Monitor: 1999 – 2001
- Volunteer for Habitat for Humanity Mt. Diablo Division, CA: 2000-2003
- Chevron Clastic Stratigraphy Group Convention Coordinator: 1999; Field Leader: 1999

- The University of Arizona Department of Geosciences
Student representative, Geomorphologist Search Committee: 1997
Geodaze symposium committee: 1997
- The University of Arizona Department of Geosciences
Leader, "Welcome to Tucson" Field trips 1993-1996.
"Lunchtime Lecture" series organizer and participant: 1992-1994
Quaternary Alliance (Qal): Fall 1992, 1993
Volunteer/participant in Society for Earth Science Students Programs: 1995-1997
Member, Sigma Gamma Epsilon: 1991-1997
- Chesapeake Bay Girl Scout Council, Board of Directors: 1986-1988

Memberships in Professional Organizations & Learned Societies

- Fulbright Association
- American Association of University Women (AAUW)
- American Association of Geographers (AAG)
- Geological Society of America (GSA)
- American Geophysical Union (AGU)
- Association for Women Geoscientists (AWG)
- International Society of Salt Lake Research (ISSLR)
- American Association of Petroleum Geologists (AAPG)
- American Quaternary Association (AMQUA)
- Friends of the Great Salt Lake (FoGSL)
- Center for Desert Archaeology; Society for American Archaeology (SAA)
- Royal Geographical Society (RGS); Institute of British Geographers (IBG)
- Sigma Xi, Society of Africanist Archaeologists (left expired in 2008)
- American Women in Science; Utah Geological Association (left expired in 2007)

IX. TEACHING & STUDENT SERVICE

Courses at the University of Utah

Several courses I teach at the University of Utah have been at the Introductory level, and many were listed as General Education Courses. The 1000 offering is listed as a science credit, so we routinely have 45+ students enrolled in the main section. Geomorphology class (3200/5200) was formerly listed as a general education course, and attracted a wide range of students from all majors across the University. We now offer that course as GEOG 3200.

My teaching service is a heavy instruction load, 7-8 credits each semester; I support a lot of student credit hours. During fall term, I lead 5-6 all-day field trips for the classes I teach, which keeps me busy. My teaching load is among the highest in my department. In addition to these courses listed, I regularly instruct tutorials, research credits and directed readings:

GEOG 1000 (formerly co-listed as ENVST 1000)

Introduction to Earth Systems (3 credits)

GEOG 3000

GeoExcursions: Field Trips in Northern Utah (4 credits)

GEOG 3200 (formerly cross-listed as ENVST 3200 and GEOG 5200)

Mountains Rivers Deserts: Introduction to Geomorphology (4 credits)

Note -- see the class Facebook page Geomorphology Rules

GEOG 3290 and 5290

Water in Utah (3 credits) see class blog on <https://waterinutah.wordpress.com>

GEOG 5201 and 6201; 5202 and 6202

Advanced topics in Geomorphology

Seminar course alternates as “Arid Lands” and “Geoarchaeology”

GEOG 5950 and 6950

Seminars in Quaternary Geology & Geomorphology (3 credits)

-- 2007 – Seminar in Great Basin Studies & Lake Bonneville

-- 2008 – Little Valley Landslide: Local Case Study

-- 2009 – Lake Bonneville Topics

-- 2010 – Environmental Topics (campus recycles, Dust, local hazards)

-- 2011 – Geoarchaeology & Landscape Archaeology

-- 2012 – Topics in Geoarchaeology

-- 2013 – Case studies: Research in the Lake Bonneville Basin

EDUCATIONAL OUTREACH I coordinate and administrate a science facebook page called *Geomorphology Rules* – I started this for my Geomorphology class (GEOG 3200) but have gained a broad public following, with more than 204k followers. Lately, my content regularly reaches millions of people each week.

<https://www.facebook.com/GeomorphologyRules?ref=bookmarks>

Graduate Committee Memberships at the University of Utah

In Geography, I now serve on the committees of PhD Candidate Matthew Wood and Masters Students Serena Madsen and Melanie Cooke. I also serve on the committee of the Anthropology PhD student Paul Allgaier.

