

ALICE V. TURKINGTON

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University of Kentucky
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Qualifications

- 1999 PhD. Geography, Queen's University of Belfast
1993 B.A. (Hons) Geography, First class, Queen's University of Belfast

Professional Employment

- Aug 2007 Associate Professor, Department of Geography, University of Kentucky
Aug 2001 – 2007 Assistant professor, Department of Geography, University of Kentucky
Aug 1998 – 2001 Research Fellow, Queen's University of Belfast.

Publications

Edited Collections

- 2005 Turkington, AV. *Stone Decay in the Architectural Environment* Geological Society of America Special Paper 390, Colorado, USA.
2005 Turkington, AV, Phillips, JD & Campbell, S. *Weathering and landscape evolution* Elsevier Publishing and *Geomorphology* Special Issue 67(1-2): 1-272.
2004 Smith, BJ & Turkington, AV. *Stone Decay: its causes and controls* Donhead Publishing Ltd., London.
2002 Smith, BJ, Turkington, AV & Thomas, MF. *The interpretation and significance of weathering mantles* Special issue of *Catena* 49 (1-2)
2001 Whalley, WB & Turkington, AV. *Weathering and Geomorphology* Special issue of *Geomorphology* 41 (1-3)

Publications in Refereed Journals

*denotes student at time of publication

- 2008 Phillips, JD, Marion, D, Turkington, AV. Pedologic and geomorphic impacts of a tornado blowdown event in a mixed pine-hardwood forest. *Catena*, 75(3): 278-287.
- 2008 Phillips, JD, Turkington, AV & Marion, D. Weathering and vegetation effects in early stages of soil formation. *Catena*, 72: 21-28.
- 2005 Turkington, AV & Paradise, TR. Sandstone weathering: a century of research and innovation. *Geomorphology* 67(1-2): 229-253
- 2005 Turkington, AV, Phillips, JD & Campbell, S. Weathering and Landscape Evolution. *Geomorphology* 67(1-2): 1-6
- 2004 *Nordberg, V & Turkington, AV. The role of geography's paradigms in weathering geomorphology. *Physical Geography* 25(5): 418-437
- 2004 Turkington, AV & Phillips, JD. Cavernous weathering, dynamical instability and self-organization. *Earth Surface Processes and Landforms* 29(6): 665-675
- 2003 Turkington, AV, *Martin, E, Viles, HA & Smith, BJ. Surface change and decay of sandstone samples exposed to a polluted urban atmosphere over a six-year period: Belfast, Northern Ireland. *Building and Environment* 38(9-10): 1205-121
- 2003 *Riegert, MA & Turkington, AV. Setting stone decay in a cultural context: conservation at African Cemetery No. 2, Lexington, Kentucky, USA. *Building and Environment* 38(9-10): 1105-1111
- 2003 Warke, PA, Curran, JM, Turkington, AV & Smith, BJ. Condition assessment for building stone conservation: a staging system approach *Building and Environment* 38(9-10): 1113-1123
- 2002 Smith, BJ, Turkington, AV & Thomas, MF. Editorial: The interpretation and significance of weathering mantles *Catena* [Special issue: Papers presented at the First International Weathering Conference, 2000] 49 (1-2) 1-4
- 2001 Whalley, WB & Turkington, AV. Editorial: Weathering and geomorphology *Geomorphology* 41 1-3
- 2001 Smith, BJ & Turkington, AV. Calcium loading of non-calcareous building stone during construction *Earth Surface Processes and Landforms* 26 (8) 877-883
- 2001 McKinley JM, Curran JM & Turkington AV. Gypsum formation in non-calcareous building sandstone: a case study of Scrabo sandstone. *Earth Surface Processes and Landforms* 26 (8) 869-875
- 2000 Turkington, AV & Smith, BJ. Observations of three-dimensional salt distribution in building sandstone *Earth Surface Processes and Landforms* 25 (12) 1317-1332

- 1998 Turkington, AV. Cavernous weathering in sandstone: lessons to be learned from natural exposure *Quarterly Journal of Geological Society*. 31 375-383

