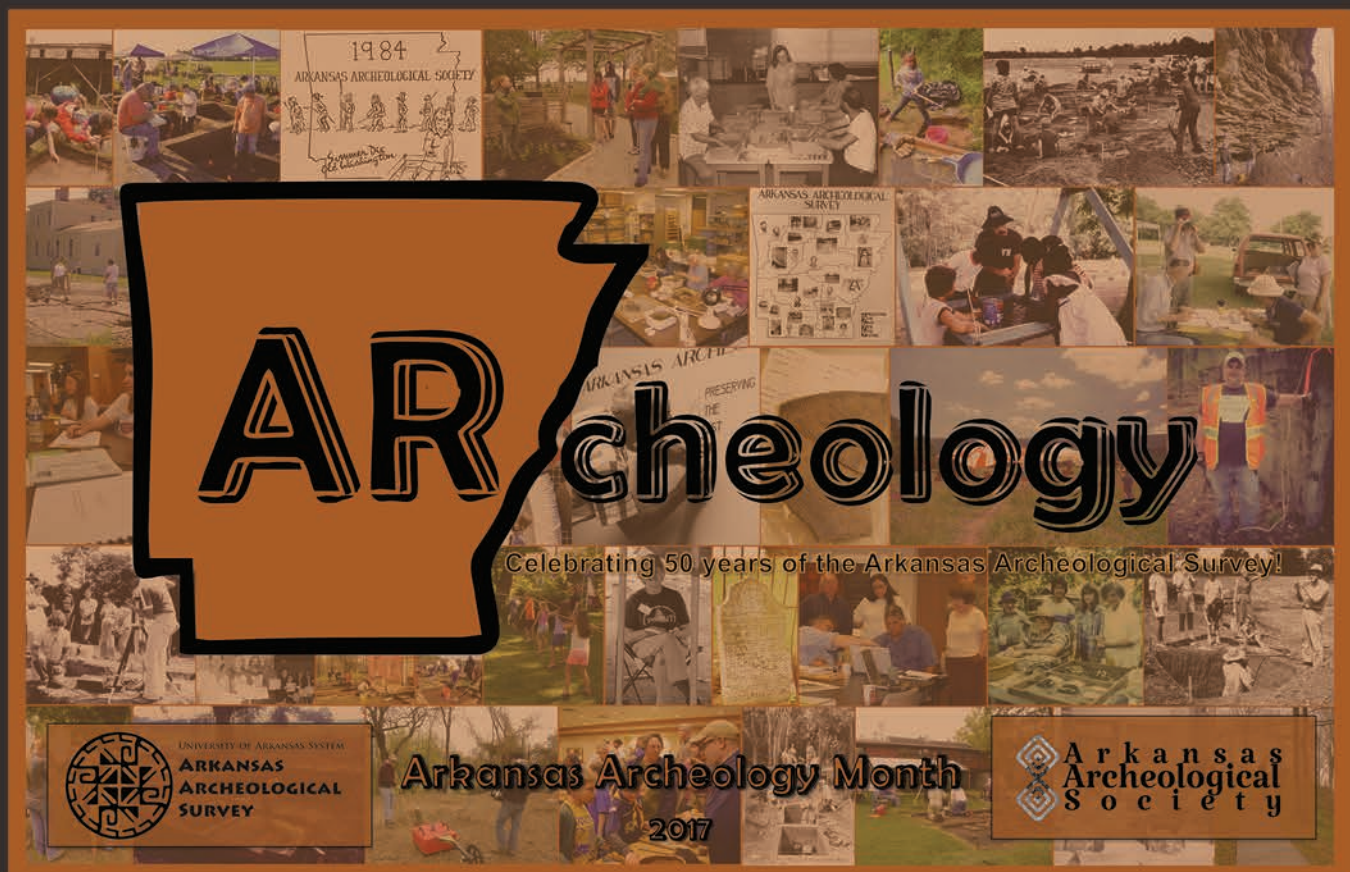


Arkansas Archeological Survey

Annual Report 2016–2017



A Division of the University of Arkansas System

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Annual Report for fiscal year 2016–2017



A Division of the University of Arkansas System



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University of Arkansas System

Arkansas Archeological Survey

INTRODUCTION

The Arkansas Archeological Survey (ARAS) is a part of the University of Arkansas System. Our mission is to study and protect archeological sites in Arkansas, to preserve and manage archeological information and collections, and to communicate what we learn to the people of Arkansas. Cooperative agreements with seven state university campuses, two state parks, and the UA System's Winthrop Rockefeller Institute enable scholars at research stations around the state to carry out this mission. The Survey has been a model for state-wide archeological programs in the United States and around the world.

Our coordinating office (CO) in Fayetteville is the ARAS administrative body. The Director, the State Archeologist, the ARAS registrar, the fiscal office, publications staff, and outreach programs operate from the CO. The registrar maintains a central archive of all archeological site records for the state. The coordinating office building also contains the University of Arkansas Museum Collections Facility. The Survey acts as a repository for archeological collections originating from state and federally funded projects in Arkansas, our own research, private consulting firms, and donations. Also at the coordinating office are our sponsored research program (SRP) and computer services program (CSP) which support themselves in part through grants, contracts, and cost-share agreements with local, state, and federal agencies. The CSP maintains several websites with educational information on Arkansas archeology and frequently updated stories about our projects. The CSP also supplies research support through our archeogeophysical program, employing the latest technologies for nondestructive detection of subsurface features at archeological sites.

Professional archeologists at our research stations teach college courses in anthropology and assist their university museums, or develop materials for public interpretation at the state parks, in addition to conducting basic research in their areas. Survey archeologists help to increase our knowledge of the past and its relationship to the present by working closely with local, state, and federal government agencies, American Indian tribes, college students, school teachers and K-12 students, tourists, fellow scholars, land owners and managers, amateur archeologists, and all Arkansas residents interested in archeology, prehistory, and the early history of the state.

At the Survey, science and service go hand-in-hand.

George Sabo III, Ph.D.
Director

ARKANSAS ARCHEOLOGICAL SURVEY



The original Arkansas Archeological Survey research station territories and personnel, 1968/69.



Frank Schambach, Hester Davis, Burney McClurkan, Jim Scholtz, Martha Rolingson, Bob McGimsey, Ken Cole, Dan Morse, and John Huner.

50 Years of Science & Service

Since its inception in 1967, the Arkansas Archeological Survey (ARAS) has earned national and international recognition as a model organization for research, information management, and public education about archeology. We serve Arkansas by providing high quality scientific work and teaching, yet we have remained accessible to the amateur archeologists, American Indian tribes, land owners and managers, teachers and students, business community, and governmental departments and agencies with whom we work. All share a dedication to cultural heritage and learning.

The Arkansas Archeological Survey came about through the combined efforts of a few dedicated professionals, especially Charles R. McGimsey III, our first Director, and Hester A. Davis, Arkansas's first State Archeologist, together with the diligent efforts of hundreds of Arkansas citizens (members of the newly formed Arkansas Archeological Society) who knew the value of protecting the state's archeological sites and the irreplaceable knowledge of a rich and varied prehistoric and early historic past, plus the work of visionary Arkansas legislators.

In 2017 we celebrated our 50th anniversary. Cognizant of our mission, in marking the half-century milestone, we chose mainly educational celebrations. A series of brief articles on our website called "50 Moments in Survey History" describes some of our efforts and accomplishments over the years. We cooperated with Arkansas Archeological Society to present a special retrospective panel discussion at that organization's 2017 Annual Meeting in North Little Rock, "Arkansas Archeological Survey 50 Year Anniversary: What Have We Learned in 50 Years?" And for professional audiences, a symposium at the 2017 Southeastern Archaeological Conference, "Archaeology Matters: Celebrating 50 Years of Public Archaeology" celebrated the history of the Survey and its influence. We have accomplished much, but there is much more to do.

Scientific Achievements & Archeological Mission 2016–2017

- Survey staff authored or coauthored **36 publications and reports**, and presented **42 papers or posters at meetings and conferences** in 2016–2017.
- The Survey's **AMASDA database (Automated Management of Archeological Site Data in Arkansas)** is **one of the oldest and best computerized site file systems in the country**. Our computer services program and registrar's office personnel are constantly working to expand and upgrade the AMASDA system to add new functionality. With the help of a major grant from the Arkansas Highway and Transportation Department, the system is now available online (password protected) for qualified researchers.
- **495 new archeological sites** were recorded, bringing the total number of sites in Arkansas site files to **48,779**.
- **224 new archeological projects** were entered into the database, bringing the projects total to **7071**.
- The Survey registrar facilitated **1225 requests for information** from the Arkansas site files by students, researchers, and project managers. We assisted **Local, State, and Federal entities**, six **American Indian Tribes**, and **44 private firms** conducting projects in Arkansas.
- We conducted projects supported with **new funds generated by grants and cost-share agreements totaling \$119,697**.

Volunteer participation in our projects, totaling **11,970 hours**, continued to show a high level of interest in archeology.



Assistant registrar Teka McGlothlin entering project data into AMASDA.

• Digital Data Collection Initiative.

A DDCI working group within ARAS led by Carl Drexler (ARAS-SAU) is developing an “action plan” to transition us from paper records filled out by hand to use of a digital platform for creating all of the records collected during fieldwork and uploading those records from the field to our servers. This involves making digital versions of the many forms we use (excavation unit level records, feature forms, profile forms, Field Serial Number log sheets, photo record sheets, special sample forms, etc.), selecting associated hardware platforms (weatherized tablets for use in the field), and developing software for uploading the data. Other members of the group are Elizabeth Horton (ARAS-TMRS), Jamie Brandon (ARAS-UAF), Emily Beahm (ARAS-WRI), John Samuelson (ARAS-CSP), and Teka McGlothlin (ARAS-Registrar).

- Our **Publications Program** is active with a new Research Series volume published in 2016, another scheduled for the fall of 2017, and two more volumes accepted (one in production and one undergoing author revision).
- In conjunction with our 50th year, we embarked on a major initiative to create a systematic archive of all our accumulated project documentation, including digitization of paper records for long-term preservation. We also started to inventory and organize our collections at the coordinating office and all ten research stations to ensure that records are complete and storage is according to modern curatorial standards.

Archeological Projects Around Arkansas 2016–2017

- The Survey is developing a new organizational focus on **the study of early agriculture in Arkansas and the Southeast**, and public education about this topic.



Our new ***Gathering, Gardening, and Agriculture: Plant-based Foodways in the Southeastern United States*** 5th grade social sciences curriculum was made available this year. This lesson and instruction package is aligned with the 5th grade Arkansas Department of Education (ADE) Social Studies Curriculum Framework. It promotes the use of archeology in social studies education in Arkansas's public schools. Each year, hundreds of 5th grade educators teach their students about pre-Columbian societies and early European exploration in North America, a period known largely through archeology. Archeology is a scholarly discipline that integrates elements of social studies, humanities, and science to reconstruct and study past human communities. Because of its interdisciplinary nature, many upper elementary and secondary educators find archeology an engaging way to teach social studies, history, and science. This curriculum offers lessons and activities to help teachers and students explore pre-Columbian societies and early European exploration, while highlighting specific sites and events in Arkansas.

Plants are vital to our everyday lives as the foundation for diverse habitats. Archeologically, plants provide a lens into past social and cultural changes. People have a long and complicated history of plant use. Plants are and have been vital to people for food, for medicine, as a raw material resource for building homes or boats, and for making tools. As critical parts of our foodways, plants not only fulfill nutrient needs, they teach us about culture, history, and economics. Biologically, people need food to survive, but what we eat is part of our history and culture.

The ancient use of plants is an important part of Arkansas history. Arkansas, along with the surrounding mid-South region, is one of only ten world centers of independent crop domestication. Preserved plant remains excavated from dry bluff shelters in the Arkansas Ozarks (and now curated at the University of Arkansas) represent most of the evidence supporting this identification. The new curriculum is designed in part to celebrate this important aspect of our past.

Our curriculum package is available for free as downloadable PDF lessons and classroom materials and PowerPoint presentations, along with background material for teachers, on a dedicated website that is easily accessible at our main website. We also have printed copies of a workbook available on request at no charge. Teacher workshops can be arranged and presented periodically to help implement this curriculum. See <https://archeology.uark.edu/gga/>

***Gathering, Gardening, and Agriculture* was awarded Preserve Arkansas's 2017 Excellence in Heritage Preservation Award.**



Jodi Barnes introduces a Teacher Workshop, held at WRI, for the GGA curriculum.



