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# Katharine V. Alexander, MA, RPA

# **Archaeological Laboratory Director**

Office Location: Evansville, Indiana

**Availability:** Immediate

Email: kvalexander@crai-ky.com

**RPA Registration ID:** 5461

**Specific Duties:** 

- · Oversee laboratory processing
- Supervise technicians and interns in laboratory tasks
- Prepare artifacts and records for curation
- Coordinate with curatorial repositories
- Analyze lithic artifacts and botanical remains

**Education and Training:** 

- PhD (expected 2023), Anthropology, University of Kentucky
- MA, Anthropology, University of Alberta
- BA, Anthropology, Arizona State University

Archaeological Experience Summary Information		
Archaeology Laboratory Director Cultural Resource Analysts, Inc. 2021-present	Research Assistant William S. Webb Museum of Anthropology, University of Kentucky 2015-2017, 2019-2020	Archaeological Field/Lab Techniciar Kentucky Archaeological Survey/UK Program for Archaeological Research 2018-2019
Research Assistant/Lab Assistant Iringa Region Archaeological Project, University of Alberta 2007-2009	Student Worker Archaeology and Ethnology Collections, Arizona State University 2005-2007	Archaeological Field Technician Various (seasonal, project-based) 2008, 2012, 2016-2020

**Katharine Alexander** is the Archaeological Laboratory Director in CRA's Evansville, Indiana office. She has experience with prehistoric and historic archaeology in curatorial, lab, and field settings. Ms. Alexander's responsibilities include overseeing laboratory processing, training and supervising interns and archaeological technicians in laboratory tasks, preparing artifacts and associated records for curation, coordinating with curatorial repositories, and conducting lithic and macrobotanical analysis. She is currently pursuing a PhD in anthropology at the University of Kentucky with a research focus on Archaic period plant use and human-environment relationships in the Green River Valley of Kentucky. She regularly presents at professional conferences and has contributed to a peer-reviewed journal article.

### **EDUCATION**

Doctor of Philosophy, Anthropology, University of Kentucky, Lexington, KY (in progress, expected 2023)

Achieved doctoral candidacy in 2019 upon passing Qualifying Exams in Lower Ohio River Valley Archaeology, Paleoethnobotany Methods, Origins of Agriculture Theory, and Evolutionary Ecology of Domesticated Plants. Currently completing dissertation, "Macrobotanical Evidence of Middle and Late Archaic Plant Use and Human-Environment Relationships in the Green River Valley, Kentucky," which investigates the emergence of incipient horticulture through a comparative analysis of macrobotanical remains from seven sites using a niche construction perspective.

#### Master of Arts, Anthropology, University of Alberta, Edmonton, AB

Master's thesis, "A Typological and Technological Analysis of Stone Artifacts from the Magubike Archaeological Site, Iringa Region, Southern Tanzania," investigated patterns of lithic reduction and raw material utilization spanning at least 50,000 years of human occupation at the Magubike Rockshelter site.

Bachelor of Arts, Anthropology, Arizona State University, Tempe, AZ

# **SUMMARY OF ARCHAEOLOGICAL EXPERIENCE**

### Laboratory Processing, Analysis, & Curation

- Ms. Alexander has five years of archaeological laboratory experience and three years of curatorial and collections management experience.
- As the Laboratory Director for the Indiana office since 2021, Ms. Alexander has coordinated all aspects of laboratory processing of prehistoric and/or historic artifacts from over 70 projects primarily in Indiana, Illinois, and Kentucky, as well as supervised the preparation of artifacts and associated records for over 160 projects for curation at repositories that meet federal (36 CFR 79) and state curation standards.
- Ms. Alexander has extensive experience applying the curation guidelines of Indiana State Museum, Illinois State
  Museum, Ball State University Applied Archaeology Laboratories, University of Louisville Center for Archaeology
  and Cultural Heritage, and Indiana University Museum of Anthropology and Archaeology to the preparation of
  archaeological collections and associated documents.
- Ms. Alexander also has one year of experience with a NAGRPA (Native American Graves Protection and Repatriation) compliant project in a laboratory setting, including compiling an inventory and following cultural sensitivity protocol for ancestral remains and associated funerary objects.
- As a trained paleoethnobotanist, Ms. Alexander has analyzed macrobotanical remains (e.g., seeds, nutshell, wood charcoal) from 16 sites in Kentucky and Texas for various Phase II projects and academic research, including samples recovered from Archaic, Woodland, and Late Prehistoric components, with findings presented in technical reports, professional conferences, and public talks. She has processed hundreds of flotation samples utilizing both manual and machine-assisted (Flote-Tech) methods and developed a comparative reference collection of 70+ plant species to aid in identification of archaeological botanical remains.
- Ms. Alexander has also analyzed lithic artifacts from over 100 sites for Phase I-III projects in Indiana, Illinois, and
  Kentucky, and contributed to associated technical reports. Her master's degree research focused on changes in
  lithic technology spanning the Middle Stone Age, Later Stone Age, and Iron Age at Magubike Rockshelter in
  Tanzania with results presented in her master's thesis and at conferences.