Refereed Book Chapters

- 2008 Turkington, AV. Fieldwork in Physical Geography. In Clifford, N and Valentine, G (eds) *Key Methods in Geography*, Sage Publications, London.
- 2005 Smith, BJ, Turkington, AV & Curran, JM. Urban stone decay: the great weathering experiment? In Turkington, AV (Ed) *Stone Decay in the Architectural Environment* GSA Special Paper 390, p1-10.
- 2004 Smith, BJ, Warke, PA, Turkington, AV & Curran, JM. Those who pray together decay together: the synchronous weathering of Belfast's sandstone churches. In Saiz-Jimenez (Editor) *Air Pollution and Cultural Heritage*. Taylor & Francis Group, London 155-163.
- 2004 Turkington, AV. Initial stages of sandstone decay in a polluted urban environment. In Mitchell, DJ & Searle, DE (Eds) *Stone deterioration in polluted urban environments* Science Publishers Inc: Plymouth, UK 93-118
- 2004 Smith, BJ & Turkington, AV. Introduction: the need for interdisciplinary thinking in stone decay and conservation studies. In Smith, BJ & Turkington, AV (eds) *Stone Decay: its causes and controls* Donhead Publishing Ltd. London 1-12
- 2004 Turkington, AV & Smith, BJ. Interpreting the spatial complexity of decay features on a sandstone wall: St Matthews Church, Belfast. In Smith, BJ & Turkington, AV (eds) *Stone Decay: its causes and controls* Donhead Publishing Ltd. London 149-166
- 2002 Smith, BJ, Turkington AV, Warke, PA, Basheer, PAM, McAlister, JJ, Meneely, J & Curran, J. Modelling the rapid, catastrophic retreat of building sandstones. A case study from a polluted maritime environment: Belfast, Northern Ireland. In Siegesmund, S., Weiss, T. & Vollbrecht, A. (eds) *Natural Stone, Weathering Phenomena, Conservation Strategies and Case Studies* Geological Society, London, Special Publications 205 347-362
- 2002 Turkington, AV, Smith, BJ & Basheer, PAM. The effect of block retreat on sub-surface temperature and moisture conditions in sandstone. In Prikryl, R. & Viles, H. (eds) *Understanding and Managing Stone Decay* Karolinum Press, Prague: 113-126
- 1997 Turkington, AV; Smith, BJ & Whalley, WBW. Exposure trials to assess short-term stone surface modification, Ca d'Oro, Venice in *Proceedings of the 4th International Symposium on the Conservation of Monuments in the Mediterranean*, Technical Chamber of Greece 359-372.
- 1996 Turkington, AV. Stone durability, in Smith, BJ & Warke, PW (eds) *Processes of Urban Stone Decay*, Donhead: London 19-31.

Other Publications

- 2007 Turkington, AV. New Madrid Fault, *Equine Disease Quarterly*, May 2007.
- 2005 Turkington, AV. Geomorphological assessment: Fitchburg Furnace settlement, Estill County, Kentucky. USDA Report (unpub)
- 2004 Turkington, AV. Cavernous weathering *Encyclopedia of Geomorphology* Vol. 1 Goudie, A. (Ed) Routledge pp1156
- 2004 Turkington, AV. Mechanical weathering *Encyclopedia of Geomorphology* Vol. 1 Goudie, A. (Ed) Routledge pp1156
- 2003 B. Smith, P. Warke, A. Turkington, D. Stelfox & J. Savage The resolution of conflicting demands in University/Industry collaboration on stone conservation. In *Cultural Heritage Research: a pan-European Challenge* Proceedings of 5th European Conference on Cultural Heritage Research
- 2001 Turkington, AV, Smith, BJ & Basheer, PAM Sub-surface temperature and moisture changes in sandstone *Acta Geologica* 45(1) 53-54

Awards and Honors

Extramural

- 2006 New Zealand ISAT Linkages Fund 'Coastal decay: is weathering a driving agent of change on shore platforms in New Zealand?', [NZ\$11,010] \$7,940
- 2005 Co-PI on United States Department of Agriculture Forest Service conservation project 'Historic Fitchburg Furnace Documentation', \$185,832
- 2003 American Chemical Society PRF grant for Scientific Education to fund international presenters at the 2004 Binghamton Geomorphology Symposium on 'Weathering and Landscape Evolution', Lexington, Kentucky, \$3,600
- 2002 National Center for Preservation Technology and Training Publications Award, National Parks Service 'Stone Durability', \$6777
- 1995-6 Research fellowship from Australian European Awards Programme
- 1993-8 Distinction Award from Department of Education Northern Ireland

