

Gary A. O'Dell, Ph.D.

Emeritus Professor (retired)

Professor of Geography 2001-2023

Dept. of History, Philosophy, Politics, Global Studies, and Legal Studies

g.odell@moreheadstate.edu

Morehead State University

302 Rader Hall

Morehead, KY 40351

tel. (606) 783-2729

fax (606) 783-5096

Previous Employment

1997 – 2001 Part-time instructor in Geography, University of Kentucky

1990 – 2001 Environmental Technologist, Division of Water, Kentucky Department for Environmental Protection.

Educational Experience

Ph.D. Geography, University of Kentucky, 2003

Eco-efficiency and lean production: Environmental performance of Japanese transplants in the United States, Advisor: John Pickles

M.A. Geography, University of Kentucky, 1996; with Environmental Systems Certificate

The search for water: Self-supply strategies in a rural Appalachian neighborhood, Advisor: Gary Shannon

B.S. Horticulture, University of Kentucky, 1976

Courses taught at Morehead State University

GEO 101 Dangerous Planet

GEO 103 Introduction to Physical Geography

GEO 201 Map Interpretation and Analysis

GEO 241 United States and Canada (online course)

GEO 245 Natural Landscapes of Appalachia

GEO 360 Physical Geography of North America (online course)

GEO 361 The World of Caves

GEO 390 Weather and Climate

GEO 399 Special Topics (several)

GEO 499C Senior Seminar in Geography

Research Interests

Geology and hydrology of karst landscapes; cavern development and morphology

Historical geography and archaeology

Early historic settlement era in Kentucky (settlement patterns, infrastructure development)

Historic saltpeter and gunpowder production

History of Thoroughbred breeding and racing

Human-environment interaction (water supply and sanitation, industrial pollution)

Rural and Appalachian studies

Awards

- 2020. Distinguished Scholar, Morehead State University
- 2020. Peter Hauer Award in History, National Speleological Society
- 1977. Oswald Award for Undergraduate Research (Biology), University of Kentucky

Appointments

- 2014. State Geographer of Kentucky (appointment by Governor Beshear)

Publications

(1) Books

- O'Dell, G.A. (forthcoming 2025). *Reinventing the American Thoroughbred: The Arabian Adventures of Alexander Keene Richards*. Louisiana State University Press.
- O'Dell, G.A. (2023). *Bluegrass Paradise: Royal Spring and the Birth of Georgetown, Kentucky*. University Press of Kentucky.
- O'Dell, G.A. and J.R. Rebmann (1972) *Caves of Rockcastle County, Kentucky*. Richmond, KY: (Book). Privately printed.

(2) Articles in peer-reviewed publications

- O'Dell, G.A. (forthcoming, 2024) "Slaves into Soldiers: Forging of the African Brigade in Northeast Louisiana. *Louisiana History: The Journal of the Louisiana Historical Association*.
- O'Dell, G.A. (2023) "Stephen Bishop: The Celebrated Guide of Mammoth Cave," *Register of the Kentucky Historical Society* (henceforth *Register KHS*).
- O'Dell, G.A. (2020) "Under Siege: Kentucky and the Transformation of American Thoroughbred Racing 1865-1936." *Register KHS* 118(Summer 2020), 389-446.
- O'Dell, G.A. (2017) "At the Starting Post: Racing Venues and Origins of Thoroughbred Racing in Kentucky 1783-1865." *Register KHS* 116(Winter 2018), 29-78.
- O'Dell, G.A. (2017) "Springs and the Pioneer Settlement of Kentucky." Chapter in *Shaped by Water: Kentucky's Watersheds, Landscapes, and People*, Brian D. Lee, Alice Jones, Dan Carey, and Stephanie McSpirit, eds. University Press of Kentucky, 27-39.
- Zhu, J, G.A O'Dell, E.L. Laudermilk, G.Bogolian, J.C. Currens, S.E. Webb, and P. Bogolian (2016) "Locating a Sealed Cave in Kentucky Using Electrical Resistivity Surveys." *AIMS Geosciences* 2 (1): 32-44
- O'Dell, G.A. and G. Bogolian (2015) "Fair and Square: Robert F. Schulkers, Seckatary Hawkins and the