We now have research and teaching gardens at three locations, Toltec Mounds, Parkin, and WRI:

- **The Plum Bayou Garden** at Toltec Mounds Archeological State Park is the first such project to celebrate and teach about the indigenous plants that were domesticated locally and cultivated by Native people in the eastern United States. It is in its second full year and is a permanent feature at the Park.
- **The Mississippian Garden** at Parkin focuses on the “three sisters” crops (corn, beans, squash) imported from Central America that formed dietary staples of the later Mississippian cultures that dominated pre-Columbian economies at the time of European arrival, and that contributed much to the Columbian Exchange.
- The gardens at WRI include both **Mississippian and Woodland Native American Teaching Gardens**, and offer visitors a chance to engage in gardening activities, including experimenting with a replicated set of implements.
- **2017 marks the 50th anniversary of the formation of the Arkansas Archeological Survey.** To celebrate a half century of fulfilling our mission to serve the state of Arkansas and its people by working to study, preserve, and teach about our history and archeological heritage, we decided to develop a series of short articles on our website. The “50 Moments” series presents many of our significant accomplishments, things we have learned, and major milestones of the Survey’s development from a small but determined organization to a slightly larger and equally determined one. We’ve faced challenges along the way, but this series illustrates how we’ve persisted. The **50 Moments in Survey History** stories can be read here: <http://archeology.uark.edu/who-we-are/50moments/>.
- **Other anniversary projects** were “Arkansas Archeological Survey 50 Year Anniversary: What Have We Learned in 50 Years?,” a panel discussion at the 2017 annual meeting of the Arkansas Archeological Society (moderated by John House, ARAS-UAPB), and “Archaeology Matters: Celebrating 50 Years of Public Archaeology,” a symposium at the 2017 annual meeting of the Southeastern Archaeological Conference (organized by Jodi Barnes, ARAS-UAM).
- The Survey has partnered with **National Park Service, Midwest Archeological Center**, to conduct archeological inventory at **Pea Ridge National Military Park**. This is a projected four year project. In 2016 geophysical survey, Geographical Information System (GIS) spatial analysis, and artifact collection took place at Ruddick’s Field Civil War Battlefield within the park. In 2017, geophysical survey, GIS, and excavations at Leetown, a Civil War era civilian hamlet, were carried out in conjunction with a University of Arkansas Archeological Field School. Preceding the field school, Survey personnel participated in the NPS-sponsored workshop *Current Archeological Prospection Advances for Non-Destructive Investigations in the 21st Century*. Staff from ARAS-UAF, ARAS-SAU, ARAS-SRP, and ARAS-CSP have been involved in the NPS-supported Pea Ridge project, with Jami Lockhart directing the geophysical aspect.
 - With an emphasis on Civil War era sites, and some home-front sites of the World War 1 & 2 years, **Conflict Archeology** is another emerging research focus within ARAS. Carl Drexler (ARAS-SAU) has a long-term research interest in this topic and experience in battlefield archeology, and has been exploring a number of **Civil War related sites** in southwest Arkansas (Elkins’ Ferry, Dooley’s Ferry, Wallace’s Ferry). Projects in northwest Arkansas (aside from Pea Ridge) have included investigations at Prairie Grove Battlefield State Park, Van Winkle Mill and homestead sites in Hobbs State Park, Cross Hollows, Mt. Comfort Church, and other sites, involving the efforts of ARAS-UAF station staff Jamie Brandon and Jerry Hilliard, as well as geophysical director Jami Lockhart, and others.



Jami Lockhart (left) during NPS workshop at Pea Ridge.

In southeast Arkansas, Jodi Barnes (ARAS-UAM) has worked at **Camp Monticello**, which served as an Italian prisoner-of-war camp during WWII. Also this year, Drexler became involved in efforts to establish safe procedures for dealing with unexploded ordnance unearthed at archeological contexts or during development. Often these objects can be handled in a way to gain information from them, rather than treated as imminent hazards to be destroyed.

- We published two books in our Research Series during 2016 and 2017. *Research, Preservation, Communication: Honoring Thomas J. Green on His Retirement from the Arkansas Archeological Survey* (RS67), edited by Mary Beth Trubitt, was published at the very beginning of the 2016–2017 fiscal year. This volume is based on papers presented at a 2014 symposium organized by Trubitt at the annual meeting of the Society for American Archaeology and is organized on the theme of the Survey's tripartite mission to study archeology, preserve site data and collections, and educate and inform the public. It contains 13 essays by 20 contributors, including 6 currently associated with the Survey. *The Battle Mound Landscape: Exploring Space, Place, and History of a Red River Caddo Community in Southwest Arkansas* (RS68), by Duncan P. McKinnon, was published in early fall of 2017. Most of the work on this volume had been completed by the end of the fiscal year, leaving only final corrections, cataloging, and printing. A revised version of McKinnon's doctoral dissertation, this volume brings together archeogeophysical and archeohistorical data from the Battle Mound site to examine Caddo community structure and landscape use.



RS67 volume editor Mary Beth Trubitt with ARAS Director emeritus Tom Green.

- ARAS works in cooperation with several of our host campuses to aid research at historic properties owned by the universities as these properties are developed for teaching and other purposes. UAFS owns the **Drennen-Scott Historic Site** in Van Buren, Arkansas and recently purchased the **Willhaf House**, also in Van Buren. Tim Mulvihill leads ongoing archeological investigations at both properties to assist reconstructions at the properties. Drennen-Scott is used as a teaching lab for the Historic Interpretation degree program. Willhaf House will become a combination museum and the mid-20th century addition to the house will be renovated as the new UAFS research station headquarters. UAM owns the **Taylor House/Hollywood Plantation** and **Camp Monticello**. Jodi Barnes has led excavations at the Taylor property to aid in reconstructions of the antebellum plantation home. Her investigations at Camp Monticello resulted in publications and a documentary film.
- Last year with funds from the Elfrieda Frank Foundation, excavations on top of the mound at the Parkin site were carried out to re-locate and remove the remnants of a wooden stump thought to represent the base of a **large Christian cross erected by Hernando de Soto's men in 1541**. It was hoped that dendrochronology (tree ring dating) could determine the exact year the wooden post was cut and placed in the ground, thus reinforcing the other evidence that Parkin is the town of Casqui written about in accounts left by participants of the Soto expedition. That proved impossible, as the stump was too decomposed; however, the wood was identified, and samples were radiocarbon dated to a range consistent with the expedition, AD 1445–1650. The remainder of the wood is being stored in case future technological improvements can provide a more accurate date.

Tree-ring specialist and UA Professor of Geosciences Dave Stahle examines post remnant from the Parkin site.



- The Survey has been focusing new research attention on **Ozark bluff shelters**—those mostly dry rock shelter sites for which the area became archeologically famous in the early decades of the twentieth century. This new research is being undertaken mostly by the ARAS-UAF research station, with contributions by our paleoethnobotany specialist at ARAS-TMRS and other staff members. Grant funding has supported a number of projects allowing a reevaluation of collections from old excavations often left languishing for many years without any detailed inventory or study. Here are some of the developments:
 - **Bluff Shelters of the Arkansas Ozarks** (<https://archeology.uark.edu/ozarkbluffshelters/>) is a new public-oriented website written by Lydia Rees, with assistance from Jamie Brandon and Elizabeth Horton. It offers the basics about these sites on a broad range of topics and includes a “News” section to keep people up to date on new research and events, including tours and lectures for the public.
 - **Saltpeter Cave** was excavated by the Survey in 1969 and 1970, after previous visits in the 1930s by the University of Arkansas Museum. It is a deep, stratified bluff shelter that is important for the fact it was excavated scientifically. However, the records and collections of the Survey’s work 47 years ago had never been studied or written up. With support of a grant from ANCRRC, Jamie Brandon (ARAS-UAF) worked with Jared Pebworth and Lydia Rees (ARAS-SRP) to rehabilitate, reorganize, and inventory the records and collections, including scanning for a digital archive. Then they photographed and analyzed a portion of the artifacts. Associated charcoal samples with the best diagnostic contexts were selected for radiocarbon dating. Saltpeter allows a glimpse back at the way of life in Arkansas 8000 years ago.
- **The Mulberry River Project** is a cooperative undertaking with the **Ozark-St. Francis National Forests** to investigate sites in Forest Service-owned tracts along the Mulberry River in Franklin County, northwest Arkansas. Limited existing information about the sites was augmented in 2016–2017 with geophysical survey, backhoe trenches to understand the geomorphology, and test excavations on a few of the geophysical anomalies. Then **our joint summer Training Program with Arkansas Archeological Society** was carried out at two sites, 3FR46 and 3FR58. They date to the Woodland and Mississippi periods, for which relatively few open air sites have been excavated in this part of the state. Results of the project added a new site type to the cultural landscape: one that concentrated on agricultural storage (there was a large grass-lined pit probably used for storing harvested produce) and manufacture of gardening hoes made from argillite (silicified siltstone). This collaborative project with USFS is producing new information on ancient plant use and habitat management that will lead to more accurate **native habitat restoration** projects in the National Forests.
- **Ouachita Caddo lifeways** are the subject of long-range research projects by ARAS-HSU researcher Mary Beth Trubitt and her assistants. Studies have included investigations of novaculite quarry sites, resulting in the “Arkansas Novaculite” website and other products, including a book coauthored with Anne S. Dowd, *Extracting Stone: The Archaeology of Quarry Landscapes*, that will be published by Oxbow Books as part of their American Landscapes series. Excavations at various habitation sites have produced a body of data on plant and animal resource use in the Saline and Ouachita river valleys. These studies stretch back to the Archaic period and through more recent Woodland and Mississippian cultural periods. This research uses architecture, foodways, and material culture to interpret social identity and community interconnections in the Ouachita Mountains.



JoJo Houff, from Pennsylvania, shovel-shaving around a feature at 3FR46 during the Mulberry River Training Program.

- An article in *The Arkansas Archeologist* by John House (ARAS-UAPB) presents **comparative archeological data from 110 excavated Native American structures in eastern Arkansas**. It is the most comprehensive study of architecture for the Mississippi (AD 900–1550) and Protohistoric (AD 1550–1700) periods in this area. The data, mostly derived from published sources, are from 33 sites and include both ceremonial and domestic structures. House compares size, orientation, shape, and construction technology, forming conclusions that associate circular buildings with ceremonial functions (although circular domestic houses were seen in southeastern Arkansas in a manifestation known as Plaquemine culture). This article represents an important distillation of existing information about Mississippi and Protohistoric period architecture in Arkansas and will be a standard reference for years to come.
- The **Arkansas Fluted Point Survey** is a project by Julie Morrow (ARAS-ASU) and her assistants to collect information about fluted points in Arkansas, and thus improve our knowledge of Paleoindian presence in the state. The site files indicate 136 known sites where one or more fluted point types have been found. Most fluted points in North America have only a vague provenience (county-level) because they were found by non-professionals and kept in private collections without records. This gives some information to help track Paleoindian movements on the landscape 13,000 years ago, but Morrow and her team hope eventually to find intact Paleoindian sites that will tell much more about life at the end of the Ice Age. The Fluted Point Survey involves visits to record detailed measurements of Paleoindian artifacts and as much provenience data as possible. Morrow has accumulated similar data for fluted points across the eastern United States for a comparative context.



Some examples of fluted points from Arkansas.

Contributions to Higher Education in Arkansas

- **George Sabo III**, Survey Director since 2013 and **Professor of Anthropology**, serves as **Co-Director of the Environmental Dynamics Interdisciplinary Ph.D. Program**, which is part of The Graduate School and International Education at the University of Arkansas.
- Ten Survey archeologists held **research faculty titles in the Department of Anthropology** at the University of Arkansas in 2016–17: Jodi Barnes, Emily Beahm, Jamie Brandon, Carl Drexler, Ann Early, Elizabeth Horton, John House, Jami Lockhart, Jeffrey Mitchem, Juliet Morrow, and Mary Beth Trubitt.
- Survey archeologists **taught 19 courses to 276 students at 7 university campuses** in Arkansas (UAF, UAPB, UAM, UAFS, ASU, HSU, and SAU).
- Courses taught by Survey archeologists fulfilled **basic education requirements** and contributed to **several undergraduate majors and graduate degree programs** at Arkansas universities, including Anthropology, History, Geosciences, and Environmental Dynamics at UAF; Heritage Studies at ASU; Historic Interpretation Program at UAFS; and African Studies at UAPB.
- Survey archeologists contributed numerous **guest lectures, demonstrations of geophysical technologies, field and lab instruction including mapping, ethnobotanical, and other specialized processing, and tours of facilities** to college and university students in Arkansas.