### **Archaeological Fieldwork**

- Ms. Alexander has approximately 75 weeks of field experience in cultural resource management and academic settings, primarily in the capacities of Archaeological Technician and Research Assistant.
- Ms. Alexander served on field crews for 16 Phase I surveys in Kentucky, Ohio, Indiana, Pennsylvania, Louisiana, Mississippi, Texas, West Virginia, North Carolina, and Virginia for various companies, and authored or co-authored technical reports for six Phase I surveys in Kentucky.
- Ms. Alexander assisted with Phase II NRHP evaluations at 11 sites in Texas and Kentucky, including Archaic,
   Woodland, Late Prehistoric, and historic components, through test unit excavations and/or mechanical excavation monitoring, and advised on flotation field sampling methods for two prehistoric sites in Texas.
- Ms. Alexander also participated in one Phase III data recovery project at an Archaic site in West Virginia.
- Ms. Alexander conducted fieldwork for several academic research projects, including four archaeological surveys in Arizona, Kentucky, and Tanzania; two geophysical surveys in Kentucky; and excavations at a Contact period site in Georgia, two prehistoric sites in Kentucky, Middle Paleolithic sites in France and Spain, and three prehistoric sites in Tanzania.

## **JOURNAL ARTICLE**

Bonzani, Renée M., **Katharine V. Alexander**, Alexander Metz, Jordon S. Munizzi, Bruce L. Manzano, Mathew J. Davidson, Grace Farrish, and Andrea Erhardt. (2021). "Using Deer Stable Isotope Data to Test a Niche Construction Hypothesis for an Increase in Prehistoric Human Maize Consumption in the Eastern Woodlands of the United States." *Environmental Archaeology* 27:3, pp. 258-276.

### **CONFERENCE PRESENTATIONS**

Metz, Alexander and **Katharine Alexander.** (2022). From Feast to Forest: The Impact of Shell Middens on Plant Communities. Paper presented at the Kentucky Heritage Council Archaeology Meeting (virtual due to COVID-19).

**Alexander, Katharine.** (2020). *Paleoethnobotany of the Kentucky Green River Archaic: The View from a Bluff-Top Shell Midden.* Paper presented at the Kentucky Heritage Council Archaeology Meeting (Bowling Green, KY).

Crothers, George, Justin Carlson, Karen Stevens, Alexander Metz, and **Katharine Alexander.** (2019). *Beyond the Big Bend: Julie Stein's Geoarchaeological Legacy in the Green River of Kentucky.* Paper presented at the 84<sup>th</sup> Annual Meeting of the Society of American Archaeology (Albuquerque, NM).

**Alexander, Katharine.** (2018). *Beyond Woman-the-Gatherer: Engendered Narratives of Agricultural Origins.* Paper presented at the 2<sup>nd</sup> Annual Kentucky Gender and Women's Studies Conference (Lexington, KY).

**Alexander, Katharine,** Renée Bonzani, and Jon Endonino. (2018). *Analysis of Botanical Remains from Grizzly Newt Rockshelter, Eastern Kentucky*. Paper presented at the Kentucky Heritage Council Archaeology Conference (Gilbertville, KY).

**Alexander, Katharine** and Renée Bonzani. (2018). *Diachronic Trends in Hard Mast Exploitation and Implications for Incipient Horticulture at Cloudsplitter, Eastern Kentucky, USA*. Poster presented at the 3<sup>rd</sup> Annual Integrated Microscopy Approaches to Archaeobotany workshop, University of Reading (Reading, England).

**Alexander, Katharine** and Anna-Marie Casserly. (2018). *Toward a Paleopharmacology of the Kentucky Archaic*. Paper presented at the 75<sup>th</sup> Annual Southeastern Archaeological Conference (Augusta, GA).

