

## **Heather L. Smith**

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Center for the Study of the First Americans  
Department of Anthropology, Texas A&M University  
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### **Education**

Ph.D. Anthropology (2015) Texas A&M University, College Station, Texas

*Dissertation: Paleoindian Technology in Beringia—A Technological and Morphological Analysis of the Northern Fluted-Point Complex.* (Chair: Ted Goebel)

M.A. Anthropology (2010) Texas A&M University, College Station, Texas

*Thesis: A Behavioral Analysis of Clovis Point Morphology Using Geometric Morphometrics.* (Chair: Ted Goebel)

Undergraduate coursework in anthropology (2005-2007) The University of Texas at Austin  
(Undergraduate Mentor: Michael Bever)

B.A. Photocommunications (2002) St. Edward's University at Austin, Texas, Magna Cum Laude  
(Undergraduate Mentor: Joseph Vitone)

### **Appointments**

- 2016 (Spring) **Lecturer**, ANTH 447: Lithic Artifact Analysis, Department of Anthropology, Texas A&M University
- 2016 (Spring) **Lecturer**, ANTH 202: Introduction to Archaeology, Department of Anthropology Texas A&M University
- 2005-Present **Associate Editor, Website Developer, Graphic Designer**, TexasBeyondHistory.net, Texas Archaeological Research Laboratory, University of Texas at Austin
- 2015 (Summer) **Archaeological Technician**, The Center for Environmental Management of Military Lands, Colorado State University, Fort Wainwright, Alaska
- 2014 (Summer) **Instructor**, ANTH 330: Archaeological Field School in the Nenana and Tanana river valleys, Alaska, Department of Anthropology, Texas A&M University
- 2013-2014 **Research Assistant**, Dr. Kelly Graf, Center for the Study of the First Americans, Texas A&M University
- 2011-2012 **Research Assistant**, Dr. Ted Goebel, Center for the Study of the First Americans, Texas A&M University
- 2008-2014 **Website-Developer, Graphic Designer**, Center for the Study of the First Americans, Texas A&M University
- 2007-2012 **Student Research Technician**, Center for the Study of the First Americans, Texas A&M University
- 2010-2011 **Field Supervisor**, Serpentine Hot Springs site (BEN-192), Center for the Study of the First Americans, Texas A&M University
- 2011 **Assistant Editor**, Current Research in the Pleistocene, Center for the Study of the First Americans, Texas A&M University
- 2010 (Spring) **Instructor**, ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University

2010 (Fall)	<b>Teaching Assistant</b> , ANTH 415: Writing in Anthropology, Department of Anthropology, Texas A&M University
2009 (Spring)	<b>Teaching Assistant</b> , ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University
2009 (Fall)	<b>Instructor</b> , ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University
2008 (Spring)	<b>Teaching Assistant</b> , ANTH 201: Introduction to Anthropology, Department of Anthropology, Texas A&M University
2008 (Fall)	<b>Instructor</b> , ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University
2007 (Fall)	<b>Teaching Assistant</b> , ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University

### **Publications**

**Smith, H.** and T. J. DeWitt (2016) The Northern Fluted Point Complex: Technological and Morphological Evidence of Adaptation and Risk in the Late Pleistocene Arctic. *Journal of Anthropological and Archaeological Sciences*, in press.

K. Graf, K. Krasinski, L. DiPietro, A. Gore, **H. Smith**, D. Rhode, S. Driese, N. Bigelow (2015) Dry Creek Revisited: New Excavations, Radiocarbon Dates, and Site Formation Inform on the Peopling of Eastern Beringia. *American Antiquity* 80(4):671-694.

**Smith, H.**, Smallwood A., and T. J. DeWitt (2014) A Geometric Morphometric Exploration of Clovis Fluted-Point Shape Variability. In *Clovis: On the Edge of a New Understanding*, edited by Ashley M. Smallwood and Thomas Jennings, pp.161-180. Texas A&M University Press.