- Elizabeth Horton (station archeologist at Toltec Mounds) participated with Dr. Krista Lewis (UALR) in the **Land of Frankincense Archaeological Project at Al Baleed**, a UNESCO Heritage site in Oman.
- Survey archeologists served on **20 thesis or dissertation committee positions (member or chair) for UAF graduate students** in Anthropology and Environmental Dynamics, **1 committee for an HSU student's MLA committee**, and **2 graduate committees for out-of-state institutions** (Southern Illinois University at Carbondale and Texas Tech University).
 - In addition Survey archeologists serve on **4 undergraduate Honors committees** at UAF, 1 at ASU, and as mentor for a UAM undergraduate working on an individualised undergraduate minor in Anthropology.
- Survey archeologists at all research stations and the coordinating office provided opportunities for **hands-on research experience** in archeological fieldwork and laboratory analysis for undergraduate and graduate students at host campuses.
- The Survey provided **employment to students at UAF, UAFS, and UAM**.
- **Additional service to Arkansas college and university campuses** included:
 - participation in course and program development for host departments
 - membership on campus and departmental committees, curatorial functions and exhibit development for campus museums and libraries
 - assistance with historic properties and collections owned or managed by the universities – e.g., the Joint Educational Consortium's Hodges Collection (HSU); Lakeport Plantation (ASU); Drennen-Scott Historic Site (UAFS); Willhaf House (UAFS); Camp Monticello (UAM); the Taylor House/Hollywood Plantation (UAM); development of SAU Museum; ongoing UA Museum Collections research and on-campus exhibit development (UAF); and more
 - ARAS Director George Sabo served as Curator for a new permanent exhibit "Arkansas Native Americans" installed at the Arkansas Union on the UAF campus using artifacts from the University Museum Collections



UA graduate student Victoria Jones and undergraduate Jamie Middleton mapping Walker Shelter.

Graduate Student Research

The Arkansas Archeological Survey supports graduate students working on internship, thesis, and dissertation projects both at the Coordinating Office and at our research stations. Support is provided through employment when available and for assistantships paid out of our base funding and through grants or other special project funds. We also work closely with the Anthropology Department and the J. William Fulbright College of Arts and Sciences at the University of Arkansas to host students who receive support through the Hester A. Davis Internship in Public Archeology and the Charles R. McGimsey III Endowment for Cultural Resource Management. Our graduate students work on a wide variety of research, preservation, and educational initiatives and thus make valuable contributions to our mission within the University of Arkansas system.

- **Jessica Cogburn** has been a graduate student at the University of Arkansas since August 2014. Prior to that, she was the station assistant for the Arkansas Archeological Survey's research station at the University of Arkansas at Monticello campus. As the Survey's graduate assistant in Fayetteville, she has been working on a database for the State Historic Preservation Office regarding archeological site eligibility for the National Register of Historic Places. Her dissertation research focus is on late prehistoric and protohistoric sites in the Central Arkansas River Valley. She will be analyzing collections from a number of sites in this region, primarily focusing on the Isgrig site (3PU15), which is located south of Little Rock.
- **Michelle Rathgaber** is a Ph.D. student in the Environmental Dynamics program. Her research focuses on the New Madrid earthquakes in NE Arkansas/SE Missouri and how they may have affected life there in the Middle-Late Mississippian cultural period (around AD1200s–1500s). She will be using archeological excavations at two sites (Manley-Usrey and Eaker) as well as larger scale views of the landscape and environment of the area to try to see the effects of the large-scale New Madrid earthquakes on how and where people were living. She is being funded by a Distinguished Doctoral Fellowship as well as a graduate assistantship through the Arkansas Archeological Survey.
- **John Samuelson** is a Ph.D. student in the Anthropology Department at the University of Arkansas. He is employed full-time at the Survey coordinating office as server administrator in our computer services program. John's dissertation research involves strontium and lead isotope analysis of samples from a unique skull and mandible cemetery at the Crenshaw site in the Caddo Archeological area of southwest Arkansas to help determine whether the people buried were of local origin, and thus if this was part of a local burial ceremonial practice. He has successfully tested an extractive process on the University of Arkansas campus to lower costs. With permission of the Caddo Nation of Oklahoma, he is preparing a National Science Foundation grant proposal for further analysis of the remains. This project will aid the Caddo Nation in determining the cultural affiliation of the human remains at the site.

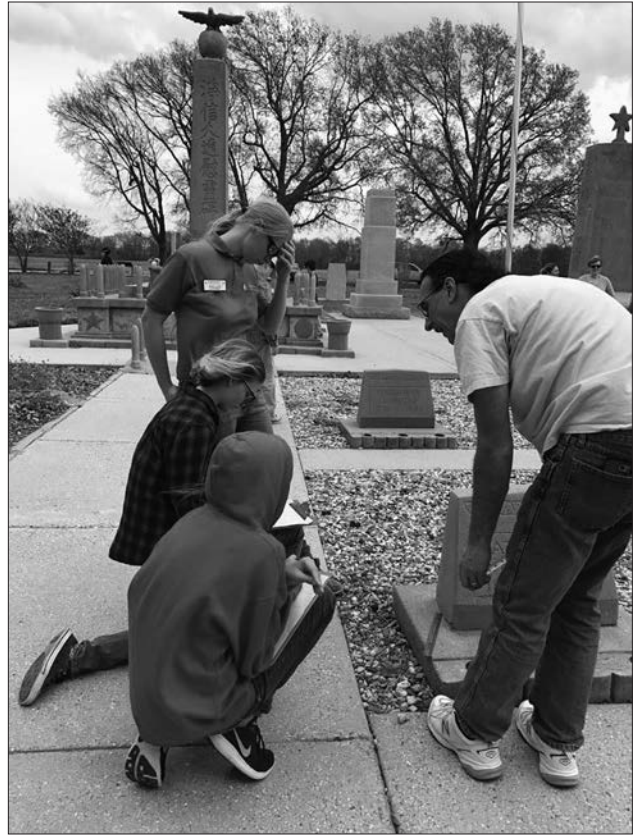
Contributions to Public Schools and K-12 Education 2016–2017

- **Gathering, Gardening & Agriculture – new 5th Grade Social Sciences Curriculum.** With funding from multiple sources (the Southeastern Archaeological Conference, the Arkansas Archeological Society, the Arkansas Humanities Council, and the National Endowment for the Humanities), several ARAS staff developed a 5th grade social sciences curriculum that is now available free on the ARAS website. Lesson plans, exercises, and PowerPoints may be downloaded directly from the Gathering, Gardening, and Agriculture webpages, which also include background information and updates on Teacher Workshops we will offer to help educators implement the curriculum. A hardcopy workbook is also available to Arkansas educators on request. The package conforms with the Arkansas Department of Education (ADE) Social Studies Curriculum Framework. Team partners in the project are Jodi Barnes (ARAS-UAM), Emily Beahm (ARAS-WRI), and Elizabeth Horton (ARAS-TMRS). The curriculum presents the history of early Arkansas through the diverse uses of plants, foodways, and plant-based traditions of Native Americans, European settlers, and African Americans, presenting archeological evidence from Arkansas to illustrate and to show how scientific techniques can explore these topics. <https://archeology.uark.edu/gga/>
- Among the other unique and creative educational activities that Survey archeologists were involved with this year:
 - **Project Dig.** ARAS-WRI station staff, cooperating with WRI Program Coordinators, again presented Project Dig, a program for Gifted and Talented students that uses archeological concepts and active learning to teach critical thinking and the scientific method. About **50 students** from Dardanelle, Perryville, Hector, Pottsville, and Dover participated, along with their teachers and some parents.
- The Survey continues to develop **educational Internet resources**, now including interactive websites — *Rock Art in Arkansas* and *Indians of Arkansas* — our new *Ozark Bluff Shelters* website written by Lydia Rees and Jamie Brandon, *Arkansas Novaculite: A Virtual Comparative Collection*, a website written by Mary Beth Trubitt for researchers and more advanced students, plus our redesigned main website with information about the Survey's research and outreach programs.
- We offer a series of **educational fliers** on many topics available as downloadable PDFs that can be used for teacher preparation or as classroom handouts.
- Survey archeologists gave **talks and demonstrations** on archeology, American Indians, and early Arkansas history, including **Career Day** presentations, Project Dig, and tours at our main office, to **approximately 800 K–12 students** and their teachers at schools, parks, and nature centers across the state.

- ARAS staff participated in 4H “**Day of Archeology**” camps at Historic Washington, Rohwer Japanese American Relocation Center, Helena/West Helena, Cass, Arkansas (Mulberry River Archeology Project), and State 4H O’Rama Workshop at the Survey coordinating office. A total of **119 youth and 38 adults** learned about archeology in Arkansas at these events.

Public Service and Outreach 2016–2017

- The Survey works closely with **state and federal agencies** whose responsibilities under environmental and cultural preservation statutes include the management and protection of archeological sites:
 - Arkansas Highway and Transportation Department
 - Arkansas Department of Parks and Tourism/Arkansas State Parks
 - Arkansas Game and Fish Commission
 - Department of Arkansas Heritage and the Arkansas Historic Preservation Program
 - National Park Service
 - USDA Forest Service
 - U.S. Natural Resources Conservation Service
 - U.S. Army Corps of Engineers
 - U.S. Fish and Wildlife Service
 - Jamie Brandon (ARAS-UAF) taught a Heritage Resource Technician training workshop for Ozark National Forest.
 - Survey staff from UAF and SAU research stations and the CSP and SRP at the coordinating office in Fayetteville participated with staff of the Midwestern Archeological Center to conduct a National Park Service-sponsored training workshop “Current Archeological Prospection Advances for Non-Destructive Investigations in the 21st Century,” at Pea Ridge National Military Park.
- We continued our **NAGPRA compliance program** in cooperation with several American Indian Tribes. The federal Native American Graves Protection and Repatriation Act (NAGPRA) requires institutions such as museums and universities to inventory their archeological and ethnographic collections of human remains, funerary objects, sacred artifacts, and items of cultural patrimony. These remains and objects must be repatriated to modern representatives of the appropriate culturally affiliated American Indian Tribe. The Survey’s activities are essential for compliance with this federal law. We also curate, under contract, collections owned by various government entities that are subject to NAGPRA.
 - Ann Early prepared a successful grant extension proposal that allowed the Survey to spend the final \$12,000 remaining from the previous grant cycle to document and prepare notices of inventory completion for a new group of human remains and funerary objects. Upon completion, the Survey will be in full compliance with NAGPRA requirements early in FY 2017–18. Early supervised graduate student Sarah Shepard, who completed the work in the ARAS Registrar’s office.
- **83 public lectures, workshops, and other presentations** by Survey staff reached audiences of **2000** Arkansans. Staff participation in **10 archeology fairs and community events or festivals**, reached audiences of over **1000**.
- 110 members of the Arkansas Archeological Society attended our jointly sponsored annual **Training Program for amateur archeologists**. The 2017 “**Society Dig**” on two sites along the Mulberry River in the Ozark National Forest near Cass, Arkansas was a cooperative research project with the Forest Service, the Society, and the Survey. Tim Mulvihill (ARAS-UAFS) and Mary Brennan (Ozark National Forest) directed fieldwork, while Jami Lockhart (ARAS-CSP) organized archeogeophysical survey prior to the excavations. Cass Job Corps personnel provided assistance and facilities. The field school excavations uncovered evidence of a new type of site related to prehistoric agriculture in northwest Arkansas (see pp. 116 in this Report).



Mapping workshop at Rohwer World War II Japanese American Internment Cemetery as part of 4H Day of Archeology.