Intramural

- 2009 Outstanding Teaching Award, College of Arts and Sciences, University of Kentucky

- 2007 College of Arts and Sciences Major Research Project Award 'Bedrock weathering and landscape evolution in the Waipaoa watershed', \$10,000
- 2006 Special Summer Faculty Research Fellowship 'Bedrock weathering in a subtropical forest', \$8000
- 2006 Foreign Travel Grant participation in International Meeting on Geomorphology and Earth System Science, Loughborough, UK, \$1200
- 2006 Outstanding Teaching Award, Department of Geography, University of Kentucky
- 2005 Summer Faculty Research Fellowship 'Development of micro-karst landforms in semi-arid environments: controls and processes', \$4000
- 2003 Outstanding Teaching Award, Department of Geography, University of Kentucky
- 2003 Undergraduate Research and Creativity Award with Antonia Stoyanova (Chemistry), \$2500
- 2002 Summer Faculty Research Fellowship 'The role of solutional weathering in sandstone landscapes in US National Parks', \$5000
- 2002 Foreign Travel Grant participation in Stone Weathering and Atmospheric Pollution Annula Conference, Oxford, UK, \$1000
- 1997 Emily Sarah Montgomery Travel Scholarship, Queens University of Belfast
- 1993 E.E. Evans Prize in Geography, Queens University of Belfast
Dr. Sarah M. Holland Memorial Prize in Geography, Queens University of Belfast
Faculty of Science Foundation Award, Queens University of Belfast
- 1991 E.E. Evans Prize in Geography, Queens University of Belfast
Lady Pakenham Entrance Scholarship, Queens University of Belfast
Faculty of Arts Foundation Award, Queens University of Belfast

Presentations

Conferences

- 2009 Turkington, AV & Phillips, JD. Weathering of in-channel clasts in the Waipaoa River, North Island, New Zealand. International Association of Geomorphologists Meeting, Melbourne, Australia.
- 2009 Turkington, AV & Kennedy, D. Assessing the role of weathering on shore platforms in New Zealand. Association of American Geographers, Las Vegas.

- 2008 Turkington, AV & Phillips, JD In situ weathering of in-channel fluvial sediments affecting drainage basin morphology. Canadian Geomorphology Research Society Annual Meeting, Banff.
- 2008 Turkington, AV Rock weathering controls on landform development in New Zealand. American Association of Geographers Annual Meeting, Boston.
- 2007 Turkington, AV Rock weathering and rock art: sustainability of cultural resources etched in stone. American Association of Geographers Annual Meeting, San Francisco.
- 2006 Turkington, AV Small-scale weathering processes in a biogenic geomorphic system. International Meeting on Geomorphology and Earth System Science, Loughborough, UK.
- 2006 Turkington, AV Weathering of subsurface sandstone in a subtropical environment, Ouachita Mountains, Arkansas. South Eastern Division of the GSA Annual Meeting, Knoxville.
- 2006 Turkington, AV Weathering of subsurface sandstone clasts and bedrock in a humid sub-tropical forest environment. American Association of Geographers Annual Meeting, Chicago.
- 2005 Turkington, AV Dynamical instability and weathering in a hot desert: New Mexico, USA. South Eastern Division of the AAG Annual Meeting, Biloxi, Mississippi.
- 2004 Turkington, AV The lifetime of stone: methodological and theoretical considerations. South Eastern Division of the AAG Annual Meeting, Biloxi, Mississippi.
- 2004 Turkington, AV Predicting the rate of rock weathering. Eastern Lakes Division of the AAG Annual Meeting, Athens, Ohio.
- 2004 Turkington, AV & Paradise, TR Sandstone weathering: a century of research and innovation. Binghamton Geomorphology Symposium, Lexington, Kentucky.
- 2004 Turkington, AV Microtopography of limestone in a semi-arid area. International Geography Congress, Glasgow, Scotland.
- 2004 Nordberg, V & Turkington, AV The role of geography's paradigms in weathering geomorphology. American Association of Geographers Annual Meeting, Philadelphia.
- 2003 Turkington, AV Observations on debris weathering on arid zone alluvial fans surfaces. South Eastern Division of the AAG Annual Meeting, Charlotte.
- 2003 Turkington, AV Post-depositional weathering of alluvial fan debris in a hot desert environment. American Association of Geographers Annual Meeting, New Orleans.
- 2002 Turkington, AV Perception and prediction of stone durability. Geological Society of America Annual Meeting, Denver.

