

Kathryn A. Catlin

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RESEARCH INTERESTS

Historical archaeology and economic anthropology of the Atlantic world; origins of complex societies; social causes and consequences of environmental & landscape change; archaeological technologies including remote sensing, geophysics, spatial analysis & GIS.

CURRENT POSITION

2011-present **GIS Supervisor**, Massachusetts Historical Commission. Maintain and update GIS database of historical resources in the state of Massachusetts. Supervisor: Michael Steinitz.

EDUCATION

- M.A. **University of Massachusetts Boston**, Historical Archaeology, June 2011.
Thesis: A Viking Age Political Economy From Soil Core Tephrochronology. John Steinberg, chair.
- Coursework **Northern Virginia Community College**, Historic Preservation and Archaeology, 2007-2009. David Clark, advisor.
- M.S. **University of North Dakota**, Space Studies, May 2005.
Thesis: Satellite Formation Flight near the Earth-Moon Triangular Libration Points. Craig McLaughlin, chair.
- B.S **University of Maryland**, Aerospace Engineering, May 2003. Honors in Aerospace Engineering, University Honors Citation. Dean's List, 6 semesters. David Akin, advisor.

FIELD AND LABORATORY EXPERIENCE

- 2009-present **Field Technician, Remote Sensing Assistant, and Laboratory Technician**, Skagafjörður Archaeological Settlement Survey. Skagafjörður, Iceland (2009-ongoing) and Vatnahverfi, Greenland (2010). PIs: John Steinberg, Douglas Bolender, Brian Damiata, E. Paul Durrenburger. Field survey, soil coring, excavation, remote sensing, GIS, environmental sampling, laboratory analysis.
- 2010-2011 **Field Technician and Remote Sensing Assistant**, Durant-Kenrick House, Newton, MA. Andrew Fiske Center in association with the Newton Historical Society. PI: Christa Baranek.
- 2010 **Field Technician and Remote Sensing Assistant**, Great Friends Meeting House, Newport, RI. Andrew Fiske Center in association with Salve Regina University. PI: Sarah Schofield.
- 2010 **Field Technician**, Faneuil Hall Archaeological Investigation in Support of the Transportation and Information Hub Project. Andrew Fiske Center in association with the National Park Service and URS Corporation, Inc. PI: Kimberly Parson. Wet screening and environmental sampling.
- 2010 **Field Technician**, Monroe Tavern, Lexington, MA. Andrew Fiske Center. PI: Christa Baranek. Excavation & GIS.
- 2010 **Field School**, Whitehall Museum House, Middletown, RI. UMass Boston & Andrew Fiske Center in association with Salve Regina University and the Colonial Dames of America. PIs: David Landon, James Garman. Excavation, GIS, remote sensing, supervision of undergraduates.
- 2010 **Field Technician and Remote Sensing Assistant**, Loring-Greenough House, Jamaica Plain, MA. Andrew Fiske Center in association with the Jamaica Plain Tuesday Club. PI: Christa Baranek.
- 2009-2010 **Laboratory Technician**, Pambamarca Archaeological Project. Center for Materials Research in Archaeology and Ethnology, Massachusetts Institute of Technology. Supervisor: Heather Lechtman. Metallurgical analysis of three cuprous artifacts. Report forthcoming.
- 2009 **Field and Laboratory Technician**, Waite-Kirby-Potter House, Westport, MA. Andrew Fiske Center in association with the Town of Westport. PIs: Christa Baranek, Katharine M. Johnson.

Excavation & ceramic analysis.

2007-2009 **Field Technician and Public Interpretation**, Loudoun Archaeological Foundation in association with Northern Virginia Community College. Supervisor: David T. Clark. Excavation, GIS and public outreach at Claude Moore Park, Sterling, VA and Banshee Reeks Nature Preserve, Leesburg, VA.