**Smith, H.**, J. Rasic, and T. Goebel (2013) Biface Traditions of Northern Alaska and Their Role in the Peopling of the Americas. In *Paleoamerican Odyssey*, edited by Kelly E. Graf, Caroline V. Ketron, and Michael R. Waters, pp.105-123. Texas A&M University Press, College Station.

Goebel, T., **H. Smith**, L. DiPietro, M. Waters, B. Hockett, K. Graf, R. Gal, S. Slobodin, R. Speakman, S. Driese, and D. Rhode (2013) Serpentine Hot Springs, Alaska: Results of Excavations and Implications for the Age and Significance of Northern Fluted Points. *Journal of Archaeological Science* 40:4222-4233.

**Smith, H.** (2012) Geometric Morphometrics and the Effects of Raw Material Quality on Clovis Point Shape. *Current Research in the Pleistocene* 28:83-85.

Goebel, T., and **H. Smith** (2011) Report of 2010 Archaeological Field Research at BEN-192, the Fluted-Point Locality near Serpentine Hot Springs, Bering Land Bridge National Preserve, Alaska. Report Submitted to the National Park Service, Alaska Region. Anchorage.

### **Submitted Manuscripts**

**Smith, H.** (In Review) Fluted Points on the Bering Land Bridge: Late Pleistocene Lithic Technological Organization at Serpentine Hot Springs, Alaska. Submitted to *Arctic*.

**Smith, H.**, A. Teten'kin, and A. Henry. (In Review) Archaeological Evidence for Construction Activities at the Kovrizhka Site, Siberia, during the Pleistocene-Holocene Transition: Structures, Lithics, and Charcoal Analyses. Submitted to *Paleoamerica*.

### **Manuscripts in Preparation**

**Smith, H.** The Origins of Fluted-point Technology in Beringia: A Geometric Morphometric Assessment. In preparation for submission to *PLOS ONE*.

**Smith, H.** Northern Fluted Point Manufacture: Analysis of a Reduction Continuum. In preparation for submission to *Paleoamerica*.

### **Grants and Scholarships Awarded**

2014 Texas A&M University Dissertation Fellowship, \$20,265

2012 National Science Foundation Doctoral Dissertation Improvement Grant: *Paleoindian Technology in Beringia—A Technological and Morphological Analysis of the Northern Fluted-Point Complex*, \$19,644

2015 Texas A&M Department of Anthropology Travel Grant to attend the 80<sup>th</sup> Annual Meeting of the Society for American Archaeology, San Francisco, California, \$700

2014 Texas A&M Department of Anthropology Travel Grant to attend the 42<sup>nd</sup> Annual Meeting of the Alaskan Anthropological Association, Anchorage, Alaska, \$845

2014 Texas A&M University Liberal Arts Department Professional Development Fund Award to attend the Transmitting Science Geometric Morphometrics Workshop in Barcelona, Spain, \$2,602

2014 Texas A&M Department of Anthropology Travel Grant to attend the 41<sup>st</sup> Annual Meeting of the Alaskan Anthropological Association, Fairbanks, Alaska, \$1,000

2013 Texas A&M University Liberal Arts Department Professional Development Fund, \$160

2013 Texas A&M Department of Anthropology Student Academic Scholarship, Texas A&M University, \$1,000

2013 Center for the Study of the First Americans Student Academic Scholarship, Texas A&M University, \$1,000

2013 Texas A&M Department of Anthropology Research Grant to conduct Lithic Analysis at the Canadian Museum of Civilization, Gatineau, Quebec, \$500

2013 Texas A&M Department of Anthropology Travel Grant to attend the 40<sup>th</sup> Annual Meeting of the Alaskan Anthropological Association, Anchorage, Alaska, \$200

2012 Texas A&M University Liberal Arts Department Professional Development Fund Award to participate in the Kovrizhka Archaeological program at Mamakan, East Siberia, Irkutsk State University, Irkutsk, Russia, \$3,224