- 2002 Turkington, AV Stone decay and Conservation. Geological Society of America Annual Meeting, Denver.
- 2002 Smith, BJ, Warke, PA, Turkington, AV, Stelfox, D & Savage, J The resolution of conflicting demands in University / Industry collaboration on stone conservation. Cultural Heritage Research: A Pan-European Challenge, Cracow, Poland.
- 2002 Turkington AV & Smith BJ Small scale rock weathering: an analogy with large scale landscape denudation. South Eastern Division of the Geological Society of America Conference, Lexington.
- 2002 Turkington, AV, Martin, E, Viles, HA & Smith, BJ. A time sequence of sandstone decay in a polluted urban environment Stone Decay and Atmospheric Pollution Network annual meeting, Oxford, UK.
- 2002 Riegert, M & Turkington AV Setting stone decay in context – the African cemetery in Lexington, Kentucky. Stone Decay and Atmospheric Pollution Network annual meeting, Oxford, UK.
- 2002 Warke, PA, Turkington, AV, Smith, BJ & Curran, J. Condition assessment and determination of remedial action for building stone Stone Decay and Atmospheric Pollution Network annual meeting, Oxford, UK.
- 2002 Turkington, AV Microenvironmental variability created by cavernous weathering: a positive feedback in the weathering system. American Association of Geographers Annual Meeting, Los Angeles.
- 2002 Turkington, AV & Phillips, JD Cavernous weathering, dynamical instability and self-organisation. Royal Geographical Society / Institute of British Geographers Annual Conference, Belfast Northern Ireland.
- 2001 Turkington, AV, Smith, BJ & basher, PAM The effect of cavern morphology on sub-surface temperature and moisture regimes in sandstone. South Eastern Division of American Association of Geographers, Lexington KY.
- 2001 Turkington, AV, Smith, BJ & Basheer, PAM Sub-surfcae temperature and moisture changes in sandstone Stone Weathering and Atmospheric Pollution Network Annual Conference, Prague, Czech Republic.
- 2001 Turkington, AV & Smith, BJ Short-term and long-term sandstone decay in Belfast. American Association of Geographers Annual Meeting, New York.
- 2000 Turkington, AV, Smith, BJ & Warke, PA. Linking short-term and long-term stone decay in Belfast: problems of scale issues. Weathering 2000, Belfast.
- 2000 Turkington, AV & Smith, BJ. Short-term and long-term pollution-related stone decay in Belfast. Conference of Irish Geographers, Belfast.
- 2000 Smith, BJ & Turkington, AV. Small-scale stone surface retreat: an analogy with large-scale landscape denudation. British Geomorphological Research Group, Rock Weathering Group Final Meeting, Sussex.

- 1999 Turkington, AV. Controls on long-term stone decay. Stone Weathering and Atmospheric Pollution Network Annual Conference, Wolverhampton.
- 1998 Turkington, AV Salt weathering in Death Valley British Geomorphological Research Group Postgraduate Symposium, Belfast.
- 1997 Turkington, AV; Smith, BJ & Whalley, WBW. Exposure trials to assess short-term stone surface modification, Ca d'Oro, Venice. 4th International Symposium on the Conservation of Monuments in the Mediterranean, Rhodes, Greece.
- 1995 Turkington, AV Cavernous weathering in sandstone GeoScience NSW, Sydney, Australia.