- Literature of an Ohio Valley Childhood.” *Ohio Valley History* 15(3): 43-67.
- O’Dell, G.A. and A.I. George (2014) “Rock-Shelter Saltpeter Mines of Eastern Kentucky.” *Historical Archaeology* 48(2): 91-121.
- O’Dell, G.A. and Wilson Gonzalez-Espada (2011) “Going Underground: A Field Investigation and Lab Activity on Karst Topography and Water Systems,” *The Science Teacher* 78(9):53-57.
- O’Dell, G.A. (2010) “Denton Offutt: America’s First ‘Horse Whisperer’?” *Register KHS* 108(Summer):173-212.
- O’Dell, G.A. (2005) “Community Self-Help Activism in Water/Sewer Development: Case Studies from McDowell County, West Virginia and Letcher County, Kentucky.” *Appalachian Journal* 33 (1):54-77.
- O’Dell, G.A. (1993) “Water Supply and the Early Development of Lexington, Kentucky.” *Filson Club History Quarterly* 67(4):431-461.
- George, A.I. and G.A. O’Dell (1992) “The Saltpeter Works at Mammoth Cave and the New Madrid Earthquake.” *Filson Club History Quarterly* 66(1):5-22.
- O’Dell, G.A. (1990) “The Trotter Family, Gunpowder, and Early Kentucky Entrepreneurship, 1784-1833.” *Register KHS* 88(4):394-430.
- O’Dell, G.A. (1989) “Bluegrass Powdermen: A Sketch of the Industry.” *Register KHS* 87(2):99-117.

(3) Articles submitted to peer-reviewed journals

- O’Dell, G.A. (undergoing review) “Richard Ten Broeck and the American Invasion of England.” *Louisiana History: The Journal of the Louisiana Historical Association*.
- O’Dell, G.A. (undergoing review) “The First and Last Powdermen in Kentucky: Richard Foley and Alexander O’Neil.” *Register KHS*.
- O’Dell, G.A. (undergoing review) “Artist in the Holy Land: The Pilgrimage of Edward Troye.” *American Art* (Smithsonian).

(4) Publications, editor reviewed

- O’Dell, G.A. (2019) “Willard Rouse Jillson and the Crystal Cave of Sloans Valley, Kentucky.” *NSS News* (National Speleological Society) 77(August), 12-24.
- O’Dell, G.A. (2018) “The Celebrated Black Explorer Stephen Bishop and Mammoth Cave: Observations by an English Journalist in 1853,” *NSS News* (National Speleological Society) 76(September), 4-18.
- O’Dell, G.A. (2017) “The Grier’s Creek Mill Cluster in Woodford County, Kentucky,

- With Some Observations on the Nature of So-Called ‘Flint’ Millstones” *The Millstone* 16(Spring 2017), 3-22. Kentucky Old Mill Association.
- O’Dell, G.A. (2017) “An Early Gunpowder Mill in Louisville, Kentucky,” *The Millstone*, Kentucky Old Mill Association 16(Spring 2017), 40-46.
- O’Dell, G.A. and Gregg Bogosian (2014) “Seckatary Hawkins and Cliff(ton) Cave: The Underground Adventures of Robert F. Schulkers.” *NSS News* (National Speleological Society) 72 (July): 10-20.
- O’Dell, G.A. (2013) Review of James C. Nicholson, *The Kentucky Derby: How the Run for the Roses Became America’s Premier Sporting Event*, in *Ohio Valley History* (Fall), 92-94.
- O’Dell, G.A. (2013) Review of James C. Nicholson, *Never Say Die: A Kentucky Colt, the Epsom Derby, and the Rise of the Modern Thoroughbred Industry*, in *Ohio Valley History* (Fall), 94-95.
- O’Dell, G.A. (2011) “Cavers React to the Spread of White Nose Syndrome: A Survey.” *NSS News* 69(August):4-10.
- O’Dell, G.A. (2008) “Using Historical Archives to Discover Forgotten Caves,” *Journal of Spelean History* (hereafter *JSH*) 42(July-Dec): 18-29.
- Clark’s Kentucky Almanac 2007*. Lexington, KY: Clark Group.
- (a) Chapter editor for “Environment and Natural Resources”
 - (b) Author of following new essays for this edition (see 2006 edition below, all previous essays retained for new edition except “Soils”).
 - “A Most Outrageous Kentuckian: Cassius Marcellus Clay 1810-1903”
 - “Wildlife of Kentucky”
- Clark’s Kentucky Almanac 2006*. Lexington, KY: Clark Group.
- (a) Chapter editor for “Environment and Natural Resources”
 - (b) Author of the following essays in above chapter:
 - “General Geology,” pp. 321-328.
 - “Caves and Karst,” pp. 329-330.
 - “Physical Regions,” pp. 331-335.
 - “Water Resources,” pp. 336-342.
 - “Soils,” p. 348.
 - (c) Author of following essays in other chapters:
 - “Pioneer Industries,” pp. 437-438 (with Tom Kiffmeyer).
 - “Cave Exploration,” pp. 643-645.
- Contributor (2003) to *Town Branch Trail Environmental Education Sign Project*. Educational pamphlet. Lexington, KY: Town Branch Trail, Inc.
- Ball, D.B. and G.A. O’Dell (2001) “Bibliography of Niter Mining and Gunpowder Manufacture.”