2012 Department of Anthropology Travel Grant to attend Annual Meeting of the Society for American Archaeology, Memphis, Tennessee, \$200

2011 Roy J. Shlemon Student Field Geoarchaeology Fund Award, \$5,000

2011 Center for the Study of the First Americans Student Academic Scholarship, Texas A&M University, \$1,000

2011 Texas A&M Department of Anthropology Travel Grant to attend Annual Meeting of the Society for American Archaeology, Sacramento, California, \$350

2010 Texas A&M Department of Anthropology Travel Grant to attend Annual Meeting of the Society for American Archaeology, St. Louis, Missouri, \$350

2009 Texas A&M Department of Anthropology Travel Grant to attend Annual Meeting of the Society for American Archaeology, Atlanta, Georgia, \$500

2007 Texas A&M University Regent's Graduate Fellowship, \$6,000

**University Teaching Experience**

**Instructor of Record:**

ANTH 442: Lithic Artifact Analysis, Department of Anthropology, Texas A&M University	Spring 2016
ANTH 202: Introduction to Archaeology, Department of Anthropology, Texas A&M University	Spring 2016
ANTH 330: Lithic Archaeological Field School in the Nenana and Tanana river valleys, Alaska, Department of Anthropology, Texas A&M University	Summer 2014
ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University	Spring 2010
ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University	Fall 2009
ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University	Fall 2008

**Teaching Assistant:**

ANTH 415: Writing in Anthropology, Department of Anthropology, Texas A&M University	Fall 2010
ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University	Spring 2009
ANTH 201: Introduction to Anthropology, Department of Anthropology, Texas A&M University	Spring 2008
ANTH 205: Peoples and Cultures of the World, Department of Anthropology, Texas A&M University	Fall 2007

### **Professional Service**

- Co-Organized Symposium: *Papers on Environmental Archaeology*, Annual Meeting of the Alaska Anthropological Association, 2015.
- Co-Organized Workshop: *Flintknapping*, Annual Meeting of the Alaska Anthropological Association, 2015.
- Undergraduate Mentor: CSFA Mentor in GIS modeling, 2015.
- Co-Organized Flintknapping workshop, Texas A&M University: “Gig-em Week”, undergraduate orientation, 2015.
- Co-Organized, Texas A&M University, Department of Anthropology, “Open House”, 2014.
- Undergraduate Mentor: CSFA Mentor in field methods, Archaeological Field School in the Nenana River valley, Alaska, Department of Anthropology, Texas A&M University, 2012.
- Co-Chair of the Texas A&M University, Anthropology Department’s Women’s Week Committee, 2009-2010.

### **Conference Papers and Posters Presented**

**Smith, H.** (2015) The Late Pleistocene Transmission of Fluted-Point Technology Across a Continent: A Morphological Investigation. Paper presented at the 80<sup>th</sup> Society for American Archaeology Annual Meeting, San Francisco, California.

**Smith, H.** (2015) The Northward Transmission of a Late Pleistocene Technology: Geographical Variation in Fluted Point Morphology. Paper presented at the 42<sup>th</sup> Alaska Anthropological Association Annual Meeting, Anchorage, Alaska.

**Smith, H.** (2014) An Investigation of the Origin of Alaskan Fluted Points and the Role of Fluted Point Technology in the Early Settlement of Beringia and the Americas. Paper presented at the 79<sup>th</sup> Society for American Archaeology Annual Meeting, Austin, Texas.

**Smith, H.** (2014) The Use of Fluting Technology and Technological Risk in Younger Dryas Beringia. Paper presented at the 41<sup>th</sup> Alaska Anthropological Association Annual Meeting, Fairbanks, Alaska.

**Smith, H., J. Rasic, and T. Goebel** (2013) Biface Traditions of Northern Alaska and Their Role in the Peopling of the Americas. Paper presented at the Paleoamerican Odyssey Conference, Santa Fe, New Mexico.