- Survey archeologists provided consultation and advice to groups and individuals working on projects to document and protect **historic cemeteries, especially African-American cemeteries.**
- Survey staff have contributed over **40 articles** and reviewed many others for the Butler Center's *Encyclopedia of Arkansas History & Culture*.
- Survey staff members respond to thousands of **requests for information** from members of the public every year, by telephone, email, and in person.
- Survey staff created or assisted with a number of **exhibits** around the state:
 - Elizabeth Horton and Katy Gregory (ARAS-TMRS) with assistance from Jodi Barnes (ARAS-UAM), worked with Capitol Historian David Ware to create and install an exhibit at the State Capitol called **"Gathering, Gardening, and Agriculture: 4000 Years of Foodways in Arkansas."** Featuring the Survey's developing research focus on early agriculture, our suite of experimental gardens, the new 5th grade social studies curriculum, paleoethnobotany and other specialties, the exhibit ran February through May 2017.



Photo taken by ARAS-HSU staff on a visit to Bryant Cemetery (3SA372).



Part of an exhibit at the State Capitol put together by our "Gathering, Gardening, and Agriculture" team in cooperation with David Ware, Capitol Historian.

- Mary Beth Trubitt and Chelsea Cinotto (ARAS-HSU) manage a **rotating exhibit at Huie Library on the HSU campus**. Three installations during the year were “Changing Technology in Archeology,” “Casas Grandes,” using Southwestern ceramics from the Sargent donation, and “1800s Artifacts,” with an array of historic finds from excavations at 3MN22.
- Chelsea Cinotto (ARAS-HSU) installed **an exhibit in the Garland County Library for Archeology Month** using ceramic vessels from the Sargent collection.
- A poster by Jodi Barnes (ARAS-UAM) about **archeology at Hollywood Plantation was part of the Chancellor’s Exhibit** at the UAM campus.
- George Sabo (ARAS Director) was curator for a temporary exhibit on “**Native American Storytelling**” at **Mullins Library** on the UAF campus.
- George Sabo was curator for a new permanent exhibit on “**Arkansas Native Americans**” installed at the **Arkansas Union** on the UAF campus.

Opening panel of the Arkansas Native Americans exhibit on the 4th floor of the Arkansas Union—exhibit designed by Todd and Tracy Johnson of Circa Digital Group and curated by George Sabo, with cooperation of the UA Museum Collections, members of the Tribes, and the campus Native American community.



- Assistance for other exhibit development was provided to the Commissioner for State Lands, Hampson Museum State Park, and Clinton Presidential Center (Ann Early); Delta Gateway Museum and ASU Museum (Julie Morrow); Parkin (Jeffrey Mitchem) and Toltec Mounds (Elizabeth Horton) State Parks; Nevada County Depot and Museum (Carl Drexler); Pine Bluff-Jefferson County Historical Museum (John House); Drew County Historical Museum (Jodi Barnes); and Shiloh Museum of Ozark History (John Samuelsen).
- Our new **website was launched in July 2015**. Designed and implemented by our own Computer Services Program staff (Deborah Weddle and John Samuelsen), the new website offers a modernized, graphic home page with a simpler and more effective menu structure that is easier to navigate, and a new concept for rotating content that emphasizes delivery of interesting information about archeological research and discoveries in Arkansas, and provides educational materials for public and schoolroom use. We also maintain **popular educational websites for the general public and fellow scholars**.
 - With **91,000 page views and 23,000 sessions**, our main website at <http://archeology.uark.edu>, had a 28% increase in traffic over the previous year, and 1090% increase since its introduction two years ago.
 - Celebrating the Arkansas Archeological Survey’s 50th anniversary, we launched a “**50 Moments**” **web series** of weekly articles outlining our accomplishments and some of the things we have learned in 50 years of research, education, and service to the people and heritage of Arkansas.
 - **Indians of Arkansas** (<http://archeology.uark.edu/indiansofarkansas/index.html>) provides content and lesson plans about the Native Americans who have resided in Arkansas. It received over **100,000 page views and 39,000 sessions** in 2016–17.
 - **Rock Art in Arkansas** (<http://archeology.uark.edu/rockart/index.html>) is a companion website to our Popular Series book and provides articles, lessons, and a picture gallery covering one of Arkansas’s most important archeological landscape resources. It received **24,000 page views and 6700 sessions** in 2016–17.

- **Arkansas Novaculite: A Virtual Comparative Collection** (<http://archeology.uark.edu/novaculite/index.html>), authored by HSU station archeologist Mary Beth Trubitt and her associates, provides resources for the study of Arkansas Novaculite as a raw material that was exploited for toolmaking and trade since ancient times. It had over **12,000 page views and 6000 sessions** in 2016–17.
- A new website on **Bluff Shelters of the Arkansas Ozarks** (<http://archeology.uark.edu/ozarkbluffshelters/>) launched late in 2016–17, but garnered **8900 page views and 2900 sessions**. This public-oriented website was written by Lydia Rees (ARAS-SRP) and Jamie Brandon (ARAS-UAF) as part of an ANCRC-funded project to update and preserve excavation records from the 1930s and to provide information to the public.
- Also late in 2016–17 the new website for **Gathering, Gardening, and Agriculture** (<https://archeology.uark.edu/gga/>), our 5th grade social studies curriculum, was launched. This website was written by Jodi Barnes, Emily Beahm, and Elizabeth Horton, with technical assistance from Deborah Weddle and John Samuelsen. It had **1000 page views and 250 sessions**.
- **Survey staff work with local landowners** who are concerned about site looting and trespassing on their property. We respond to requests from concerned landowners to investigate and to recover information from sites that have been damaged by unauthorized digging.
- The Survey and its research stations increased the use of **social media** to provide information about Arkansas archeology, our projects and discoveries, and local volunteer opportunities.
- Survey staff serve on a number of **Boards and Commissions** in Arkansas and beyond:
 - Ann Early (State Archeologist): Department of Arkansas Heritage **State Review Board for Historic Preservation**, an appointment by the Governor of Arkansas, interim secretary; board member of the **Arkansas Genealogical Society**, and the **Arkansas Women's History Institute**; member of the **National Association of State Archaeologists**.
 - Jamie Brandon (UAF): Chair, **State Review Board for Historical Preservation**; board member, **Arkansas Humanities Council**; President (July–December 2016) and Secretary (January–June 2017), **Preserve Arkansas**; Vice-Chair, **City of Fayetteville Woolsey Farmstead Steering Committee**.
 - Jodi Barnes (UAM): President-Elect (July–December 2016) and President (beginning December 2016), **Preserve Arkansas**; board member, **Arkansas Preservation Foundation**; **Drew County Historical Society and Museum Commission**; **Arkansas Delta Endowment for Building Communities** (grant selection committee).
 - Carl Drexler (SAU): Board of Trustees, **Arkansas Historical Association**; board member, **Friends of the Arkansas State Archives**.
 - Jami Lockhart (CSP): **Northwest Arkansas Open Space Plan Steering Committee**.
 - Jeffrey Mitchem (Parkin): Advisory Board, **Alliance for Weedon Island Archaeological Research and Education**, St. Petersburg, Florida; Director-at-Large, **Florida Public Archaeology Network**.
 - Deborah Sabo and Marilyn Knapp (CO): Executive Committee members of the **Arkansas Archeological Society**.

Professional Service 2016–2017

- Survey staff provided **consultation, advice, or other assistance** to over **130** agencies, firms, museums, schools, parks, civic groups, and other bodies, in addition to service rendered to research station host institutions.
- Mary Beth Trubitt was named as **Editor** of the journal ***Southeastern Archaeology***.
- Survey staff served as officers, members of various committees, or in other service capacities for **professional organizations**:
Society for American Archaeology – Society for Historical Archaeology – Southeastern Archaeological Conference – Caddo Conference Organization – Florida Anthropological Society – Arkansas Historical Association
- The Survey posts **“Guidelines for Fieldwork and Report Writing in Arkansas,”** an appendix to the Arkansas State Plan, on its website for access by agency and private firm archeologists.

Grants & Cost-Share Agreements 2016–2017

- \$19,468.81 from the Elfrieda Frank Foundation to Jeffrey M. Mitchem for “The Search for Hernando de Soto’s Cross at Casqui.”
- \$1170 in 2015 from the Arkansas Archeological Society’s Archeological Research Fund to Jeffrey M. Mitchem, Timothy S. Mulvihill (ARAS-UAFS), and Jami J. Lockhart (ARAS-CSP) for “Radiocarbon Dates for the Richards Bridge Site (3CT11/22).”
- \$595 in 2016 from the Arkansas Archeological Society’s Archeological Research Fund to Jeffrey M. Mitchem, Timothy S. Mulvihill, and Jami J. Lockhart for “Radiocarbon Dates for the Richards Bridge Site (3CT11/22).”
- \$595 from the Arkansas Archeological Society’s Archeological Research Fund, awarded to Jamie Brandon, Lydia Rees, and Jared Pebworth, for an AMS radiocarbon date from 3NW29.
- \$595 from the Arkansas Archeological Society’s Archeological Research Fund to Robert Scott for “Dating Late Mississippian Tillar Phase Ceramics and Subsistence Remains in Southeast Arkansas,” AMS date for 3DR359.
- \$19,688 grant awarded to Jodi Barnes from ANCRC for “Continued Research at Hollywood Plantation: Monitoring, Analysis, and Public Education.”
- \$710 awarded by the Arkansas Archeological Society’s Archeological Research Fund to Mary Beth Trubitt and Katie Leslie for “Dating Architecture from the 2014 Society Training Program Excavations” (for botanical identification and AMS dating of a sample from 3MN298 Structure 2).
- \$30,324 from the Arkansas Historic Preservation Program for Archeological Survey of the Battlefield at Prairie D’Ane (Carl Drexler, principal investigator).
- \$46,992 from the National Park Service for “Archeological Inventory at Leetown, Pea Ridge National Military Park.”
- \$37,480 from ANCRC for “Preserving the Prehistoric Heritage of South Arkansas.”
- \$7520 from ANCRC for “Preserving and Interpreting Saltpeter Cave.”
- \$24,427 from ANCRC (through UAM) for “Investigations at Taylor House/Hollywood Plantation.”
- \$3278 from ANCRC (through UAFS) for “Investigations at the Willhaf House.”

Honors & Awards 2016–2017

- **2016 Certificate of Appreciation** in recognition of Archeological Programs to the Arkansas Archeological Survey from Desha County 4H.
- **2017 Forest Supervisor’s Award for Partners and Community Engagement** to Arkansas Archeological Survey and Arkansas Archeological Society from the Ozark-St. Francis National Forests.
- **Martha Rolingson**, Emerita Archeologist with Arkansas Archeological Survey, was inducted into the **University of Kentucky College of Arts and Sciences Hall of Fame**.
- **2017 Excellence in Heritage Preservation Award** from Preserve Arkansas to *Gathering, Gardening, and Agriculture: Plant-Based Foodways in the Southeastern United States*, a 5th grade social studies curriculum developed by ARAS.
- **2017 Outstanding Achievement in Preservation Education Award** from Preserve Arkansas to *Bluff-Shelters of the Arkansas Ozarks*, a new public-oriented website developed by ARAS.

Finding Creative Solutions to Persistent Challenges

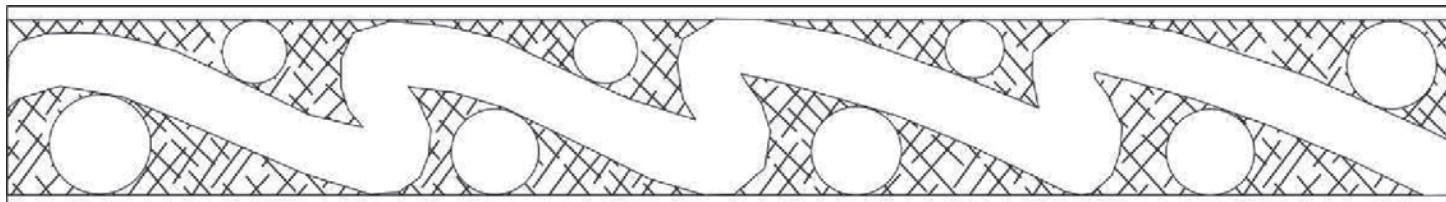
The Survey recognizes a number of ongoing challenges in fulfilling our mission of research, service, and education. We are committed to evaluating our programs from within and seeking ever more creative and more efficient ways to meet our goals.