Hummel, Rebecca, **Katharine Alexander**, and George Crothers. (2018). *Initial Timing and Spread of Domesticated Eastern Agricultural Complex Plants: The Need for a Comprehensive Database*. Poster presented at the 82<sup>nd</sup> Annual Meeting for the Society of American Archaeology (Washington D.C.).

Stevens, Karen, **Katharine Alexander**, and Alexander Metz. (2018). *New Approaches to Old Questions: Current Research Objectives for the Green River Valley Shell Midden Archaic, Kentucky, USA*. Paper presented at the 82<sup>nd</sup> Annual Meeting for the Society of American Archaeology (Washington, D.C.).

Stevens, Karen, Justin Carlson, Megan Parker, **Katharine Alexander**, and Alexander Metz. (2017). *Finding a Space/Place for Archaeology in Political Ecology*. Workshop presented at the Dimensions of Political Ecology Conference (Lexington, KY).

**Alexander, Katharine.** (2010). *Lithic Assemblages from Magubike, Iringa Region, Tanzania.* Paper presented at the 18<sup>th</sup> Annual Richard Frucht Student Conference (Edmonton, AB).

**Alexander, Katharine.** (2009). *Middle Stone Age Lithic Assemblages at Magubike, Iringa Region, Tanzania*. Paper presented at the East African Association for Paleontology and Paleoanthropology meeting (Arusha, Tanzania).

## **TECHNICAL REPORTS**

Alexander, Katharine. (2020). "Chapter 7: Analysis of Macrobotanical Remains." In *National Register of Historic Places Eligibility Testing for Sites 41PP375, 41PP377, 41PP378, 41PP382, 41PP384, 41PP385, 41PP386, 41PP387, and 41PP388 for the Proposed Turkey Peak Reservoir Project* by M. Johnson, K. Pelusio, M. Koszarek, K. Alexander, C. Tinsley, and A. Keen. HDR, Inc., Dallas, TX.

**Alexander, Katharine.** (2019). *Macrobotanical Analysis for Sites 41PP377 and 41PP378 in North-Central Texas.* Submitted to HDR, Inc., Dallas, TX.

**Alexander, Katharine.** (2019). *Phase I Archaeological Survey of a Portion of the Proposed Town Branch Trail in Northwest Lexington, Fayette County.* UK-PAR Technical Report No. 878. University of Kentucky, Lexington, KY.

**Alexander, Katharine.** (2018). *Phase I Archaeological Survey for a Section of a Proposed Force Main Sewer Line near Monticello, Wayne County, Kentucky.* UK-PAR Technical Report No. 873. University of Kentucky, Lexington, KY.

Ahler, Steven and **Katharine Alexander**. (2018). Phase *II National Register of Historic Places Eligibility Assessment of 15TR1 Area B in Trigg County, Kentucky*. UK-PAR Technical Report No. 868. University of Kentucky. Lexington, KY.

Bonzani, Renée and **Katharine Alexander**. (2018). *Macrobotanical Analysis for 15JA120 (Grizzly Newt Rockshelter), Jackson County in Eastern Kentucky*. For Daniel Boone National Forest in association with Dr. Jon Endonino, Eastern Kentucky University, Department of Anthropology, Sociology and Social Work Archaeological Field School.

Manzano, Bruce, **Katharine Alexander**, and Steven Ahler. (2018). *Phase I Archaeological Survey for a Proposed Natural Gas Line to the Kentucky Green Harvest/Fresh Harvest Facilities in Lincoln County, Kentucky.* UK-PAR Technical Report No. 872. University of Kentucky, Lexington, KY.

Schlarb, Eric, **Katharine Alexander**, Michael Stottman, Justin Carlson, and Ashley Whitten. (2018). *An Archaeological Assessment of the Pine Creek Timber Sale Units, Daniel Boone National Forest, Laurel and Pulaski Counties, Kentucky*. UK-PAR Technical Report No. 876. University of Kentucky, Lexington, KY.

Schlarb, Eric, Michael Stottman, Leah Tepe, Alex Duncan, **Katharine Alexander**, Ashley Whitten, and Justin Carlson. (2018). *An Archaeological Assessment of the Redbird Crest Trail, Redbird Ranger district, Daniel Boone National Forest, Clay and Leslie Counties, Kentucky*. UK-PAR Technical Report No. 870. University of Kentucky, Lexington, KY.