**Smith, H.** (2013) The Utility of Geometric Morphometric Analysis to Understanding Fluted-Point Variability. Paper presented at the 40<sup>th</sup> Alaska Anthropological Association Annual Meeting, Anchorage, Alaska.

**Smith, H.** (2012) Preliminary Analysis of Fluted-Point Technology at Serpentine Hot Springs, Alaska. Poster presented at the 77<sup>th</sup> Society for American Archaeology Annual Meeting, Memphis, Tennessee.

**Smith, H., and T. Goebel** (2012) Serpentine Fluted-Point Update: Report on the 2011 Excavations at BEN-192, Seward Peninsula, Alaska. Paper presented at the 39<sup>th</sup> Alaska Anthropological Association Annual Meeting, Seattle, Washington.

**Smith, H.**, and A. Smallwood (2011) Variability in Clovis Point Shape in North America Using Geometric Morphometrics. Paper presented at the 76<sup>th</sup> Society for American Archaeology Annual Meeting, Sacramento, California

Younie, A., **H. Smith**, T. Goebel, M. Waters, and K. Graf (2011) The fluted-point locality near Serpentine Hot Springs, Alaska: archaeological investigations during the 2010 field season. Poster presented at the 76<sup>th</sup> Annual Meeting of the Society for American Archaeology, Sacramento, California.

**Smith, H.**, and T. Goebel (2011) The Fluted Point Assemblage from Serpentine Hot Springs. Paper presented at the 38<sup>th</sup> Alaska Anthropological Association Annual Meeting, Fairbanks, Alaska.

**Smith, H.**, T. Goebel, and A. Younie (2010) Update of Recent Excavations at the Serpentine Hot Springs Site, BER-192, Bering Land Bridge National Park, Alaska Paper presented at the 18th Arctic Conference at Bryn-Mawr University, Philadelphia, Pennsylvania.

**Smith, H.**, T. DeWitt, and T. Goebel (2010) Digital Shape Analysis of Clovis Projectile Points. Paper presented at the 75<sup>th</sup> Annual Meeting of the Society for American Archaeology, St. Louis, Missouri.

**Smith, H.**, T. Goebel, S. Slobodin, and M. R. Waters (2009) New Dates from Ushki-1, Kamchatka, Confirm 13,000 cal B.P. Age for Earliest Paleolithic Occupation. Paper presented at the 17<sup>th</sup> Annual Arctic Conference, Boulder, Colorado.

### **Section 106 and 104 Compliance Experience**

Summer 2015	<p><b>The Center for Environmental Management of Military Lands</b> Archaeological Technician Fort Wainwright, Alaska</p> <ul style="list-style-type: none"> <li>• Cultural resource identification and comprehensive inventory surveys.</li> <li>• Archaeological reconnaissance and mitigation.</li> <li>• National Register of Historic Places eligibility assessment.</li> <li>• Archaeological resource monitoring.</li> <li>• Cultural resources data management and analysis.</li> </ul> <p>Supervisor: Julie Esdale, Ph.D., Colorado State</p>
2010-2011	<p><b>Center for the Study of the First Americans</b> Student Archaeological Technician</p> <ul style="list-style-type: none"> <li>• Archeological investigations undertaken on Federal lands conducted under a Permit for Archeological Investigations.</li> <li>• Consultation with Native Alaskan tribal organizations.</li> <li>• Preparation and application for permits for archeological investigation issued under the Archaeological Resources Protection Act (ARPA) and Antiquities Act (16 USC 433).</li> <li>• Preparation and submission of archeological investigation reports to the National Park Service regional director.</li> </ul> <p>Supervisor: Ted Goebel, Ph.D., Texas A&amp;M University</p>
Spring 2005	<p><b>Texas Historical Commission</b> Student Archaeological Intern</p> <ul style="list-style-type: none"> <li>• THC Archaeological Stewardship Network Investigation</li> <li>• Archaeological reconnaissance (phases 1-2)</li> </ul> <p>Supervisor: Dan Potter, Ph.D., Texas Historical Commission</p>