Recently I also served on the committees of several geography students, including Meitong Liu (“Magi”), Liz Looby, Evan Burgess, James Turrin, Robert Baskin and Kelsey Howard. I also served on the committees Will Farr (MAST program), Walt Eiman (Anthropology), and Maura Hanhnerger (Atmospheric Science). I chaired the research of students pursuing master’s degrees Mike Freeman (Geography) and Daniel Smith (MAST). Throughout the years, I have also served on graduate committees in Civil Engineering, the Geology & Geophysics Department, and the Department of Atmospheric Sciences. I provide some further details.

Graduate Committee Service as Chair

4. JD Dolinar (M.S., Anthropology, University of Utah)
Student in Geography: 2019- 2021 rotated off
PhD project title forthcoming. General topic is on Great Basin Geoarchaeology.
Present position: Instructor, GEOG 1000 course at University of Utah

2. Daniel L. Smith (B.S.Eng, University of Utah)
Student in Professional Master of Science & Technology: Environmental Science
Period: 2015 – 2017; Degree: MAST 2017
Professional experience project final report title: The potential for lead in municipal water systems of Utah.
Present position: Environmental Scientist, Anderson Engineering Company Inc.

2. Michael Freeman (B.S., University of Wyoming)
Masters Student in Geography - Period: 2013 – 2014; Degree: M.S. 2014
Thesis title: Flow reversal events and statistical modeling of flow dynamics of hypersaline water across a constructed causeway, Great Salt Lake, Utah, USA
Present position: Surface Water Specialist, Utah Water Center, U.S.G.S.

1. Patrick John Culpepper (B.S., U.S. Military Academy, West Point)
Masters Student in Geography - Period: 2007 – 2009; Degree: M.S. 2009
Thesis title: Analysis of Terrestrial Ground-Based LiDAR Datasets on Active Lava Flow Processes and the Geomorphology of Pu’u O’O, Hawaii
Present position: Lt Colonel in the U.S. Army

Other Graduate Committee Membership Service

20. Matthew Wood (B.S. BYU)
PhD Student in Geography Period: 2020– 2023
Thesis Title: Mitigating Cascading and Co-occurring Hazards with Classification, Mapping, and Simulation
19. Serena Madsen (B.A., University of Utah)
Master's Student in Geography Period: 2021– current
Thesis Title: Spatiotemporal Analysis Of Intersectionality In The United States
18. Paul Allgaier (M.S., University of Utah, 2019)
PhD Student in Anthropology Period: 2017 – 2021 current
Tentative thesis title: Great Basin Habitat, Suitability and Modeling Human Behavior
Present position: Archaeological Consultant, Far West.
17. Meitong Liu (undergraduate degree completed in China)
PhD Student in Geography Period: 2017 – 2020; [Degree: M.S. 2019]
[Thesis topic: Environmental Cost and Environmental Justice of Air Pollution in China]
16. Elizabeth Looby (B.S., University of Utah; M.S., 2019)
Student in Geography - Period: 2015 – 2019; defended 02-14-2019
Thesis topic: Former climate variability and cultural practices of prehistoric civilizations of the Tigray Plateau in Ethiopia]
Present position: Facebook. Prior: Risk Specialist, Thumbtack; NASA Ames Intern
15. Melanie Cooke (B.S., University of Utah)
*Student in Geography - Period: 2014 – 2021 **current [Degree: M.S. forthcoming]*
[Thesis topic: Biogeography and Paleoecology Utah Lake]
Present position: Research Volunteer, Natural History Museum of Utah
14. Kelsey Howard (B.S., University of Utah; M.S., 2016)
Student in Geography - Period: 2007 – 2014; Degree: M.S. 2016
Thesis title: (paleoecology topic)
13. William Farr (B.S., University of Utah; M.S. 2014)
Student in Professional Master of Science & Technology: Environmental Science
Period: 2012 – 2014; Degree: MAST 2014
Thesis title: Milford Flat Dust and Air Quality Evaluation Project
Present position: Meteorologist & Weather Instrumentation Technician, Smoke Management Program Coordinator, Western Weather Group, Inc.