- Ohio Valley Historical Archaeology* 16:1-128.
- O'Dell, G.A. (2001) "Assessing Environmental Performance of Japanese Industrial Facilities in Kentucky." In *Japan in Kentucky*, P.P. Karan, ed., 222-259. University Press of Kentucky.
- O'Dell, G.A. (1999) "The Changing Fortunes of a Small Town in Kentucky." *Focus* 45(3):9-19. American Geographical Society.
- O'Dell, G.A. and N.F. Johnson (1999) "The Foley Family and Their Role in Gunpowder Manufacture." In Stottman, M.J. and C.D. Hockensmith, "Archaeological Investigations at the 1795 Elijah Foley House, Fayette County, Kentucky," 268-273. In *Current Archaeological Research in Kentucky*. Volume Five. Hockensmith, C.D., C. Carstens, C. Stout, and S.J. Rivers, ed., 265-313. Frankfort, KY: Kentucky Heritage Council.
- O'Dell, G.A. (1998) Contributor to "The Natural Environment," chapter in the *Atlas of Kentucky*. Lexington: University Press of Kentucky.
- O'Dell, G.A., R. Householder and F. Reid (1996) "Subterranean Explorers: Mapping Russell Cave With GPS and Magnetic Induction Radio." *GPS World* 7(11):20-33.
- O'Dell, G.A. and J.R. Rebmann (1996) "The Rescue of McConnell Springs Historic Site: A Partnership Between Local Government and the Citizens of Lexington, Kentucky." In *Proceedings, 1995 Cave Management Symposium*, ed. G.T. Rea, 255-266. Indianapolis: Indiana Karst Conservancy, Inc.
- O'Dell, G.A. (1996) "Saltpeter Manufacturing and Marketing and its Relation to the Gunpowder Industry in Kentucky during the Nineteenth Century." In *Historical Archaeology in Kentucky*, ed. K.A. McBride, W.S. McBride and D. Pollack, 67-105. Frankfort: Kentucky Heritage Council.
- J.F. Watkins and G.A. O'Dell (1994) "Kentucky's Physical Regions and the Inner Bluegrass." In *Lexington and Kentucky's Inner Bluegrass Region*, ed. R. Ulack, K.B. Raitz, and H.L. Hopper, 5-11. Pathways in Geography title No. 10. Lexington: National Council for Geographic Education.
- O'Dell, G.A. (1993) "Cave Spring Farm: Karst Springs and the Settlement of Kentucky." *National Speleological Society News* (hereafter *NSS News*) 51(12):323-327.
- O'Dell, G.A. (1993) "Samuel M. Cassidy, Jr., 1902-1992." Obituary. *NSS News* 51(9):249.
- O'Dell, G.A. (1992) "Great Saltpetre Cave." In *Rockcastle County, Kentucky, and its people*. Waynesville, NC: Don Mills, Inc.
- O'Dell, G.A. (1992) "Rockcastle's Underground Wilderness." In *Rockcastle County, Kentucky, and its People*. Waynesville, NC: Don Mills, Inc.
- O'Dell, G.A. (1992) "Saltpeter Mining in Rockcastle County." *Mount Vernon Signal*, 7 May, sec 2:1.
- O'Dell, G.A. (1990) "Amateurs at War: The Lack of Effective Leadership in the Militia of the

Northwest, 1782-1812.” *Perspectives in History* 5(1):19-28. Highland Heights, KY: Northern Kentucky University.