**Academic Archaeological Field Projects and Laboratory Experience**

- 7/2014 McDonald Creek Site (2043)  
Tanana River Valley, Alaska  
Excavation crew  
Principal Investigator: T. Goebel, Ph.D., Texas A&M
- 5/2014-7/2014 CSFA Summer Field School: Excavation and survey in the Nenana and  
Tanana River Valleys, Alaska  
Co-Instructor  
Principal Investigator: T. Goebel, Ph.D., Texas A&M
- 7/2012-8/2012 Kovrizhka Site  
Bodaibo, Siberia  
Excavation Crew  
Principal Investigator: A. Teten'kin, Ph.D., Irkutsk State Technical  
University
- 6/2012-7/2012 Susitna River Valley, Alaska  
Survey and Preliminary Testing Crew  
Principal Investigator: J. Blong M.A., Texas A&M
- 7/2011-8/2011 BEN-192, Serpentine Hot Springs Site  
Bering Land Bridge National Preserve, Alaska  
Excavation Crew Chief  
Principal Investigator: T. Goebel, Ph.D., Texas A&M
- 7/2011 Susitna River Valley, Alaska  
Survey and Preliminary Testing Crew  
Principal Investigator: J. Blong, M.A., Texas A&M
- 6/2011-7/2011 Dry Creek Site  
Nenana River Valley, Alaska  
Excavation Crew  
Principal Investigator: K. Graf, Ph.D., Texas A&M
- 6/2011 Upper Tanana River Valley, Alaska  
Survey and Preliminary Testing Crew  
Principal Investigator: T. Goebel, Ph.D., Texas A&M
- 7/2010-8/2010 BEN-192, Serpentine Hot Springs Site  
Bering Land Bridge National Preserve, Alaska  
Excavation Crew Chief  
Principal Investigator: T. Goebel, Ph.D. Texas A&M
- 7/2010 Denali National Park  
Savage River Valley, Alaska  
Survey and Preliminary Testing Crew  
Principal Investigator: J. Blong M. A., Texas A&M
- 5/2010-7/2010 Owl Ridge Site  
Teklanika River Valley, Alaska  
Excavation Crew  
Principal Investigator: K. Graf, Ph.D., Texas A&M

- 8/2009 Ghost Ranch  
Abiquiu, New Mexico  
Excavation Crew  
Principal Investigator: C. Crews, M. A., Texas A&M
- 6/2009-7/2009 Owl Ridge Site  
Teklanika River Valley, Alaska  
Excavation Crew  
Principal Investigator: K. Graf, Ph.D., Texas A&M
- 5/2009-6/2009 Debra L. Friedkin Site  
Salado, Texas  
Excavation Crew  
Principal Investigator: M. Waters, Ph.D., Texas A&M
- 6/2008-7/2008 Debra L. Friedkin Site  
Salado, Texas  
Excavation Crew  
Principal Investigator: M. Waters, Ph.D., Texas A&M
- 5/2008-6/2008 Bonneville Estates Rockshelter  
Nevada  
Excavation Crew  
Principal Investigators: T. Goebel, Ph.D. and K. Graf, Ph.D., Texas A&M
- 8/2006-12/2006 41VT141 Laboratory Processing  
Inventory and cataloguing of artifacts recovered from the McNeill Ranch Site at Texas Archaeological Research Laboratory  
Preliminary lithic analysis  
Supervised by M. Bever, Ph.D., University of Texas at Austin
- 6/2006-7/2006 UT Austin Field School  
Victoria, Texas  
Survey, excavation, mapping, remote sensing and geoarchaeological field techniques at the McNeill Ranch Site (41VT141)  
Professor M. Bever, Ph.D., University of Texas at Austin
- 8/2005-11/2005 41LR297 Laboratory Processing  
Analyzed macrobotanical remains from the Gene Stallings Ranch Site (41LR297) at Texas Archaeological Research Laboratory  
Supervised by L. Bush, Ph.D.
- 7/2005 Texas Archaeological Society Field School  
Paris, TX  
Participated in excavation of the Gene Stallings Ranch Site (41LR297)  
Supervised by P. Mercado-Allinger, Ph.D., State Archaeologist
- 3/2005 THC Archaeological Stewardship Network Investigation in  
Lockhart, TX  
Survey Crew  
Supervised by D. Potter, Ph.D., Texas Historical Commission