12. James Turrin (B.S., The Ohio State University; M.S., University of Utah 2014)
Student in Geography - Period: 2010 – 2014; Degree: Ph.D. 2014
Thesis title: Flow Instabilities of Alaskan Glaciers
Present position: Consultant in Digital Cartography
11. Maura Hahnenberger (B.S., University of Utah; M.S., University of Utah 2014)
Student in Atmospheric Sciences - Period: 2008 – 2014; Degree: Ph.D 2014
Thesis title: Dust storms in the eastern Great Basin of Utah, U.S.A
Present position: Assistant Professor, Salt Lake Community College
10. Robert Baskin (B.A., Thiel College, M.S., University of Utah; PhD 2014)
Student in Geography - Period: 2007 – 2014; Degree: PhD 2014
Thesis title: Occurrence + Distribution of Microbial Bioherms in Great Salt Lake, UT
Present position: Supervisory Hydrologist, Utah Water Center, USGS
9. Walt Eiman (B.A., Utah State University; M.Ed., Marian University)
Student in Anthropology - Period: 2011 – 2013; Non-thesis Degree: M.A. 2013
Present position: Helicopter Pilot, U.S. Army
8. Evan Burgess (Bachelor's, University of Colorado Boulder; M.S., University of Utah)
Student in Geography - Period: 2009 – 2013; Degree: Ph.D 2013
Thesis title: Ice flow dynamics of Alaska Glaciers
Present position: GeoSpatial Data Scientist, Air Sciences Inc.
7. Zachary Lundeen (B.A., Idaho State University; M.S., University of Massachusetts, Amherst)
Student in Geography - Period: 2006 – 2012; Degree: Ph.D 2012
Thesis title: Paleoecological and isotopic records of climate change and variability from lakes and speleothems, Bear River Range, southeastern Idaho
Present position: Director, Bonderman Field Station at Rio Mesa, UU Field Station
6. Eric Martineau (B.S., University of Utah)
Student in Geography - Period: 2010 – 2012; Degree: M.S. 2012
Thesis title: Seismic Risk Perception and Household Adjustment in Salt Lake City, UT
Present position: Mitigation Specialist, Emergency Management, Utah Department of Public Safety
5. Daren Nelson (B.S., Utah State University; M.S., University of Idaho)
Student in Geology and Geophysics - Period: 2006 – 2012; Degree: Ph.D 2012
Thesis title: Geomorphic and stratigraphic development of Lake Bonneville's intermediate paleoshorelines during the Late Pleistocene.
Present position: Assistant Professor, University of North Carolina – Pembroke.

4. Krysia Skorko (B.S., Vassar College)
Student in Geology and Geophysics - Period: 2008 – 2009; Degree: M.A. 2013
Thesis title: Fluvial response to Great Salt Lake level changes: observations, mechanisms, and implications
Present position: Hydrologist, U.S. Geological Survey
3. Gregory Smith (B.S., University of Utah)
Student in Geography - Period: 2008 – 2010; Degree: M.S. 2010
Thesis title: Development of a flash flood potential index using physiographic datasets within a geographic information system
Present position: Senior Hydrologist at NWS Colorado Basin River Forecast Center
2. Jesse Manoni (B.A., University of Utah?)
Student in Recreation, Parks & Tourism - Period: 2008 – 2010; Degree: M.A. 2010
Thesis title: Development of an annotated Trail Guide for Entrada Ranch
Present position: Firefighter Commander
1. Matthew Hansen (B.S., Brigham Young University)
Student in Geography - Period: 2005 – 2008; Degree: M.S. 2010
Thesis title: Decision Tree Classification of Dambo Wetlands using Remotely Sensed Multispectral and Topographic Data
Present position: Director, PEG Development

Undergraduate Research Leadership Service

Supervisor, Honors Thesis at the University of Utah

1. Thulasi Seshan (Geography B.S. Honors 2018)
Title: Comparative Indigenous Water Law in The Western United States And Australia

Undergraduate Research Opportunity Program (UROP) at the University of Utah

Since 2006, I have written >49 letters of support for students applying for research support through the University of Utah Undergraduate Research Opportunities Program (UROP).