O’Dell, G.A. (1990) “A Sketch of the Saltpeter Manufacturing Millennium in World History.” *Journal of Spelean History* 24(4):22-31.

O’Dell, G.A. (1990) “The Obliteration of Clifton Cave.” *Journal of Spelean History* 24(2); 4-9.

O’Dell, G.A. and L.E. Spangler (1990) “Slacks Cave Bicentennial, 1790-1990.” *NSS News* 48(3):60-63.

O’Dell, G.A. (1989) “Phelps Cave.” *NSS News* 47(12):296-299.

O’Dell, G.A. (1988) “The Obituary of Picadome Cave.” *JSH* 22(4):7-12.

O’Dell, G.A. (1988) “The Spencer Cooper Powder Mill.” *JSH* 22(2):12-14.

O’Dell, G.A. (1987) “Three Kentucky Springs.” *JSH* 21(3&4):47-54.

O’Dell, G.A. (1986) “The Public Spring of Lexington, Kentucky.” *JSH* 20(3):66-68.

O’Dell, G.A. (1985) “History and Description of Russell Cave.” *JSH* 19(3):64-73.

O’Dell, G.A. (1985) “Underground Discoveries Reveal Kentucky's Past.” *NSS News* 43(7):231-233.

O’Dell, G.A. (1978) “Media Particle-Size Effects on Rooting” (with L.P. Stoltz). *Plant Propagator* 24:4-8.

(5) Published map

O’Dell, G.A. and J.C. Currens, (2019) “Karst Groundwater Basins in the Morehead 30 x 60 Minute Quadrangle.” (Lexington: Kentucky Geological Survey). Available in hard-copy from KGS. Soon available online at: <https://www.uky.edu/KGS/water/research/kaatlas.htm>

Presentations

O’Dell, G.A. and L. Melim. (2019) “Unusual Cave Pearls from a Kentucky Cave.” National Speleological Society annual convention, Cookville, TN, June 17-21.

George, A.I. and G.A. O’Dell (2019) “Young Stephen Bishop: The Early Life of the Celebrated Mammoth Cave Guide.” National Speleological Society annual convention, Cookville, TN, June 17-21.

O’Dell, G.A. (2019) “Willard Rouse Jillson and the Crystal Cave of Sloans Valley, Kentucky.” National Speleological Society annual convention, Cookville, TN, June 17-21.

O’Dell, G.A. (2019) “Willard Rouse Jillson and the Crystal Cave of Sloans Valley, Kentucky.” Invited presentation, Carter Caves Winter Adventure Weekend, January 25.

- Hannibal, J.T, Hockensmith, C, and G.A. O'Dell (2018) "Lithological and Paleontological Aspects Of A Late-Eighteenth–Early-Nineteenth Century Kentucky Millstone Quarry Containing In Situ Millstones Made Of Ordovician Chert-Rich Rock". Geological Society of America annual meeting, Indianapolis, Indiana, November 4-7.
- O'Dell, G.A. (2018) "Rock-Shelter Niter Mines of Eastern Kentucky." Invited presentation, Eastern Kentucky Archaeology Group, Fort Boonesborough State Park, August 28, 2018.
- O'Dell, G.A. (2018) "Willard Rouse Jillson and the Crystal Cave of Sloans Valley, Kentucky." Invited presentation, Kentucky Speleological Survey, Lexington, Kentucky, September 23, 2018.
- O'Dell, G.A. (2017) "Reinventing the Thoroughbred: The Arabian Adventures of Alexander Keene Richards, 1861-1881" Invited presentation, Scott County Historical Society, 16 March.
- O'Dell, G.A. (2016) "Reinventing the Thoroughbred: The Arabian Adventures of Alexander Keene Richards, 1827-1860." Invited presentation, Scott County Historical Society, 18 August.
- O'Dell G.A. (2015) "Rock Shelter Niter Mines of Eastern Kentucky." Invited presentation, GIS for You, Your Region, and Your Career Path, Kentucky Association of Mapping Professionals, Morehead State University, 25 March.
- O'Dell G.A. (2014) "Rock Shelter Niter Mines of Eastern Kentucky." Kentucky Heritage Council Archeology Conference, Dale Hollow State Resort Park, 15 March.
- O'Dell, G.A.(2013) "Relocating Clifton Cave Using Electrical Resistivity Tomography," Kentucky Academy of Science Annual Meeting, Morehead, KY, 9 November.
- O'Dell, G.A. (2013) "Rock Shelter Saltpeter Mines of Eastern Kentucky," Kentucky Academy of Science Annual Meeting, Morehead, KY, 9 November.
- O'Dell, G.A. (2013) "Gunpowder, Geopolitics, and American Independence," Invited persentation, Clark County Public Library, Winchester, KY, 24 October.
- O'Dell, G.A. (2012) "History of Gunpowder Manufacturing in Kentucky." Invited speaker in dinner series: "History to chew on" at McConnell Springs, Lexington, KY, 12 June.
- O'Dell, G.A. and Joshua Druen. (2010) "Valley Stress-Release Fracturing as a Predictive Model in Karst Conduit Development: The Case of Tarkiln Creek, Elliott County, Kentucky." Kentucky Academy of Science Annual Meeting, Bowling Green, Kentucky, 13 November.
- O'Dell, G.A. and Timothy Hare (2010) "Historic Niter Mining in Rock Shelters of the Daniel Boone National Forest, Kentucky. Symposium on Ohio Valley Urban and Historical Archaeology, Blue Licks Battlefield State Resort Park, 27 March.
- O'Dell, G.A. (2009) "Developing Student Research in Karst Hydrology Using Qualitative Dye