Invited Plenaries, Research Seminars, and Colloquia

Extramural

- 2007 Invited lecture at Miami University of Ohio: 'Weathering and landform development in North Island, New Zealand'.
- 2007 Invited lecture at the Victoria University of Wellington, New Zealand: 'Weathering and landscape evolution'.
- 2006 Visiting Scholar at University of Nottingham, UK, April-May 2006.
- 2005 Invited lecture in the University of Illinois: 'The lifetime of stone: theoretical and methodological considerations'. 18th February.
- 2002 Invited lecture in The Getty Conservation Institute: 'Topographic variation on rock surfaces: empirical and theoretical considerations' 22nd April.

Intramural

- 2001 Turkington, AV Rock weathering. Department of Geology colloquia series, University of Kentucky, October 2001.

Conferences, Sessions, and Speaker Series Organized
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Conferences Organized

- 2004 Binghamton Geomorphology Symposium on *Weathering and Landscape Evolution*, Lexington, Kentucky October 2004, with JD Phillips and S Campbell
- 2000 *Weathering 2000*, an International Symposium, Belfast, UK, with BJ Smith, WB Whalley and JM Curran
- 1998 Stone Weathering and Atmospheric Pollution Network Annual Conference, Hungary, June 1998, with BJ Smith, PA Warke, HA Viles & A Torok

Conference Sessions Organized

2003 Convener of topical session 'Stone decay and conservation' at Geological Society of America Annual Conference, Denver, Colorado

Speaker series organized

2006 Dean's Lecture and Visiting Professor, College of Arts and Sciences, for Prof. N. Clifford, University of Nottingham, UK

Service

Professional Associations -- Committees and Boards

National

Member, National Science Foundation, Geography and Regional Science Dissertation Advisory Panel 2006-2008

Regional

Chair, Award Committee, South East Division of the AAG 2006

Secretary and Treasurer, Geomorphology Specialty Group, AAG 2009-2011

Chair, Awards Committee, Geomorphology Specialty Group, AAG 2009-2010

Member, Awards Committee, Geomorphology Specialty Group, AAG 2007-2009

Kentucky State representative for South East Division of the AAG 2003-2005

Member, Program Committee, South East Division of the AAG annual meeting 2001/2002

Member, Self-Organising Systems fixed term working group, British Society of Geomorphologists, UK 2006

Member of Review Committee, Office of the Vice-Rector for Academic Affairs, University of Cyprus, 2007.

Editorial Committees and Boards

Member, Editorial Board, *Southeastern Geographer*

Member, Editorial Committee, *Kentucky Space and Places*

Invited Reviews

Scholarly Journals

(* denotes more than one review in that year)

Geomorphology 2000*, 2003*, 2004*
Earth Surface Processes and Landforms 2000*, 2001*, 2005, 2006, 2007
Catena 2000*
Sedimentology 2003
Building and Environment 2002*
Bulletin of Geosciences 2004
Arctic and Alpine Research 2005
Geological Society of London Special Publications 2005
Journal of Geophysical Research 2007

Presses

Reviewer of book manuscript, *Elemental Geosystems* for Prentice Hall 2007
Reviewer of book manuscript, *Geosystems* for Prentice Hall 2007
Reviewer of book manuscript, *Introducing Physical Geography* for Wiley 2006
Reviewer of book manuscript, *Environmental Science* for Wiley 2004
Reviewer of book manuscript, *Fundamentals of Geomorphology* for Routledge 2004
Reviewer of book manuscript, *Physical Geography* for Wiley 2004
Reviewer of book manuscript, *Philosophy, Science and Physical Geography*, for Routledge 2003
Reviewer of book manuscript, *Physical Geography*, for Wiley & Sons 2003

Research Foundations

Reviewed grant applications for the Natural Environment Research Council (UK), UK, National Science Foundation (USA), and Environmental Protection Agency (USA).