- **Site Destruction.** Damage to sites and the loss of Arkansas’s irreplaceable archeological heritage due to changing land use patterns and vandalism remains an important issue.
 - The pressure of land development threatens sites in the state’s growth regions. Land-leveling for agriculture also destroys large numbers of sites. **The Survey works successfully with landowners and tenants to employ the latest technologies to rescue archeological information without impeding normal land use.**
 - Rock shelters in the Ozarks have increasingly been exploited as illicit methamphetamine labs, with attendant vandalism of archeological deposits. **The Survey works with various law enforcement agencies to assist investigations and prosecutions.**

- The State Archeologist, the Survey, and the Arkansas Archeological Society are working together to train more site stewards in the **Site Stewardship Program**; this program assigns a trained volunteer to monitor the condition of a particular site, with the permission and cooperation of interested landowners, and to perform occasional clean-up or erosion control.
- **The Archaeological Conservancy** purchased 8 archeological sites in Arkansas between 2001 and 2014. The Survey continues to work closely with the Conservancy to identify additional sites that can be secured for future preservation. This past year, **erosion control and rehabilitation of Cavanaugh Mound in Fort Smith** was completed.
- **Funding for Backlog of Reports.** It is often easier to obtain funding for the more “glamorous” fieldwork phase of an archeological project than for specialized laboratory work and report-writing. Yet, excavations mean little until what we learn from them becomes available to our colleagues, to students, and to the interested public. To support the “lab and desk work” necessary to bring our research to full fruition, the Survey has sought **grants from the Arkansas Natural and Cultural Resources Council. We have now completed 16 ANCR-supported reports on existing collections, leading to 3 major publications and a new website that is now online. We also have several graduate students working with previously excavated material for their thesis and dissertation projects.**
- **Public Education and Heritage Tourism Opportunities.** Even after 50 years of effort by the Survey, many Arkansans still do not know that Arkansas possesses archeological sites recognized for their importance by professionals throughout the United States and around the world. **We are improving how we tell the stories of Arkansas history and prehistory through the “voice” of archeology.**
 - We are producing more **educational materials using archeological examples to provide STEM and STEAM learning exercises** for mathematics, language arts, and science topics. This year, **we developed a new 5th grade social sciences curriculum “Gathering, Gardening, and Agriculture”** that is available for free to Arkansas educators on our website.
 - **We want to write more Popular Series books** for the general public and develop the educational content of our website. **Currently we are working to create Popular Series volumes on the Toltec Mounds and Parkin sites, new books on general Arkansas prehistoric and historic archeology, and a small volume on riverine boat wreck sites.**
 - Our **Indians of Arkansas website** is a significant educational resource for learning and teaching about archeology and anthropology in Arkansas and the South. A new website on **Bluff Shelters in the Arkansas Ozarks** was developed for the public this year.
 - Arkansas has only a few archeology-themed parks where the public can visit interpreted archeological sites. **We are working with State Parks, the Forest Service, and the National Park Service to develop archeological heritage tourism.**
 - For two years, **the annual Training Program sponsored jointly by the Survey and the Arkansas Archeological Society was held at the Richards Bridge site** near Earle, to investigate a Parkin phase village site that will contribute new information **for interpreting Parkin Archeological State Park.**
 - We now have **educational/experimental gardens** at three research stations exploring plant use in prehistoric and pioneer Arkansas—two of these are at state parks (Parkin and Toltec Mounds) and the other site is WRI.
 - We continue to provide archeological support for development at **Davidsonville, Historic Washington, Prairie Grove Battlefield, and other State Parks**, in addition to the regular programs of research at **Toltec Mounds and Parkin State Parks**, with new projects such as the **Plum Bayou Interpretive Garden at Toltec Mounds.**
 - Archeologists from the Survey’s coordinating office and UAF research station are conducting **investigations at Pea Ridge National Military Park in cooperation with the National Park Service Midwest Archeological Center.** New information about various parts of the battlefield landscape will aid interpretation at the Park. This is a federal Cooperative Ecosystem Studies Units (CESU) project. In addition, Carl Drexler (ARAS-SAU) has worked to **assist Civil War site preservationists in southwest Arkansas and other parts of the Southeast.**
 - Jami Lockhart and John House, assisted by staff from the coordinating office and UAPB station, joined archeologists from the Midwest Archeological Center of the National Park Service to conduct **new investigations at sites in the Osotuooy Unit of Arkansas Post National Memorial.** This study, also conducted under the federal Cooperative Ecosystem Studies Units (CESU) program, will increase our understanding of the development of Quapaw culture in eastern Arkansas and their interactions with early French settlers.
- **Budget Constraints and Institutional Issues.** Survey employees earn significantly less than their comparably qualified colleagues at universities, federal agencies, and private Cultural Resource Management firms. This has made it harder to recruit new station archeologists and to keep good station assistants.



Research Station Reports



Toltec Mounds Archeological State Park Research Station

ENTRANCE TO THE PLUM BAYOU GARDEN

The Toltec Mounds research station is located at Toltec Mounds Archeological State Park in Scott. The Toltec Mounds site is a National Historic Landmark. Survey staff carry out ongoing research at the site, providing the primary resources for development of interpretive programs at the park. The Toltec Mounds site was the religious, social, and political center for people of the Plum Bayou culture of central Arkansas. Built and occupied between AD 650 and 1050, it is one of the largest and most complex American Indian sites in the Mississippi Valley. Archeologists who visited the site more than 100 years ago found 16 mounds inside a 5298-foot-long ditch and earthen embankment. Though many of the mounds have been plowed down or mined for fill dirt, several remain visible today, along with remnants of the embankment. Most of the mounds were square, flat-topped earthen structures built by carrying basket-loads of dirt. Several of the mounds were arranged around an open plaza and aligned according to astronomical observations. The two largest were built in stages, and stand today at 39 and 49 feet high. The site had a small permanent population of religious and political leaders and their families, but most Plum Bayou people lived in scattered villages and hamlets in the surrounding countryside, only gathering at the site for religious and community activities. The Plum Bayou people grew a variety of native domesticated crops, harvested nuts, hunted, and fished.

Elizabeth Horton (Ph.D., Washington University in St. Louis, 2011) is the Survey's Research Station Archeologist for Toltec Mounds Archeological State Park, and Research Assistant Professor of Anthropology for the Department of Anthropology, University of Arkansas Fayetteville. She came to the Survey in 2010 as a postdoctoral researcher at the coordinating office, and began the position at the Toltec Mounds research station in July 2011. Horton's doctoral dissertation focused on Pre-Columbian fabric technology and plant fiber use in the Southeast, Arkansas in particular, using assemblages from the University of Arkansas Museum Collections. Her specialization in paleoethnobotany brings needed skills to the Survey. She is working to establish a paleoethnobotany lab at the Toltec station that can serve the entire organization.

Katherine Gregory (M.A., Florida Atlantic University) joined the Survey as station assistant at UAM in October 2014. In October 2016 she transferred to the Toltec Mounds research station. She earned her B.A. in Anthropology from Marquette University and previously worked for the Seminole Tribe of Florida Tribal Historic Preservation Office.

Marilyn Whitlow has been assistant at the Toltec Mounds station since 1985. She works with the station archeologist on many aspects of station management, including daily operations, research (field and lab), processing and cataloging artifacts, and outreach, including hosting lab days for volunteers.

The Station Gets a “New” Lab

This was an unusual year for the Toltec Mounds Research Station (TMRS) as we were physically moved out of our lab and offices for over half of the fiscal year while these spaces were renovated. We began packing and moving the nearly 50 years of archeological records and collections, and all other contents of our space, including furniture and shelving units, in early July, a job that took almost the entire month. Arkansas State Parks Force Account began the laborious renovation process in the second week of August, after a private contractor had completed asbestos abatement. The renovation allowed us to fine tune how we use the space, to convert a former equipment room to curation and increase our storage space as much as possible. In addition, we created a dedicated paleoethnobotanical lab. Station archeologist Elizabeth Horton worked closely with Arkansas State Parks staff to design new bookshelves, work stations, and cabinets. The research station started moving back into the renovated lab in November, although some work continued. All of this took up a significant portion of our year, but we are delighted with the aesthetic and functional improvements to our station and look forward to many years of research in the more open, accessible, and “science-friendly” lab.

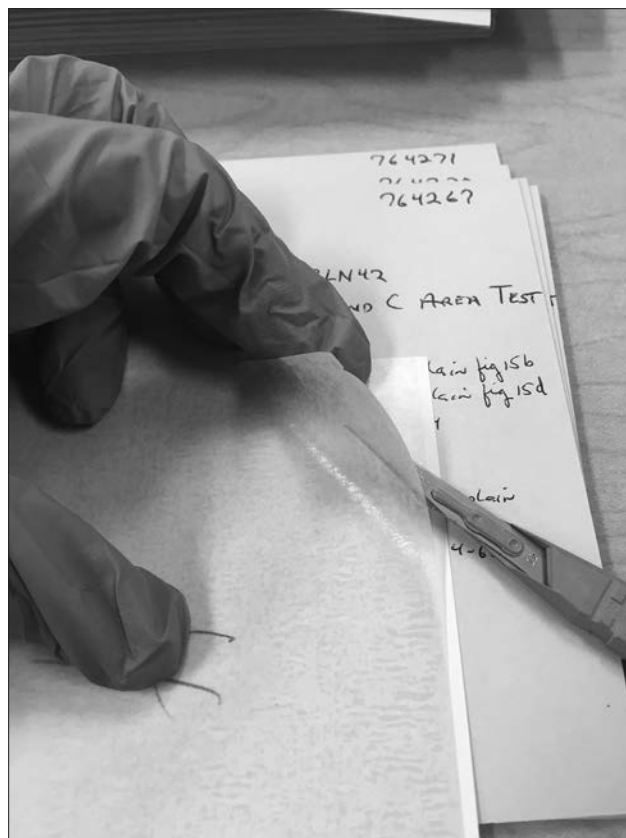
While some projects had to be delayed during this period, the staff continued forward with other work. Whitlow assisted

ARAS-HSU station archeologist Mary Beth Trubitt with digital files for a Caddo vessel identification project. Horton continued to work on research and maintenance of the Plum Bayou Garden, gathering data on plant morphology and growth rates as part of ongoing experiments in cultivating annual wild crop progenitors. Thanks to the generosity of the UALR Department of Anthropology and Dr. Krista Lewis, Horton was provided with temporary space in their archeology lab for microscopes and samples in order to continue some ethnobotany projects.

Also this year, we were joined by a new staff member—station assistant Katy Gregory. Gregory transferred to ARAS-TMRS in October of 2016, and despite initially having to work out of the temporary lab at UALR, hit the ground running by assisting with development of a more coherent and well-organized records archive. Gregory also gamely took on learning how to tend plants in the Plum Bayou Garden as part of ongoing experimental cultivation projects.

As we moved back into the lab in November 2016, the ARAS-TMRS staff as a team began a months-long process of intensive and thorough rehabilitation, stabilization, and inventory of the station’s records and archives. These vital documents hold the data of over 40 years of excavation at the Toltec Mounds site, and at other sites across the state. With assistance from the ARAS coordinating office, these docu-

Stabilizing photographic records that were on degrading, non-archival backing materials.



ments were scanned and preserved as digital records. The ARAS-TMRS staff then spent the better part of the second half of the fiscal year working their way carefully through the records to ensure that paper site forms, excavation notes, photographs, negatives, maps, and more are carefully stabilized and properly curated to the best of our ability and in keeping with current archival standards.

Paleoethnobotany for the Public

Several projects carried out this year revolved around the study of plant domestication. In addition to working with colleagues Jodi Barnes (ARAS-UAM), Emily Beahm (ARAS-WRI), and George Sabo (ARAS Director) on the “Gathering, Gardening, and Agriculture” 5th grade curriculum and associated teacher’s workshops, Horton and Gregory collaborated with Capitol Historian David Ware to create an exhibit based on this curriculum. It was installed in the State Capitol in Little Rock. Horton is also networking with colleagues across the eastern United States, sharing research questions and data related to experimental gardening projects that will help us understand the processes and mechanisms of plant domestication in the eastern United States nearly 5000 years ago. A significant part of this work seeks to integrate research results about the deep history of plant domestication and the independent origin of agriculture in the eastern United States with public archeology and public outreach.