PREVIOUS POSITION

2009-2011 **Graduate Research Assistant**, Andrew Fiske Memorial Center for Archaeological Research, University of Massachusetts Boston. Supervisor: Dr. John Steinberg. Maintain GIS databases for Fiske Center projects. Assist with remote sensing investigations. Train students in GIS.

ADDITIONAL COURSEWORK AND TRAINING

Historical archaeology, Environmental archaeology, Palaeoethnobotany, Archaeological methods and theory, Historical anthropology, Archaeology of metals, Archaeology of colonialism, Museum practice, Geographic Information Systems, X-Ray fluorescence, Satellite communications, Orbital mechanics, Life support and human factors, Space systems design, Dynamics and control, Thermodynamics, Rocket propulsion, Structures, Materials engineering, Aerodynamics, Numerical methods.

PROFICIENCIES

Language: French

Software: ArcGIS, Maptitude, ERDAS, FileMaker, SPSS, GPR-Slice, UNIX, Microsoft Windows/Office, Matlab, Perl, html, STK, Adobe products

Instrumentation: GPR, Conductivity, Resistivity, Magnetometry, GPS, TotalStation, microscopy, metallurgical sample preparation, machine shop

PROFESSIONAL & HONORARY MEMBERSHIPS

Register of Professional Archaeologists (pending)	American Institute of Aeronautics and Astronautics
Society for Historical Archaeology	Sigma Gamma Tau
Society for American Archaeology	Dakota Space Society
Society for Economic Anthropology	National Society of Collegiate Scholars
Council for Northeast Historical Archaeology	Golden Key International Honour Society
Lambda Alpha	National Honor Society
American Association for the Advancement of Science	International Thespian Society

AWARDS & GRANTS

2011 Barbara E. Leudtke Book Award For Excellence in Historical Archaeology
2010-2011 Dr. Robert W. Spayne Research Grant (\$2000 towards MA research), UMass Boston GSA.
2010 Professional Development Grant (to attend SHA 2011 conference), UMass Boston GSA.
2004-2005 NASA Graduate Student Researchers Program Fellowship
2004 & 2005 Placed 3rd in Graduate division at Region V AIAA Student Conference
2003 Team design project: First place at RASC-AL conference
1999-2003 University of Maryland Banneker-Key Scholarship
1999-2003 Maryland Distinguished Scholar Award
1999 National Merit Finalist
1999 Valedictorian, Old Mill High School
1999 National AP Scholar
1999 Girl Scout Gold Award
1998 George Washington University School of Engineering and Applied Sciences Medal

ENGINEERING AND OTHER POSITIONS

2010 **Sales Associate**, Lorem Ipsum Books, Cambridge, MA. Part-time. Sales, online sales, inventory.
2008-2009 **Volunteer**, Loudoun Museum, Leesburg, VA. Part-time. Set-up & crowd wrangling at events.
2005-2009 **Mission Planner/Orbit Analyst**, Boeing, Leesburg, VA. Supervisor: Cesar Lindo.
2003-2005 **Graduate Research Assistant**, Department of Space Studies, University of North Dakota & NASA GSFC. Advisors: Craig McLaughlin (UND), Jesse Leitner and Richard Luquette (NASA).

- 1999-2003 **Undergraduate Research Assistant**, Space Systems Laboratory, University of Maryland College Park. Projects: MARS, SCAMP. Supervisor: David Akin.
- 2002 **Engineering Aide**, National Transportation Safety Board. Supervisor: James Cash.