University Committees

Member of Admissions and Advising Committee, Department of Historic Preservation 2002-09

Departmental Committees

Chair, Search Committee 2007

Chair, Undergraduate Committee 2007-09

Chair, Personnel Committee 2006-07 [2 hires]

Co-ordinator of Faculty-TA Mentoring Program and TA training 2005-07, 2008-09

Chair, Laboratory Advisory Committee 2003-07

Chair, Professional Development Committee 2005-07, 2008-09

Member, Graduate Committee 2007-09

Member, Professional Development Committee 2004-07

Member, Colloquium and Semple Day Committee, 2004-07

Member, Undergraduate Committee 2003-05

Member, Laboratory Advisory Committee 2001-03

Member, Personnel Committee, 2001-03

Mentor for Teaching Assistant 2003-09

Membership in Professional Organizations

Association of American Geographers
South-Eastern division of the AAG
Geological Society of America
British Geomorphological Research Group
Stone Weathering and Atmospheric Pollution Network

Teaching and Advising

Undergraduate Instruction

Courses taught

Introductory

GEO 130 Introduction to Physical Geography
GEO 251 Weather and Climate
UK 101 Academic Orientation
DSP 011 Meltdown: how and why the Earth's Climate is Changing

Intermediate / Advanced

GEO 406G Geomorphology of Kentucky
GEO 351 Physical Landscapes
GEO 365 Global Environmental Change
GEO 499 Senior Seminar in Geography

Courses contributed to

Gaines Seminar: Time, memory and narrative (UK)
Environmental hazards and management (UK)
Applied Geomorphology (Queens University of Belfast)
Geomorphology (Queens University of Belfast)
Introduction to Physical Geography (Queens University of Belfast)
Field Studies in the Mediterranean (Queens University of Belfast)
GeoSkills (Queens University of Belfast)
Introduction to Human Geography (Queens University of Belfast)

Undergraduate Student Supervision and Advising

2008 Advisor to two Environmental Studies student theses.

- 2003 Advisor to Antonia Stoyanova, who received an Undergraduate Research Award, Dean of Undergraduate Studies, University of Kentucky.
- 2003- Advisor to Honors student in Journal Project.
- 2002- Advisor for seven to ten undergraduate geography majors each year.
- 1998 Advisor to Esther Martin, School of Geography, University of Oxford, Honors Dissertation 'Sandstone Weathering in Coastal and Inland Polluted Environments' Graduated 1999.

Graduate Instruction

Graduate Seminars offered

GEO 702 Concepts in Geography (co-instructor 2004)
GEO 703 Concepts in Physical Geography
GEO 721 Rock Weathering and Stone Decay
GEO 742 Teaching Practicum

GEO 560, 655 Independent Study Courses in Geography

Courses contributed to

Biogeography and Conservation (UK)
Field Methods in Geography (UK)
Research methods in Geography (UK)
Analytical methods in Geography (UK)
Professional Development (UK)
Geoarcheology (UK)

Graduate Student Supervision

Ph.D. Committee membership

John Allen, Earth and Environmental Sciences, 'Paleogeographic reconstruction of the St. Lawrence promontory, western Newfoundland' 2009.

Lois Yoksoulian, Earth and Environmental Sciences, 'Effect of contact metamorphism on coal geochemistry and petrology: implications for the release of ¹³C-depleted methane' ABD.

Matthew Surles, Earth and Environmental Sciences, 'Interactions between structures in the Appalachian and Ouachita Foreland beneath the Gulf coastal Plain'. 2007

Anna Froula, English. 'Soldier Girls'. 2007

Viva Nordberg, Geography. 'Life cycles, systems, and chaos: the adoption and application of metaphors in geomorphology'. 2006

Linda Martin, Geography. 'Effects of forest and grass vegetation on fluvio karst hillslope hydrology, Bowman's Bend, Kentucky'. 2006

Zach Musselman, Geography. 'Tributary response to the Lake Livingston impoundment - Lower Trinity River, Texas'. 2006

Thomas Becker, Geology. 'Paleographic and tectonic implications of the late Paleozoic Alleghanian orogen developed from radiometric sedimentary provenance proxies from the Appalachian foreland basin'. 2004

M.A. Committee Chair and Major Advisor

Kurt Leahey, Historic Preservation 'Stone decay and Preservation at Lower Howard's Creek, Kentucky', 2006.

M.A. Committee membership

Kristin Adams, Geography. 'The polygenetic nature of texture contrast soil formation in the Oachita National Forest, Arkansas'. 2005

Donna Gilbreath, Geography, "Projecting the results of satet smoking ban initiatives using cartographic analysis'. 2007.