Below is a list of the research projects that I advised through the UROP. I have served as co-advisor on several others!

Primary Advisor, Research Funded through UROP

8. Thulasi Seshan (Geography B.S. Honors 2018); Year of initial funding – 2017
Topic: *Indigenous Water Rights Comparative Studies.*
7. Amber Henshaw (Geography B.S., 2017); Year of initial funding - 2017
Topic: *Survey: Public Attitudes of Air Quality and Pollution.*
6. Jasmine Reading (Environmental Sustainability B.S., 2018); Year of initial funding - 2016
Topic: *Mercury in the Great Salt Lake – Bonneville Basin*
5. Cole Boyer (Environmental Sustainability B.S. 2017?); Year of initial funding - 2015
Topic: *Snowpack Studies at Alta*
4. Alexander Lowe (Geology B.S. 2016?); Year of initial funding - 2013
Topic: *Fieldwork for Spit Bar Sedimentology*
3. Jacob Gottfredson (Chemistry B.S., 2012); Year of initial funding - 2010
Topic: *Preparation of Fossil-Spring Tufa Deposits for Uranium-Series Dating: A Case Study from Kharga Oasis, Saharan Egypt*
2. Kristyn Burrell (Geography & Environmental Studies B.S., 2010); Year funded - 2010
Topic: *Nuclear Issues in Utah*
1. Trent Raleigh (Economics B.S., 2009); Year of funding – 2009
Topic: *Inquiry and Economic Analysis of SB 202: Energy Resource and Carbon Emission Reduction Initiative*

Additional Undergraduate Mentoring

Since 2007, I have supervised more than 10 Undergraduate Internships – here is a short list:

14. Paige Sidwell: Geoarchaeology and Soils at Kyzyltepe, Uzbekistan
13. Stuart Thompson: Health Effects of Poor Air Quality in Utah
12. Joseph Masini: Geomorphology of the Great Basin National Park Region
11. David Williams: Geomorphic Effects of Fire
10. Kristyn Burrell: If Utah Grows Nuclear, will Utah Glow Nuclear?
9. Sean McCarthy: Recycling on the U of U Campus, and Sustainability Issues
8. Gina Begin: Preservation of The Nine Mile Canyon
7. Tyler Nelson: The Fremont – A Cultural Hybrid or Solitary Entity
6. Alexander Headman: Naxcivan-Azerbaijan Geoarchaeological Mapping Survey
5. Kevin Leishman: Alaska Glacial Geomorphology // California Redwoods
4. Kristyn Burrell: Nuclear Waste Storage in Utah
3. Robert Moore: Student-led service learning projects in the Philippines
2. Kristyn Burrell: Environmental Standards and Legal Aspects of Nuclear Waste in UT
1. Travis Young: Out-of-the-Box Sustainable Architecture Internship and “Green Living”

I have helped to place University of Utah students into internships with the US Forest Service, the US Geological Service, Bureau of Land Management and several state and county government agencies, as well as local consulting firms.

Since 2007, I have supervised many Undergraduate Independent Study Topics:

- 25: *Air Quality and Traffic Accidents in Utah*
- 24: *Fremont Culture in Wyoming*
- 23: *Air quality issues in the local Utah news*
- 22: *Coal, Mercury and the water cycle in the Great Salt Lake - Bonneville Watershed*
- 21: *Legal issues – Water Law for Australian Aboriginals and the US SW*
- 20: *Social justice and environmental degradation*
- 19: *Refugee Issues – theories and perspectives of the public*
- 18: *Pollution, Population and Urbanization in Salt Lake County*
- 17: *Air Quality in Utah - Survey*
- 16: *Watershed studies in Great Salt Lake with USGS*
- 15: *Field studies in the Great Basin Region*
- 14: *Field work in the Kalahari & Namib Deserts*
- 13: *Geoarchaeology C-14 databases for maize in the US SW*
- 12: *Geomorphology of the Great Basin National Park Region*
- 11: *Geomorphic Effects of Fire*
- 10: *If Utah Grows Nuclear, will Utah Glow Nuclear?*
- 9: *Recycling on the U of U Campus, and Sustainability Issues*
- 8: *Preservation of The Nine Mile Canyon*
- 7: *The Fremont – A Cultural Hybrid or Solitary Entity*
- 6: *Naxcivan-Azerbaijan Geoarchaeological Mapping Survey*
- 5: *Alaska Glacial Geomorphology // California Redwoods*
- 4: *Nuclear Waste Storage in Utah*
- 3: *Student-led service learning projects in the Philippines*
- 2: *Environmental Standards and Legal Aspects of Nuclear Waste in UT*
- 1: *Out-of-the-Box Sustainable Architecture Internship and “Green Living”*

International Service to Students

During my Fulbright (2021-2022) in Italy, I taught courses at two universities – Insubria in Como, and Cagliari in Sardinia. I also taught three field practicums and served on three graduate student assessment panels.

For Fulbright-Italy, I served on interview and selection panels in 2022. Here at Utah, I worked with more than 20 students applying for Fulbrights and I served on the interviewing panel that delivers recommendations of support to the National Selection Panel.

Additional information

Since arriving at the University of Utah, I have written numerous (>200/year now) letters of support and recommendations for students. I have helped >300 (I have stopped counting) individuals secure scholarships, internship positions, and employment. I've helped students launch themselves into further studies and enrolment for graduate or professional school; some of my students have enrolled at Cornell (Travis Young, Architecture), George Washington University (Paul Stone, Peace Studies-Arbitration MA), and Cambridge (Thomas Beskeen, Remote Sensing MS). One student who I helped to mentor from his undergraduate degree in Archaeology at University of Akron and through his PhD at the University of Chicago is currently an Assistant Prof at Stanford University (Andrew Bauer). My PhD Mentee, Maura Hahnenberger (PhD Atmospheric Sciences 2014) was just promoted to Associate Professor at the Salt Lake Community College. One of my former Master's Students Mike Freeman is a Research Hydrologist at the USGS. Another one of my Masters students, John Culpepper taught Geomorphology at West Point for several years, and was recently promoted to Lt Col in the U.S. Army.

I served on two recent NSF panels for the Graduate Research Fellowships Program (GRFP).

In 2011, I won the College of Social and Behavioural Sciences Superior Teaching Award.

The Facebook Page I developed for my Geomorphology Class called "Geomorphology Rules" has >179,000 followers, with posts reaching 2-6 million people per week. This is a considerable outreach activity at the international scale; it significantly strengthens the image of the Department of Geography and the University of Utah.

X. SUPPLEMENTAL

Selected Research Associations and Field Projects as of 2021

Tel Burna (Biblical Libnah) Excavation, Israel 2014 - present
Sirwan Valley Survey project, Kudistan, Iraq 2014 - 2019
Naxcivan Field Survey Team, Azerbaijan 2010 -- 2011
Namibia Field Survey Team, Governmental Survey Office, since 2004- present
Ziyaret Tepe Archaeological Expedition, Tepe, Turkey since 2002
Afar Research Project, Eritrea 1998 - 2011
Prison Site Excavation Team, Utah Antiquities 2009

Prior Employment Experience

Consultant, The Discovery Channel: June – September, 2007

Provided logistical and technical support for pitch development in Turkey
Advised science content regarding landscapes and archaeological sites

Teaching Assistant, University of Arizona Department of Geosciences: 1996 - 1998

Courses in Geomorphology, Global Change, and Oceanography.

Main responsibilities included:

- Develop, prepare and run labs; manage testing and grading; deliver lectures.
- Organize and run field trips (e.g. Mexico for 100+ 1st-year students).
- Facilitate graduate-level study groups and undergraduate tutorials.