REPORTS

- 2011 Bolender, D. J., J. M. Steinberg, B. N. Damiata, J. W. Schoenfelder, and K. Catlin. Preliminary Report: Evaluating the Potential of Archaeogeophysical Surveying on Viking Age and Medieval Sites in Greenland, 2-16 August, 2010. Fiske Center for Archaeological Research Cultural Resource Management Study No. 51.
- 2011 Steinberg, J. M., B. N. Damiata, J. W. Schoenfelder, K. A. Catlin, and C. Campbell. Results of Archaeogeophysical Surveying at the Great Friends Meeting House in Newport, Rhode Island. Fiske Center for Archeological Research Culture Resource Management Study No. 46.
- 2010 Johnson, K. M., C. M. Baranek, K. A. Catlin, and L. W. Ng. Documentary and Archaeological Investigations at the Waite-Kirby-Potter Site, Westport, Massachusetts. Fiske Center for Archaeological Research Cultural Resource Management Study No. 37.
- 2010 Steinberg, J., C. Beranek, J. Schoenfelder, and K. A. Catlin. Loring-Greenough House North Yard Archaeogeophysics, Jamaica Plain, Massachusetts. Fiske Center for Archaeological Research Cultural Resource Management Study No. 40.
- 2009 Steinberg, J. M., R. S. Shepard, E. L. Button, K. A. Catlin, D. J. Bolender, B. N. Damiata, K. R. Hale, J. E. Curtis, K. M. Johnson, J. W. Schoenfelder, A. Schriener, and M. Á. Sigurgeirson. Reports of the Skagafjörður Archaeological Settlement Survey 2009. Andrew Fiske Center, UMass Boston.
- 2009 Trigg, H. B., D. J. Bolender, K. A. Catlin, J. E. Curtis, S. A. Jacobucci, and J. M. Steinberg. Report of the Skagafjörður Archaeological Settlement Survey 2009: Using Pollen to Assess Local Environmental Variation during the Viking Age in Skagafjörður, Iceland. Andrew Fiske Center, UMass Boston.

PUBLICATIONS

- 2011 Catlin, K. A. *A Viking Age Political Economy from Soil Core Tephrochronology*. Master's thesis. University of Massachusetts Boston.
- 2007 Catlin, K. A. and C. A. McLaughlin. Earth-Moon Triangular Libration Point Spacecraft Formations. *Journal of Spacecraft and Rockets* 44(3): 660-670.
- 2005 Catlin, K. A. *Relative Motion of Two Spacecraft near the Earth-Moon Triangular Libration Points*. Master's thesis. University of North Dakota.

PRESENTATIONS

- 2012 Catlin, K. A. "A Stratified Landscape: Soil Cores and the Origins of Wealth in Viking Age Iceland." Poster to be presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN, April 18-22, 2012.
- 2011 Catlin, K. A., J. M. Steinberg, B. N. Damiata, J. W. Schoenfelder, and W. Gillis. "Shallow Geophysics of Cemetery Landscapes." Presented at the Cemetery Preservation Workshop, Massachusetts Department of Conservation and Recreation, November 18, 2011.
- 2010 Catlin, K. A. "Getting to the Core of Skagafjörður." Presented at the 17th Anniversary Meeting of the Society for American Archaeology, St. Louis, MO, April 18, 2010.
- 2005 Catlin, K. A. "Spacecraft Formation Design at the Earth-Moon Triangular Libration Points." Presented at AIAA Region V Student Conference, Wichita, KS, April 2005.

- 2004 Catlin, K. A. "Satellite Formation Flight Using the Perturbed COWPOKE Equations." Presented at AIAA Region V Student Conference, Minneapolis, MN, April 2004.
- 2004 Catlin, K. A., and C. A. McLaughlin. "Relative Motion of Two Spacecraft near the Earth-Moon Triangular Libration Points." Presented at AIAA/AAS Astrodynamics Specialist Conference, Providence, RI, August 2004.
- 2004 McLaughlin, C. A., and K. A. Catlin. "Perturbation Analysis for Earth-Moon L4 Formations." Poster presented at 2nd International Symposium on Formation Flying Missions & Technologies, Arlington, VA, September 2004.
- 2003 Catlin, K. A. "Experimental Investigation of a Simple Low-Cost EVA Liquid Cooling Garment." Presented at the AIAA Region I Student Conference, College Park, MD, April 2003. Space Systems Laboratory Document # SSL03-005.