**Visiting Researcher Experience: Lithic Analysis Conducted at Research Institutions**

05/2014	Canadian Museum of Civilization, Gatineau, Quebec, CA 5/4-5/9/2014
04/2013	Frison Institute, University of Wyoming, Laramie, WY 4/22-5/1/2013
03/2013	Bureau of Land Management, Fairbanks, AK, 3/18-3/25/2013
02/2013	University of Western Ontario, London, ON, Canada, 2/17-3/1/2013
02/2013	National Museum of Natural History, Washington D.C., 2/3-2/15/2013
12/2012	Parks Calgary Canada, Calgary, AL, Canada, 12/10-12/16/2012
12/2012	Royal Alberta Museum, Edmonton, AL, Canada, 12/3-12/7/2012
11/2012	Simon Fraser University, Vancouver, BC, Canada, 11/28-29/2012
11/2012	Royal British Columbia Museum, Victoria, BC, Canada, 11/27/2012
11/2012	National Park Service, Anchorage, AK, 11/15-11/16/2012
11/2012	Bureau of Land Management, Fairbanks AK, 10/31-11/13/2012
10/2012	University of Alaska Museum of the North, Fairbanks, AK, 10/13-10/30/2012
11/2008	National Museum of Natural History, Washington D.C., 11/10-11/14/2008
10/2008	Texas Archaeological Research Laboratory, Austin, TX, 11/2008

**Committees and Honors**

2010	Co-Chair, Women's Week Committee, Anthropology Department, Texas A&M University,
2009	Co-Chair, Women's Week Committee, Anthropology Department, Texas A&M University,
2006	Texas Archeological Society Undergraduate Student Committee
2005-2007	Dean's List, The University of Texas at Austin
1999-2002	Dean's List, St. Edward's University, Austin, Texas
2002	Inducted into Alpha Chi Honors Society
2001	School of humanities' Scholarship, St. Edward's University, Austin, Texas

**Special Skills and Training**

<b>Language</b>	Russian-to-English translation
<b>Laboratory</b>	Lithic analysis, XRF analysis, macro- and micro-botanical/palynological analysis, artifact photography and scanning
<b>Microscopy</b>	JEOL JSM-6400 scanning electron microscope
<b>Software</b>	<b>Geometric Morphometric Analysis-</b> tpsDig2, tpsRegr, tpsUtil, tpsRelw, Morpho-J <b>Spatial Analysis-</b> ArcGIS <b>RC Calibration Analysis-</b> Oxcal, Calib <b>Statistical Analysis-</b> SAS JMP, SPSS, R <b>Graphic Design (Publication and Web Development)-</b> Adobe Photoshop, Illustrator, Flash, Premier, InDesign, Fireworks, CorelDRAW, Micromedia Dreamweaver, Quark Express, html, html5, CSS, JavaScript. <b>Text Editing-</b> Microsoft Word, Excel, Access, Power Point, Adobe Acrobat

**Affiliations**

Society for American Archaeology  
Alaskan Anthropological Association  
Texas Archaeological Society

**Ph.D. Advisory Committee**

Ted Goebel, Ph.D. (Chair)

Kelly Graf, Ph.D.

Michael Waters, Ph.D.

David Carlson, Ph.D.

Thomas DeWitt, Ph.D.