Stottman, Michael and **Katharine Alexander.** (2018). *Phase I Archaeological Survey for the Proposed Lincoln Street Redevelopment Project in Clark County, Kentucky.* UK-PAR Technical Report No. 864. University of Kentucky, Lexington, KY.

**Alexander, Katharine** (2017). *Preliminary Report on the Analysis of Macrobotanical Remains from Site 41PP386 in Palo Pinto County, Texas.* Submitted to HDR, Inc., Dallas, TX.

Alexander, Katharine (2009). Chapter 6: Fiber Production of Three Varieties of Agave Found on Perry Mesa. In *Report of the Spring 2007 Field Season, Legacies on the Landscape, Archaeological and Ecological Research at Agua Fria National Monument and Tonto National Forest.* Edited by K. Spielmann. Report submitted to the U.S. Bureau of Land Management and Tonto National Forest, Phoenix, Arizona. Arizona State University, Tempe, pages 66-69.

### PALEOETHNOBOTANY EXPERIENCE

**Phase II NRHP Eligibility Testing of Site 40TR54 in Trousdale County, Tennessee.** Macrobotanical analysis of samples recovered from prehistoric features. Botanical analyst, CRA, Inc. 2023 (in progress).

Middle and Late Archaic Plant Use and Human-Environment Relationships at Sites 15WA6 (Crumps), 15MU12 (Baker), 15OH1 (Chiggerville), 15BT6 (DeWeese), 15BT11 (Haynes), 15HE638, and 15HE160 in west-central Kentucky. Processed flotation samples with Flote-Tech and conducted macrobotanical analysis of remains recovered by various university-affiliated excavations and curated at the William S. Webb Museum of Anthropology. PhD dissertation research, University of Kentucky. 2019-present (in progress).

Phase II NRHP Eligibility Testing of Sites 41PP377 and 41PP378 in Palo Pinto County, Texas. Advised field sampling strategies, conducted manual (bucket) and machine (Flote-Tech) assisted flotation, and analyzed macrobotanical remains for samples recovered from Archaic and Late Prehistoric deposits. Paleobotanical Analyst, HDR, Inc. 2019.

Phase II NRHP Eligibility Testing of Site 15TR1 (Canton) Area B in Trigg County, KY. Conducted macrobotanical analysis of samples recovered from Mississippian component. Archaeological Technician, UK Program for Archaeological Research, University of Kentucky. 2018.

Phase II NRHP Eligibility Testing of Site 15ED443 in Edmonson County, KY. Conducted macrobotanical analysis of samples recovered from prehistoric deposits. Archaeological Technician, UK Program for Archaeological Research, University of Kentucky. 2018.

Phase II NRHP Eligibility Testing of Sites 41PP385, 41PP386, and 41PP388 in Palo Pinto County, Texas. Conducted manual (bucket) and machine (Flote-Tech) assisted flotation, and analyzed macrobotanical remains recovered from Archaic and Late Prehistoric deposits. Paleobotanical Analyst, HDR, Inc. 2017.

Macrobotanical Analysis for Investigations at Site 15JA120 (Grizzly Newt) in Jackson County, Kentucky. Processed flotation samples with Flote-Tech and assisted Dr. Renée Bonzani with analysis of macrobotanical remains recovered from Early Archaic, Late Archaic, Late Woodland, and Fort Ancient components during the 2016 Eastern Kentucky University archaeological field school in Daniel Boone National Forest. Graduate student researcher, University of Kentucky. 2016-2017.

Late Archaic-Early Woodland Plant Remains from Site 15MF36 (Cloudsplitter) in Menifee County, Kentucky. Processed and analyzed desiccated macrobotanical remains recovered from Late Archaic and Early Woodland deposits during W. Cowan's dissertation research and curated at William S. Webb Museum of Anthropology. Graduate research (independent study with Dr. Renée Bonzani), University of Kentucky. 2016.

Comparison of Fiber Processing Yields of Three Varieties of Prehistorically Cultivated Agave on Perry Mesa in Agua Fria National Monument, Arizona. Conducted experimental archaeology project informed by the ethnographic record in order to process and compare fiber yields of prehistorically cultivated varieties of agave and their hybrids. Undergraduate researcher, Legacies on the Landscape Research Project, Arizona State University. 2007.