- Tracing.”
Presented (1) Faculty Seminar, Department of Earth and Space Sciences, Morehead State Univ.;
(2) Seminar Series, Department of Earth Science, University of Kentucky (Invited).
- O’Dell, G.A. (2007) (1) “Using Historical Archives to Discover Forgotten Caves,” and (2)
“Springhouses in Kentucky: Form and Function in an Evolving Landscape.” Annual Convention,
National Speleological Society, Marengo, IN.
- O’Dell, G.A. and Royal Berglee (2006) Radio interview by Chuck Mraz, 25-minute “Front Page”
feature on Morehead State Public Radio (WMKY) concerning *Kentucky Almanac*. 16 May.
- O’Dell, G.A. (2005) “Colonial Gunpowder Manufacturing in Kentucky.” Invited speaker in dinner
series: “History to chew on” at McConnell Springs, Lexington, KY.
- O’Dell, G.A. (2005) “The Kentucky Roadside Spring: Traditional Water-Supply Alternative for
Appalachian Households,” 28th Annual Appalachian Studies conference, Radford, VA.
- O’Dell, G.A. and T. Kiffmeyer (2005) “Buried Treasure: Kentucky’s Saltpeter Mines in the War of
1812,” 23rd Annual Symposium on Ohio Valley Urban and Historic Archaeology, Carter Caves
State Park, KY.
- Sorrel, G.R. and G.A. O’Dell (2004) “Erosion Control and Hurricane Protection: The Isabel
Experience at Virginia Beach.” Annual Meeting, Southeastern Division Association of American
Geographers (SEDAAG). Note: Joint student-faculty research project.
- O’Dell, G.A. (2004) “Springs and Springhouses in the Bluegrass: An Historical Perspective.” Invited
speaker in dinner series: “History to chew on” at McConnell Springs, Lexington, KY.
- O’Dell, G.A. (2004) " Civic Involvement in Water/Sewer Planning: Case Studies From McDowell
County, WV and Letcher County, KY," Appalachian Studies Conference, Cherokee, NC.
- O’Dell, G.A. (2001) “Field Identification of 19th-Century Niter Mining Sites.” Symposium on Ohio
Valley Urban and Historic Archaeology, Murray State University, Kentucky.
- O’Dell, G.A. (2001) “The Blue Grass Springhouse: Form and Function in an Evolving Landscape.”
Kentucky Water Research Symposium, Lexington, KY.
- O’Dell, G.A. (2000) “Assessing Environmental Performance of Japanese Industrial Facilities in
Kentucky.” Annual meeting, Association of American Geographers. Pittsburgh, PA.
- O’Dell, G.A. (2000) “The Blue Grass Springhouse: Form and Function in an Evolving Landscape.”
Geography Graduate Student Conference, Miami University, OH.
- O’Dell, G.A. (1999) “Civic Involvement in Water/Sewer Planning: Case Studies from McDowell
County, West Virginia and Letcher County, Kentucky.” Invited presentation, meeting of the
Appalachian Regional Commission, Washington, D.C.
- O’Dell, G.A. (1999) “Assessing Environmental Performance of Japanese Industrial Facilities in