Instructional Staff, University of Pennsylvania-YBRA Field School: 1998

Assisted undergraduate students with field methodologies, including:

- Basic orienteering, use of a Brunton compass, tape and pace surveying.
- Topographic reconnaissance of structures, aerial photo interpretation.
- Mapping projects (Elk Basin, WY; Red Lodge, MT; Yellowstone N.P.).

Consultant, The Discovery Channel: 1996-1997

Served as "on-line expert" for various web page features about geology.
Fact-checked geoscience portions in text of television scripts.

Palynology Lab Assistant, University of Arizona Geosciences: 1991 - 1993

Performed physical, chemical separations of various core and sediment samples.
Prepared and counted over 100 pollen sample slides from US southwest.
Generated histogram plots of floral spectra; generated statistics; archived data.

Geoarchaeology Lab Assistant, University of Arizona Anthropology: 1991 - 1994

Accomplished physical sediment separations and petrography of samples.
Performed chemical pretreatment processes for >200 radiocarbon samples.
Applied "Custer battlefield archaeology" analysis techniques on spent cartridges.

Teaching Assistant, University of Arizona Department of Geosciences: 1991 - 1992

Courses in Stratigraphy and Sedimentology, Historical Geology.

Main responsibilities included:

- Prepare lectures for and run labs; manage testing and grading.
- Run field trips and class time excursions.
- Assist students studying in the Learning Center.

Pre-Doctoral Fellow, National Air and Space Museum, Smithsonian Institution: 1991

Processed digital satellite data using Erdas and IDRISI.
Compiled a photomosaic of 12 Landsat-MSS scenes in Western Desert, Egypt.
Identified and mapped new paleolake deposits for ground-truthing in 1992 - 1996.

Teaching Assistant, Bryn Mawr College: 1990-1991

Assisted development and execution of labs in new Oceanography course.
Helped design field project associated with research cruise off Sandy Hook, NJ.

Geologic Consultant, Kennbert Investment Group: 1990

Developed, field-tested maps for gold prospecting, Hurricane Fault region, UT.

Lab Tech, University of Pennsylvania Department of Geology: 1989 - 1990

Assisted with paleobotanical sample analyses and curation.

Seasonal Park Ranger and Naturalist Interpreter, Delaware Seashore State Park: 1988

Conducted nature walks, educational campfire talks, seining, birding excursions.
Obtained field measurements for assessment of beach erosion.
Assisted Beach Patrol in more remote areas of the barrier island.

Further Details of Academic and Professional Training

Field Courses and Experiences

- RADAN Processing and Software, GSSI: March 2010
- Guest Instructor, Wasatch-Uinta Field Camp: July 2008
- Leader, Great Salt Lake field trip for the China Academy of Sciences: May 2008
- Co-Leader, GSA field trip "Mesozoic Lakes of the Colorado Plateau:" October 2005
- Instructor, Field Setting of Baja California Sur: March 2004
- ILIC Field Trip Leader, Mesozoic Lakes of Colorado Plateau: April 2003
- Project Geomorphologist, Ziyaret Tepe Archaeological Project, Turkey: 2002-2004
- Stanford Deepwater Depositional Environments Conference: October, 2001
- Chevron Turbidite School, Ainsa, Spain; May, 2001
- Chevron Structural Styles and Rift Architecture School, NV-AZ: November, 1999
- Chevron Carbonate Reefs Field School, Belize: March, 1999
- Chevron Clastic Reservoir Stratigraphy Field School, S. Utah: October, 1998
- Instructor, YBRA Field Geology School: Summer 1998
- BP-Alaska Arctic Survival School: Summer, 1997
- Stratigraphic mapping fieldwork, Morrison Formation, central Utah: summer 1996.
- Survey-reconnaissance team, Qattara Depression, northern Egypt: April 1996.
- Geologist for field team of archaeologists, Dakhla Oasis, southern Egypt: 1995-1996.
- Geologist, Smithsonian Field Season, Western Desert, Egypt: 1996, 1994, 1993, 1992.
- Field trip organizer and leader, "Geology of the Tucson Basin:" Fall 1993, 1992, 1991.
- Mapping carbonate rocks, Arbuckle Mountains, southern Oklahoma: Fall 1990.
- Field assistant for geologists in Canyonlands and Grand Canyon N.P.: Summer 1990.
- Yellowstone-Bighorn Research Association (YBRA) Geologic Field Camp, Princeton University: Summer 1988. Field mapping exercises in: Elk Basin, WY; Beartooth Mountains, MT; Clarks Fork Canyon, WY; Dillon, MT; and Yellowstone N.P., WY.