Ask most kids, and even adults, “What did the ancient Arkansas Indians eat,” and almost to a person the answer will include “corn, beans, and squash.” While this isn’t exactly wrong, it’s not the whole story. The “Three Sisters,” as corn, beans, and squash are often termed, reflect very late prehistoric and even historic period foodways for the Indians of Arkansas, that became integrated into an already existing, sophisticated pattern of land management, agriculture, and plant use that was many thousands of years old. Today, thanks to researchers working with archeological collections like those curated at the University of Arkansas Museum that came from dry caves and bluffshelters of northwest Arkansas, we know that by 4000 years ago, Arkansas, along with other parts of the Midsouth and Southeast, was one of ten “Global Centers of Independent Domestication.” Like ancient peoples of the Middle East and the Near East, where modern-day crops like wheat, oats, and rice were domesticated, or Mexico and South America, where chilies, potatoes, and corn were domesticated,



Dr. Horton (at top of photo, wearing dark trousers) with paleoethnobotany class participants during the summer Training Program experiment with processing goosefoot (*Chenopodium berlandieri*).

the indigenous peoples of eastern North America had begun cultivating and eventually domesticating locally available seed crop plants by 5000 years ago. These plants included some crops that we still grow today as part of large-scale intensive agriculture, for example, sunflowers and acorn squash. But they also include what we call the “Lost Crops” of eastern North America—plants that were, based on archeological findings, clearly domesticated in prehistory but which are extinct today, with only the native wild progenitors now existing on the landscape.

The “Lost Crops” collaboration that Horton has been working on with colleagues from Cornell University, The Ohio State University, The University of the South Sewanee, and Washington University in St. Louis, has coalesced into two goals. First is an experimental research approach for improving

our understanding of how these wild plants may have behaved as cultivated crops. This includes sharing findings, data, experiences, and questions arising from separate independent projects across the eastern U.S. In November of 2016, Horton and Stephen Carmody co-presented on their respective experimental archeology gardening and agricultural projects—the Plum Bayou Garden at Toltec Mounds, and the Native Cultigens Project at the University of the South Sewanee—in a well-attended symposium on the “Lost Crops” at the Southeastern Archaeological Conference. And in May of this year, co-authors Natalie Mueller, Gayle Fritz, Paul Patton, Stephen Carmody, and Elizabeth Horton shared some of what they are starting to learn in an article in *Nature* (see Appendix 1).

The second goal has been to increase public awareness of the status of eastern North America as an independent center of domestication in prehistory, and the importance of these wild plants to the ongoing work of understanding prehistoric crop domestication. Increasingly issues of crop biodiversity, food security, and sustainable agriculture have come to the fore in our society. The study of these ancient eastern North American crops offers a unique perspective to these questions, from how small-scale farmers deal with native agricultural pests, such as squash beetles, that would have been as much of a problem for ancient farmers as they are today, to the potential for native plant species to offer new crop opportunities, such as goosefoot (*Chenopodium berlandieri*), which can be consumed like spinach and offers the potential of a nutrient rich, locally adapted, and therefore relatively hardy food crop that would require fewer chemical inputs. To this latter goal, in February of this year, Horton, along with colleagues Natalie Mueller, Paul Patton, and Andrew Weiland gave short presentations and participated in a panel Q&A for The Ohio State University’s Food Studies Program, with an audience of 150 students, crop scientists, and local organic farmers. In addition, Horton gave another nine public talks around the state and in neighboring states on these issues.

Lastly, the Plum Bayou Garden has continued to fulfill its mission as a publicly accessible interpretative landscape, with an estimated one-third of the nearly 50,000 visitors to the park strolling through it this year. It has also been a seed bank, providing starter seeds for other educational and interpretative gardens. This year, Horton provided advice, feedback, training, and seed to Caddo Mounds State Historic Site, Moundville State Park, The Center for American Archeology, The New Orleans Center for the Creative Arts, and the Army Corps of Engineers, Memphis District, for projects ranging from student research on traditional foodways, to interpretive and educational gardens, to a culturally meaningful beautification project at a federal installation.

Perishable Material Culture & Other Paleoethnobotanical Projects

Thanks to the temporary lab space provided by UALR, Horton was able to help other ARAS research stations by

selecting radiocarbon samples, and to continue sorting and analyzing flotation samples from the 2010 Training Program held at Toltec Mounds and additional sites. She also worked on refining the analysis and identification of plant fiber sources in archeological materials, which this year included a sample of well-preserved textile from the 2015 excavation season at Al Baleed in Oman that was permitted for export to the UALR laboratory. This sample has proved challenging and prompted some methodological refinements in the processing of fiber samples. Additions to the available fiber comparative collection were also pursued.

Donation of the Gene Waters Collection to the University of Arkansas Museum made available perishable artifacts from the Ozark Plateau that had not yet been analyzed, and Horton has been working to incorporate new data from this collection, as well as others, into the growing body of information about fabric traditions and fiber use in the Ozarks. Horton’s 2010 dissertation was accepted for publication by the Arkansas Archeological Survey’s Research Series after outside peer-review this year, so knowledge about textile and basketry production gained from analyses of collections after completion of the dissertation will be used to revise the work for publication.

Every year the work at ARAS-TMRS is bookended by the annual Training Program. This year, our station assistant Katy Gregory acted as an area supervisor at site 3FR46, while Horton taught an intensive paleoethnobotany course for nine Arkansas Archeological Society members. In addition, Horton oversaw excavation at one of two large Woodland period storage/trash pits that were tested due to their appearance as large magnetic anomalies in the initial remote sensing of the site. This unique feature, a pit over three feet deep that began as a grass-lined storage pit before being repurposed as a trash pit in a later period, is a first for the archeological record of Arkansas. It has the exciting potential to yield paleoethnobotanical data that will provide an important comparative record to the rich, well-preserved, and long-studied dessicated assemblages of the Ozark Plateau. The soil samples taken from this feature and others are currently being processed with the assistance of UALR student Rachel Jones, and we look forward to learning what information they may yield.

Public Service and Outreach

This year the Toltec Mounds and Southern Arkansas University research stations provided support and assistance to the Little Rock Police Department and the National Center for Missing and Exploited Children in a canine-assisted search for a missing person. Dr. Horton, SAU station archeologist Carl Drexler, and TMRS station assistant Katy Gregory spent three days with local law enforcement teams, and NCMEC dog handlers checking a heavily wooded park in Little Rock for evidence of, or related to a missing person case from October of 2015. While ultimately no evidence was recovered, the search provided law enforcement with the ability to move on to other leads and locations related to this open investigation.



Deep, grass-lined pit at 3FR46, excavated during the Training Program, is the first feature of its kind to be explored at an open-air site in Arkansas. It adds a new dimension—agricultural storage—to the cultural landscape for the Woodland and Mississippian cultures in this area.

The TMRS also co-hosted, with Toltec Mounds State Park and the UALR Department of Anthropology, the third annual ArcheOlympics competition in March. This year, we had five institutions from across the state field teams for the competition: University of Arkansas Fayetteville, University of Arkansas Little Rock, University of Central Arkansas, Hendrix College,

and University of Arkansas Pulaski Technical College. Approximately 40 participants took part in three contests, including the favorite atlatl spear-throwing, for the right to claim the title of 2017 Champions—a feat won this year by one of the two teams from the University of Arkansas Pulaski Technical College. Congratulations! As in previous years, the competition provided a relaxed, fun environment for anthropology and archeology students from all over the state to get to know each other, as well as the professors from various schools, and the many Survey staff who helped out on the day of competition. We are delighted and honored that so many schools participated this year and we look forward to recruiting even more schools next year to join in this unique, yearly opportunity.

Toltec Mounds Research Station — Academic & Service Activities

Teaching & Higher Ed

- **UALR Anthropology Program.** Though not a faculty member at UALR, Horton maintains an active collaboration with the Anthropology Program, and with Dr. Krista Lewis, to create hands-on opportunities and help train local archeology students in the field and lab. She also regularly provides guest lectures for UALR anthropology courses. Below are her contributions for the 2016–2017 fiscal year.
- Horton was a professional staff member of the Land of Frankincense Archaeological Project, 2016A Season at Al Baleed, Oman, a UNESCO heritage site, 12/10/16 –1/11/17. Principal Investigator, Krista Lewis (3 students).
- Facilitated and assisted in the field and lab project for ANTH 4487, Archaeological Investigation (Instructor, Krista Lewis) with preliminary pedestrian survey, small-scale shovel test, site reporting, artifact processing and cataloging, cemetery site check, and mapping at the New South Nursery site, Spring 2016 (13 students).
- Guest lecture on “Paleoethnobotany: Plant, People, and Prehistory” for ANTH 4312, Eating Cultures (Instructor, Krista Lewis), Fall 2016.
- Letters of recommendation for two former UALR students for archeology job applications, and one student application to graduate school.

Service to State Parks & Toltec Mounds Archeological State Park

- **Programs & Presentations.** Fall Equinox public presentation (audience 15); Artifact ID Day (audience 5).
- **Archeological Consultation and Testing.** Monitored animal burrow damage and erosion on mounds, embankments, and lakeshore at the park; consultation with AHPP about various development impacts on the park.
- **Education & Park Development.** Consultation with park staff on seasonal displays and public programming; consultation on Eagle Scout projects at the park; provided interview to Arkansas State Parks social media director about online content for blogs and podcasts.

Paleoethnobotanical Laboratory

- **Eastern Agricultural Complex Research.** Horton continued to collaborate with colleagues at institutions nationwide to create a research and data sharing network for experimental Eastern Agricultural Complex agroecosystems. She presented “The Plum Bayou Garden at Toltec Mounds Archeological State Park: Integrating Paleoethnobotanical Research and Public Archeology” in a Food for Thought speaker series at The Ohio State University with presentations and panel including Natalie Mueller (Cornell University), Andrew Weiland (Ohio University), and Paul Patton (OSU) (150 attendees). Other efforts include:
 - **The Plum Bayou Garden:** ongoing experimental work in ancient agroecosystems; content for the Plum Bayou Garden Facebook page
 - ***Nicotiana rustica*:** cultivation, harvesting, and processing for use in reburials
- **Textiles Research.** Horton continued activities related to the **Spiro Perishables Project** and assisted Mary Suter, curator at the University of Arkansas Museum, with questions about perishable artifacts in the donated **Waters Collection**.

Professional Service

- **Professional Organizations.** Horton served on the ARAS Publications Committee and on the ARAS Digital Data Collection Initiative (DDCI) working group. She was outgoing chair of the SEAC Patty Jo Watson Award Committee. She provided peer review of works submitted to the journal *Southeastern Archaeology*.
- **Assistance at Other ARAS Research Projects.** Processed flotation samples for ARAS-WRI, ARAS-UAM, and ARAS-UAPB station projects. Selected radiocarbon samples for ARAS-CO, ARAS-UAPB, and ARAS-WRI projects. Harvested, processed, and distributed raw *Nicotiana rustica* grown in the Plum Bayou Garden to all ten ARAS research stations and to the State Archeologist and ARAS Sponsored Research Program for use in curation, transportation, and reburial of human remains and grave goods covered under NAGPRA and individual Memorandums of Agreement with Federally Recognized Tribes.

Public Service & Outreach

- **Programs & Presentations.** Horton gave talks to the Arkansas Chapter of the Audubon Society (audience 15); Tahlequah Chapter of the Oklahoma Archeological Society (audience 10); Arkansas Chapter of the National Herb Society (with Amy Griffith) (audience 11); Missouri Master Naturalists (audience 23); and set up a demonstration booth on fiber and textile research at the ARAS coordinating office in Fayetteville for Celebrate Archeology Day during Archeology Month (150 visitors).
- **ArcheOlympics.** A day of outdoor games allowing visitors to try their hand at ancient technologies such as spear-throwers (atlatls), and other games testing archeological knowledge. The 3rd annual event was again coordinated by Horton and UALR's Krista Lewis, with help from Katy Gregory, and hosted by ARAS-TMRS at Toltec Mounds State Park. This was an Arkansas Archeology Month (March 2017) event and drew over 40 participants plus onlookers.
- **Exhibits.** Working with Capitol Historian David Ware, Horton and Gregory created and installed an exhibit, “Gathering, Gardening, and Agriculture: 4000 Years of Foodways in Arkansas,” at the State Capitol, February–May 2017.
- **Lab Days:** Volunteers worked on records rehabilitation and inventory, Plum Bayou Garden maintenance, and flotation processing.
- **Media Outreach.** Horton administers a Facebook Page for the Toltec Mounds Research Station (www.facebook.com/ARASTMRS) which is used to disseminate information about activities and research in Arkansas by the Arkansas Archeological Survey and Arkansas Archeological Society, and also other public archeology entities throughout the Southeast.
 - Horton was interviewed for a podcast on Arkansas food.