- Kentucky.” Invited presentation, Japan in Kentucky Conference, University of Kentucky.
- O’Dell, G.A. (1999) “Springhouses in Kentucky.” Invited speaker, Fleming County Conservation District banquet.
- O’Dell, G.A. (1997) “Evolution of the Natural Landscape of the Bluegrass Region.” Invited speaker, Frankfort chapter Audubon Society.
- O’Dell, G.A. (1997) “Public Policy Implications of Groundwater Quality Misconceptions.” Kentucky Water Resources Symposium, Lexington, KY.
- O’Dell, G.A. (1997) “Gunpowder, Geopolitics, and American Independence.” Invited speaker, Louisville Rotary Club. Rebroadcast on WFPL (a NPR affiliate).
- O’Dell, G.A. (1996) "Perception Versus Reality: Water-Quality of Domestic-Use Springs." Kentucky Water Resources Symposium, Lexington, KY.
- Webb, J.S. and G.A. O’Dell (1996) "The Kentucky Ground Water Monitoring Network" Poster session, 41st Annual Midwest Groundwater Conference, Lexington, KY.
- O’Dell, G.A. (1996) A 'Booming' Industry: Gunpowder Manufacturing in Kentucky." Invited speaker, "Firewater, Fireworks and Farming: Industry and Community in the Bluegrass, 1775-1850." Symposium, Lexington, KY.
- O’Dell, G.A. (1996) "'This Perilous and Dangerous Profession': The Historical Development of Water Well Technology." Eleventh Annual Drillers Workshop, Louisville, KY.
- O’Dell, G.A. (1995) "The Rescue of McConnell Springs Historic Site: A Partnership Between City Government and the Citizens of Lexington, Kentucky." National Cave Management Symposium, Spring Mill State Park, IN.
- O’Dell, G.A. (1995) "Echoes of the Past: Decline of a Small Kentucky Town." Appalachian Studies Conference, WV Univ., Morgantown, WV.
- O’Dell, G.A. (1994) "Karst Groundwater Issues Related to U.S. Forest Service Management Practices in the Daniel Boone National Forest, Kentucky, With Specific Focus on the Horse Lick Creek Ecosystem." Invited participant, Permanent Horse Lick Ecosystem Management Analysis Team, U.S. Forest Service, Berea, KY.
- O’Dell, G.A. (1994) "Nineteenth-Century Saltpeter Mining in the Daniel Boone National Forest, Kentucky." Conference on Appalachian Geography, Pipestem State Resort Park, WV.
- O’Dell, G.A. (1992) "Domestic Water Supplies from Groundwater Sources in Eastern Kentucky" Kentucky Water Resources Symposium, Lexington, KY.
- O’Dell, G.A. (1992) "Domestic Water Supply Sources in a Karst Region: The Crooked Creek Drainage Basin, Rockcastle County, Kentucky." Conference on Appalachian Geography, Pipestem State Resort Park, WV.

O'Dell, G.A. (1992) "GIS and the Management of Great Saltpetre Cave, Rockcastle County, Kentucky." National Cave Management Symposium, Bowling Green, KY.

O'Dell, G.A. (1992) "The Bluegrass Karst Region." Invited after-dinner speaker for Lexington field trip, International Geographical Union, Lexington, KY.

Organization membership

National Cave Conservation Association, board member
Rockcastle Karst Conservancy, board member
Kentucky Old Mill Association, vice-president and editor of *The Millstone*
Kentucky Geographic Alliance, board member
National Speleological Society
Appalachian Studies Association

Relevant work experience and consulting

2002-2024

Provided professional expertise gratis to the following organizations at their request: Blue Grass Trust for Historic Preservation; Kentucky Heritage Council; Kentucky Nature Preserves Commission; Carter Caves State Park; Blue Licks Battlefield State Park; Kentucky Division of Water; Dept. of Archaeology and Anthropology, UK; and United States Forest Service.