### **PUBLIC OUTREACH**

*The Archaeology of Kentucky's Ancient Gardens*. Public talk presented for Liberty Hall Historic Site's Garden Lecture Series, Frankfort, KY, 2022

'Virtues of Some Plants Found in Field and Garden:' Eighteenth Century Herbalism. Display, presentation, and hands-on activities developed and presented to public at the Fort Randolph Living History Walk, Fort Randolph, Point Pleasant, WV, 2021, 2022

**Kentucky's First Farmers: Prehistoric Upland Gardens of Eastern Kentucky.** Museum exhibit for the William S. Webb Museum of Anthropology to display at Lafferty Hall at the University of Kentucky, 2020-2021

Out of the Woods: The Analysis of Archaeological Wood Charcoal. Blog post written for Kentucky Organization of Professional Archaeologists Kentucky Archaeology Month, 2020

*Prehistoric Crop, Modern Weed: Goosefoot.* Blog post written for Kentucky Organization of Professional Archaeologists Kentucky Archaeology Month, 2019

*Plants and People of the Past: Grizzly Newt Rockshelter* (with Renée Bonzani and Jon Endonino). Public talk presenting original research for the Eastern Kentucky Archaeology Group Speaker, Richmond, KY, 2019

*Cloudsplitter Rockshelter: Kentucky's First Farmers* (with Renée Bonzani.). Public talk presenting original research for the Eastern Kentucky Archaeology Group Speaker, Richmond, KY, 2018

*From Forests to Garden: Native Plant Domestication.* Presentation and hands-on activities presented to school groups at the annual Living Archaeology Weekend, Kentucky Archaeological Survey, Red River Gorge, KY, 2016, 2017

**Nuts about Hickory: The Importance of Carya spp. to Prehistoric Kentucky Hunter-Gatherers. Blog** post written for Kentucky Organization of Professional Archaeologists Kentucky Archaeology Month, 2016

*The Archaeological Heritage of Iringa Region, Tanzania* (with Katie Biittner, Pastory Bushozi, Benjamin Collins, and Pamela Willoughby). Poster and pamphlets prepared in English and Swahili for distribution to schools, government agencies, and villages in southern Tanzania for the Iringa Region Archaeological Project, University of Alberta, 2010

### **TEACHING EXPERIENCE**

#### **Courses Taught**

Graduate Student Instructor, University of Kentucky (Lexington, KY), 2021

What Makes Us Human? Introduction to Anthropology

Adjunct Instructor, University of Rio Grande/Rio Grande Community College (Rio Grande, OH), 2013-2015, 2021-present

- Anthropology
- Introduction to Social Sciences

#### **Courses Assisted**

Teaching Assistant, University of Kentucky (Lexington, KY), 2017-2018, 2019

- Archaeology: Mysteries and Controversies
- Introduction to Biological Anthropology
- Cultural Diversity in the Modern World

Teaching Assistant, University of Alberta (Edmonton, AB), 2008

Race and Racism in the Modern World

### PROFESSIONAL AFFILIATIONS

Member, Southeastern Archaeological Conference Member, Association for Environmental Archaeology Member, Society for Economic Botany

## AWARDS, GRANTS, & SCHOLARHSHIPS

Fellowship, Anthropology Department, University of Kentucky, 2021 Conference Travel Grant, Anthropology Department, University of Kentucky, 2020 Royster Award of Special Distinction, University of Kentucky, 2015-2018 Small Research Grant, Association of Environmental Archaeology, 2018
Legacy Graduate Travel Award, Department of Anthropology, University of Kentucky, 2018
Conference Travel Grant, Anthropology Department, University of Kentucky, 2018
Professional Development and Travel Grant, University of Alberta, 2009
J. Gordin Kaplan Student Travel Award, Faculty of Graduate Studies and Research, University of Alberta, 2009
Graduate Intern Tuition Supplement, Department of Anthropology, University of Alberta, 2008
Sun Devil Scholarship, Arizona State University, 2005-2007
Stephen McGhee Family Scholarship, Gallia County, Ohio 4-H, 2005

## **ADDITIONAL TRAINING**

Occupational First Aid and Adult CPR (2021) and Bloodborne Pathogens (2022) training, American Red Cross Third Annual Integrated Microscopy Approaches to Archaeobotany workshop, University of Reading, England Semester-long independent study in macrobotanical analysis with Dr. Renée Bonzani, University of Kentucky Field School for Quaternary Paleoanthropology and Prehistory of Southeastern Spain