Service to Arkansas Archeological Society

- **Chapter Presentations.** Horton gave public talks at the Ouachita Chapter in Hot Springs, the Ko-ko-ci Chapter in Fayetteville, and the Kadohadacho Chapter in Magnolia (combined audiences 50).
- **Central Arkansas Chapter.** TMRS assisted with organization of this new Chapter in the Little Rock area.
- **Training Program.** Horton taught a Paleoethnobotany seminar at the 2017 Training Program in June with 9 participants, and gave an evening lecture (audience 25). Katy Gregory supervised excavations in Area B at 3FR46.

Volunteer Hours

- Volunteers contributed 723 hours to station research projects in the field and laboratory during 2016–2017.

THE MOUND AT THE PARKIN SITE

Parkin Archeological State Park Research Station

The Parkin research station was established in 1990 at Parkin Archeological State Park in Cross County. Its primary mission is to study the Parkin site and related sites in the region and to aid State Parks staff in interpreting and presenting this research to the general public. The Parkin site is a 17-acre Mississippian American Indian village located on the banks of the St. Francis River, and lies entirely within park boundaries. It has a large flat-topped earthen mound surrounded by hundreds of buried house remnants, and was enclosed by a log palisade and moat. Excavations in the 1990s showed that the site was settled as early as AD 1000 and was occupied at least until 1541, when the expedition of Hernando de Soto passed through the area. Parkin is believed to be the Indian village of Casqui that was visited by the Spaniards and described in the four written accounts left by survivors and chroniclers of the expedition.

Jeffrey M. Mitchem (Ph.D., University of Florida, 1989) is the Survey's Research Station Archeologist for Parkin Archeological State Park, and Research Associate Professor of Anthropology for the Department of Anthropology, University of Arkansas Fayetteville. He joined the Survey in 1990 to establish the Parkin research station, following appointments at Florida State University and Louisiana State University. His specializations include late prehistoric and early historic archeology of the Southeast and the Mississippi Valley, early Spanish contact sites in the New World, ceramic technology, glass bead studies, beads of Jordan and the Levant, Florida archeology, and the history of archeology in the Southeast. He is past President and Secretary-Treasurer of the Society of Bead Researchers.

E. Faye Futch earned an Associate of Arts degree in 2002 from Mid-South Community College and a B.A. in Interdisciplinary Studies with a Minor in African-American Studies from Arkansas State University in 2005. She joined the Survey staff in 1990. She helps process artifacts in the laboratory, greets visitors to the park and station, and is involved with the African American cemetery preservation initiative. Ms. Futch is working toward a Master's degree in History, with an emphasis in Public History, at Arkansas State University. She was promoted to Research Assistant in 2008, and now pursues local history research in northeast Arkansas.

Combined 2015–16 and 2016–17 Fiscal Year Reports

The Second Field Season at Richards Bridge

In June of 2016, the Arkansas Archeological Society and Arkansas Archeological Survey held a second season of their jointly sponsored annual Training Program at the Richards Bridge site, 3CT11/22, in Crittenden County. Dr. Mitchem co-directed the project—which was hosted by Parkin Archeological State Park and the City of Parkin—with Timothy S. Mulvihill (ARAS-UAFS) and Dr. Jami J. Lockhart (ARAS-CSP). Excavations in 2016 focused on two of the most promising site areas, and substantial progress was made. Once again, the Hood family welcomed us to their property and facilitated work at Richards Bridge as well as geophysical work at a mound elsewhere on their property, where their family cemetery is located.

The Richards Bridge site is important because it is located near the edge of what archeologists believe to be the boundary of Parkin phase territory. The initial investigations revealed that it was different from other known Parkin phase settlements, in terms of layout, house form, and especially defensive features.

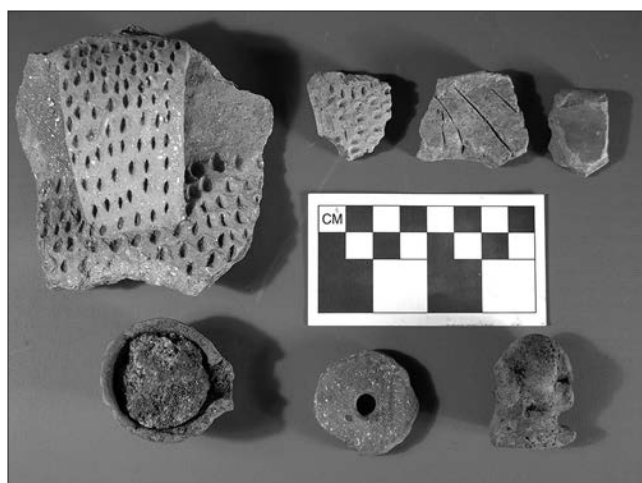
Three initial radiocarbon dates indicate that parts of the site may date as early as AD 1290, and some structures may have been built or occupied as late as AD 1615. Additional radiocarbon samples will be submitted in the near future to narrow down dates of the various structures investigated.

Preliminary results indicate that the houses we excavated are older than expected: early Parkin phase as opposed to late. They are also quite different from those excavated at the Parkin site, both in size and in construction. This latter observation was one of the primary aims of the project—to figure out if the houses excavated at the Parkin site were typical of the entire area or peculiar to Parkin itself. As often happens in archeology, the work raises a number of new questions while resolving others.

Analysis of the excavated material will take quite some time, but our knowledge of Parkin phase architecture already has been broadened. Eventual analysis of animal bones and plant remains from the site should also give us insights into how the people's food gathering and gardening habits changed through time.

Arkansas Archeological Society members and ARAS staff excavating at the Richards Bridge site. ARAS digital photo.





Ceramic artifacts from the Richards Bridge site. ARAS-Parkin digital photo.



Stone artifacts from the Richards Bridge site. ARAS-Parkin digital photo.



A clay pipe and other artifacts from Richards Bridge. ARAS-Parkin digital photo.

After the second Training Program in 2016, plans were to return for some follow-up excavations in Area 1 of the site, to better define the large structure there and to search for better samples for radiocarbon dating. Unfortunately, the project directors have not yet been able to schedule a time to carry out these excavations.

Processing and Analysis of Richards Bridge Excavation Materials

Two field seasons (2015 and 2016) of Training Programs at the Richards Bridge site, 3CT11/22, in Crittenden County produced a very large amount of excavated material, all of which has to be washed and sorted before it can be analyzed. Temporary field laboratories during both Training Programs accomplished a great deal, but the site yielded large quantities of fired clay fragments along with artifacts, animal and plant remains, and soil samples that are still being processed.

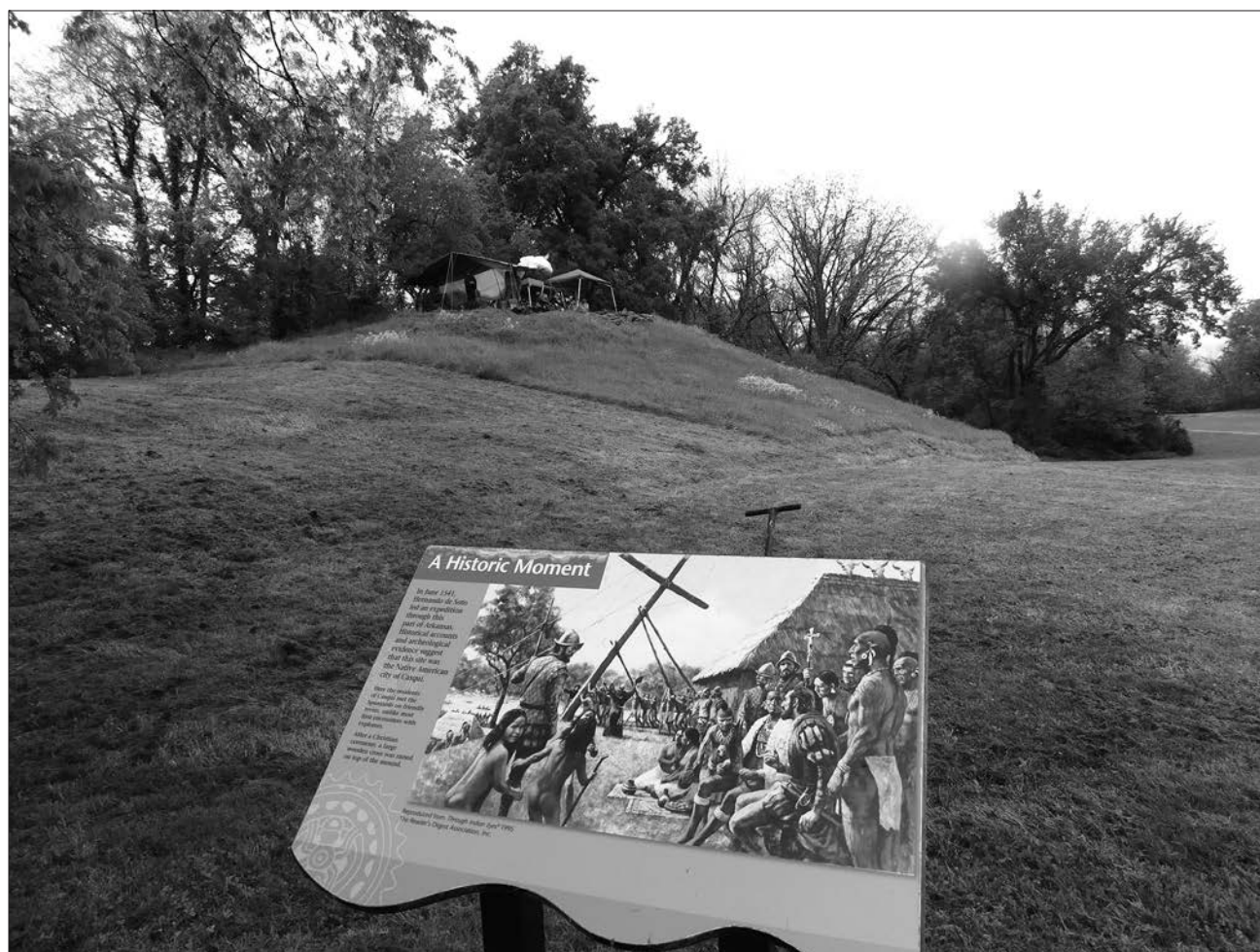
When the June 2015 Training Program ended, all of the first season's material was moved from the temporary laboratory in Parkin to the Parkin research station. Although the movers tried to bring things in in an orderly fashion, this was difficult due to time constraints. An additional complication was lack of space in the station laboratory. Bags of excavated material covered almost the entire floor, all table and counter space, and every available shelf. This lack of organization made initial laboratory progress very slow.

In early February of 2016, a truckload of extra metal shelving units were brought from the ARAS-ASU research station to Parkin. These were from the ARAS-Blytheville research station that had recently closed. Once they were set up in the Parkin laboratory, we began the laborious process of sorting the bags, consolidating some, and placing all on shelves in order by Field Specimen Number. This made it much easier to work on cleaning and sorting the materials, which is ongoing. Most of the burned clay fragments are discarded at the site after being examined. This reduces the volume of the collections by a substantial amount, easing the burden of crowded storage conditions at the station.

Investigating the Possible Cross Raised at Casqui by Hernando de Soto in 1541

When the expedition of Spanish explorer Hernando de Soto crossed the Mississippi River in the summer of 1541, he and the hundreds of people accompanying him entered what is now Arkansas. They spent the next year roaming through the state until Soto's death in 1542. The surviving group decided to abandon the expedition and head to Mexico, which they did after many tribulations.

Shortly after crossing the Mississippi, they heard of a powerful chief named Casqui, who ruled over a number of settlements



Interpretive sign at Parkin Archeological State Park depicting the raising of the cross at Casqui, with the 2016 cross/post excavations ongoing in the background. Photo courtesy of Jessica Fleming Crawford, The Archaeological Conservancy.

in some of the river valleys. Soto traveled to Casqui's village, where he was welcomed with gifts and hospitality. He remained there a few days, and one of the things he did was to have a wooden cross constructed and raised atop the mound that was the platform for the chief's house. Some Catholic priests among the expedition members conducted a Mass, and the cross was apparently left in place by the residents of Casqui's village.