Short Courses and Seminars

- Processing and Analysis of GeoEarthscope and Other Community LiDAR Topography Datasets, Geological Society of America Meeting, October, 2007
- DEMs: Topographic Dimension for Visualizing Geology, Geomorphology, and Active Tectonics Geological Society of America Meeting, November, 2003
- Field Acquisition of Ground Penetrating Radar, May 2003
- GIS for Geoscientists, Geological Society of America Meeting, November, 2000
- GCSSEPM Turbidite Systems, December 2000
- Clastic Sequence Stratigraphy and Seismic Interpretation, October 2000
- Introduction to SeisWorks software, February 2000
- Seismic School, Seismic Acquisition and Processing, October 1999
- Subsurface Geological Mapping Techniques, September 1999
- Foreign Policy/Corruption Act, Chevron Legal School, May 1999
- Economic Evaluation, Chevron School, April, 1999
- Remote Sensing for the Geoscientist, Chevron School, March 1999
- Reservoir Characterization, Chevron School, February 1999
- Geostatistics and Reservoir Modelling at Chevron, January 1999
- Formation Evaluation and Petrophysics, Chevron School, December 1998
- Practical Reservoir Engineering, Chevron School, November 1998
- Wellsite Training - Bakersfield, CA. November 1998
- Introduction to Oil and Gas Exploration - BP school, May 1997
- Workplace Hazardous Materials Information Course (WHMIS), June 1996
- Geochemistry and Stable Isotopes Short Course, GSA Meeting, October 1993
- Radiation Protection and Safety Course, University of Arizona, September 1992
- Laboratory Safety Course, University of Arizona, September, 1991
- Machine Practicum and Scientific Glassblowing, Bryn Mawr College, 1990-1991

Practical Technical Fluencies

- Fluent with GPR (Ground-Penetrating Radar) acquisition, analyses & interpretation
- Use of C++ programming language
- Extensive experience with UNIX systems and OpenWorks platforms
- Experience with software applications, including:
 - SeisWorks (2D/3D); StratWorks; GoCad ++ visualization; Showcase; EasyCopy; SynTool; EarthCube; VoxelGeo; TDQ Time-Depth Conversion
- Image analysis software, including IDRISI, ERDAS, ENVI and Photoshop
- PC Workstation experience with Microsoft Office applications (e.g. PowerPoint!!), as well as Excel, Naturally Speaking, Freehand, Canvas, Adobe Illustrator...
- Fluent with Geomatics software applications, including ArcView, ArcGIS software and alternate GIS (Geographic Information Systems) platforms such as MicroDEM.
- Practice of various analytical laboratory techniques involved with dating techniques (radiocarbon and U-series disequilibrium) and pollen analysis

- Experience with use of analytical equipment, including: petrographic microscopes, XRD (X- Ray Diffraction), TIMS (Thermal Emissions Mass Spectrometer), ICP (Inductively-Coupled Plasma), Scanning Electron Microscopes (SEM), mechanical sieves, separator machinery; sedimentary flumes.
- Field experience with auger equipment; vibracores; TOTAL- EDM stations (Electronic Distance Meters); Global Positioning Systems (GPS) technologies
- Fluent in French and Italian; coping abilities in Brazilian Portuguese and Egyptian Arabic
- Moderate abilities in conversational Turkish and Arabic

For other details about my career and research, please ask.

For updates about my latest publications: <https://www.kathleennicoll.rocks>