Since the 1960s, several artifacts have been found at the Parkin site that came from the Soto expedition. Based on these objects and the location and configuration of the settlement, many archeologists believe that the Parkin site is the location of Casqui's village. Limited excavations atop the mound at Parkin in 1966 encountered part of a large wooden post that had been burned in place. After some samples were taken, its location was mapped, it was covered with a sheet of white plastic, and then it was covered back up. In the 1990s, some analyses were performed on the wood samples, finding that the post was of bald cypress and dated between 1515 and 1663. These tantalizing results whetted the appetites of the archeologists and staff at

Parkin Archeological State Park, who dreamt of digging down to this post again to see if a tree ring date would show that it was cut in 1541. If so, this would be strong evidence supporting the identification of the Parkin site as Casqui.

Through the aid of Mark Michel of The Archaeological Conservancy, this dream finally came true in April, 2016. Mark directed Dr. Jeffrey M. Mitchem to a private foundation, the Elfrieda Frank Foundation, who awarded a grant to cover the costs of such a project. A small team of highly skilled archeologists from the Arkansas Archeological Survey were brought together, and Arkansas State Parks provided Rangers to guard the site from disturbance at night. The excavations went quickly, and the post remnant was located, along with the 50-year-old remains of the plastic sheet that had covered it. The post appears to have been set in place right above another one. This previous post had been burned in place, then a hole was dug down for setting the new post/possible cross.

In consultation with Dr. Mitchem, Mark Michel wrote a press release-like article that was posted to The Archaeological

The base of the possible cross exposed at the Parkin site. Photo courtesy of Jessica Fleming Crawford, The Archaeological Conservancy.

Conservancy's website [<http://www.archaeologicalconservancy.org/arkansas-archaeologists-find-remains-de-sotos-cross/>] and sent out to news services while the excavation was being completed. Interest was widespread, in both the United States and overseas. Coverage included articles or summaries in the *Arkansas Democrat-Gazette*, *Arkansas Times*, *The Arkansas Catholic*, and a number of websites in the U.S. and England. Mitchem was interviewed on KUAF radio in Fayetteville, and the discussion was aired on a number of NPR stations in the state.

The post and surrounding soil matrix were carefully excavated and meticulously documented. The best preserved portion was removed intact, wrapped securely, and driven across the state to the University of Arkansas campus, where Dr. David W. Stahle, Professor of Geosciences and a leading expert in tree-ring studies (with a specialty in bald cypress) did his best to derive a tree-ring date. Unfortunately, the remains were not preserved well enough to accomplish this.

The grant included funds for six AMS radiocarbon dates, a technique which requires only a small amount of material for dating. Samples were taken from individual growth rings (primarily outer rings) and one from the core of the tree. These were submitted to Beta Analytic, Inc. in 2016. The results on all six samples were essentially identical, with calibrated date ranges of AD 1445–1650. The wide ranges are due to the wood being only a few centuries before the present: as one approaches modern time, the standard deviation increases. While we would prefer a tighter result, these dates demonstrate beyond any doubt that the tree's age is from a time range that included 1541.

In early 2017, the Elfrieda Frank Foundation granted permission to use some of the unexpended funds for three additional AMS dates. We decided to take two samples from remains of the charred post that was underneath (and assumed to predate) the possible cross, and the third from an anomalous small pit or post feature about a meter east of the possible cross. The lower post sample yielded calibrated date ranges of AD 1435–1615, supporting our idea that it predates the cross by a few years or decades (though this is by no means certain). This would confirm the hypothesis that there was an existing post already on the mound, which was burned in place before digging the new posthole and setting the possible cross in it. Ceremonial posts on mounds are known from other Mississippian sites, and this was probably a factor in the Casqui people's ready



acceptance of a cross atop the mound where the chief's house stood. The small pit yielded a calibrated date of AD 1450–1640, but we do not know what this feature represents.

The remaining portions of the post are being securely stored in the hope that technology will eventually be developed to more accurately date the wood. While we were unable to get a tree-ring date, none of the archeological evidence so far suggests anything to prove that this post is **NOT** the cross raised by Soto in 1541. The Spanish artifacts and other factors allow us to make a compelling argument that it is. The Parkin site in Parkin Archeological State Park is one of the most historically important places in Arkansas, a location of local, state, and national significance.

Birdeye Historic Preservation Project

During the 2016 Training Program, Faye Futch, ARAS-Parkin research assistant, along with Arkansas Archeological Society members Debra Morse and Wendy Brooke, began a historic preservation project at Birdeye, Arkansas. Faye has been collaborating with Martin Smith and was successful in securing support and permission from the Smith family since early 2015 for this project. Ralph Wilcox (National Register/Survey Coordinator with the Arkansas Historic Preservation Program), Callie Williams, (AHPP National Register Historian), and Travis Ratermann (AHPP Survey Historian) met Faye at Birdeye to survey the properties and determine the eligibility of the project. The goal is to have Birdeye designated as a historic district.

The fieldwork consisted of surveying and documenting the Smith family history, six homes, two former tenant houses, and the commercial business district buildings. Photographs were made of the structures from all angles. They were also mapped and architectural and ancillary forms were completed. Faye has

made several trips back to the area to confirm aspects of the history and take other photographs.

Faye is presently writing the nomination for the Birdeye Plantation. Arkansas Archeological Survey Photographer Jane Kellett reproduced the photographs.

More Soto Expedition Research: An Alleged Contact Site in Florida

Several years ago, a landowner in central Florida claimed to have found an archeological site on his land that had many artifacts from the Hernando de Soto expedition and a later Spanish mission as well. A number of researchers who specialize in early Spanish contact sites in the Southeast became concerned

about the authenticity of this site, based on their knowledge of archeological sites in the vicinity, and also concern about the authenticity of some of the artifacts, especially glass beads. Dr. Mitchem joined with six professional colleagues to write a paper discussing these issues, which was presented at the Southeastern Archaeological Conference in the fall of 2016. The authors of that paper have been collaborating on a much longer manuscript which will soon be submitted for publication in the scholarly journal *Southeastern Archaeology*.

There is widespread public interest in the Soto expedition. Thus, evaluation of claims about the site was considered important, given the lack of documentation, and the fact that historicity of many of the artifacts was called into question.

Arkansas Archeological Society member Wendy Burke determining the foundation type at the Smith house in Birdeye. Photo courtesy of Faye Futch.



Parkin Research Station — Academic & Service Activities (FY2015–2016 & FY2016–2017)

Grants, Honors & Awards

- \$19,468.81 from the Elfrieda Frank Foundation to Jeffrey M. Mitchem for “The Search for Hernando de Soto’s Cross at Casqui”
- \$1170 in 2015 from the Arkansas Archeological Society’s Archeological Research Fund to Jeffrey M. Mitchem, Timothy S. Mulvihill (ARAS-UAFS), and Jami J. Lockhart (ARAS-CSP) for “Radiocarbon Dates for the Richards Bridge Site (3CT11/22)”
- \$595 in 2016 from the Arkansas Archeological Society’s Archeological Research Fund to Jeffrey M. Mitchem, Timothy S. Mulvihill, and Jami J. Lockhart for “Radiocarbon Dates for the Richards Bridge Site (3CT11/22)”

Service to State Parks and Parkin Archeological State Park

- Both Mitchem and Futch answer questions and assist park visitors on an as-needed basis.
- Mitchem assisted Park staff to display effigy vessels from the Hazel site donated by a former Arkansas resident.
- Mitchem aided Park Superintendent Ben Swadley in obtaining the original H. Tom Hall painting of the cross-raising at Casqui for the Park.
- Mitchem worked with The Archaeological Conservancy and Arkansas State Parks staff to assist with arrangements for a donation of land to Parkin Archeological State Park from a private citizen.
- Mitchem worked with Park Superintendent Ben Swadley to plan reconstruction of a prehistoric building and portion of the defensive palisade, based on excavations at the site (a project funded by a grant from the Arkansas Natural and Cultural Resources Council to Arkansas State Parks).

Records and Collections Management

- **Richards Bridge Project:** organization and sorting of excavation material; setting up new shelving; sorting and repackaging radiocarbon samples.
- **ARAS Records Backup and Archive Project:** gathered Parkin research station records, including field and laboratory records for the Parkin site (3CS29 and 3CS256), the Meador site (3SF414), the Neeley’s Ferry site (3CS24), and Richards Bridge (3CT11/22), as well as a wide variety of reports and documents, and sent them to the ARAS coordinating office in Fayetteville to be scanned for backup.

Professional Service (Mitchem)

- Editorial Board of *The Florida Anthropologist*
- Advisory Board of the Alliance for Weedon Island Archaeological Research and Education in St. Petersburg, FL
- Peer review for the journals *Southeastern Archaeology*, *The Florida Anthropologist*, and *American Archaeology*, The University Press of Florida, and for The National Science Foundation
- Reviewed the final script for a documentary titled “Escampaba: The Kingdom of Carlos,” written by Theresa Schober of Koreshan State Historic Site, Florida
- Wrote and delivered a resolution of gratitude to Dr. Amber VanDerwarker at the Business Meeting during the 72nd Annual Meeting of the Southeastern Archaeological Conference in Nashville, and a memorial resolution for Laura Kammerer at the Business Meeting during the 73rd Annual Meeting of the Southeastern Archaeological Conference in Athens, GA
- Provided testimony in a Register of Professional Archaeologists grievance case
- Elected to the Board of Directors of the Florida Public Archaeology Network as Director at Large, out-of-state (term beginning July 1, 2017)

Public Service & Outreach (Mitchem)

- *Jeffrey M. Mitchem: 15 Questions with an Archeologist.* Podcast of an interview in collaboration with archeologists from the Southeast Archeological Center, National Park Service, Tallahassee. <http://directory.libsyn.com/episode/index/id/3924306>
- Conducted Artifact and Fossil/Mineral ID Days, with ARAS-ASU station and Arkansas Geological Survey, for Archeology Month 2016 and 2017, and Artifact ID Days at the Delta Gateway Museum in Blytheville for Archeology Month 2016 and 2017 (combined attendance 75).

- Mitchem presented a public talk to the White County Historical Society in Searcy (audience 50). He also gave informal talks about the Richards Bridge site at events hosted by the Hood Brothers (owners of the site) and Crittenden County landowner Terry Richardson (combined attendance 110).
- Delivered introductory lecture in Memphis and accompanied the 2016 Archaeological Conservancy “Peoples of the Mississippi Valley” Tour, guiding participants around the Parkin, McClellan, and Potter sites, and Hampson Museum State Park (31 participants).
- Media Interviews:
 - Worked with Amy Schlesing, a University of Arkansas science/research reporter from the Office of University Relations, Division of University Advancement, University of Arkansas, Fayetteville, who wrote a story on the first season at Richards Bridge: “Unearthing America’s History,” *Research Frontiers* July 17, 2015, <https://researchfrontiers.uark.edu/?s=digging+up+america%27s+history>.
 - Participated in a telephone interview about Parkin and related sites with Arkansas Tech University student Xiu Chen as a class project.
 - Several telephone interviews, one television news interview, and one videotaped Arkansas State Parks interview during and after the possible cross excavation.
 - Taped a public radio interview about the cross excavations and the Parkin site at KUAF Studios in Fayetteville for the program “Ozarks at Large.”
- Visited Sherman Mound in Mississippi County to assess damage done by railroad construction.
- At the request of the State Archeologist, followed up on a report by a citizen of the disturbance of a potentially significant site in the right-of-way of a petroleum pipeline being installed near Village Creek State Park and provided information to the Arkansas Historic Preservation Program.
- A collector contacted Mitchem about a bell he had found that he thought might be from the Soto expedition. A photograph revealed it to be a much later type of bell, dating from the 1800s.
- Florida archeology:
 - Consultation with Pinellas County Parks & Conservation Resources Department on the archeological and historical significance of the Safety Harbor site in Philippe Park.
 - Volunteered for a day at an excavation at Wakulla Springs State Park.
 - Consultation with a writer from Atlas Obscura for a story on Vernon Lamme, the first State Archaeologist of Florida. “Stolen Artifacts! Drunk Teens! And More True Tales of Florida’s First State Archaeologist” by Sarah Laskow, <https://tinyurl.com/y8fg663p>.

Service to the Arkansas Archeological Society

- **Programs & Presentations.** Mitchem gave public presentations to the Tunican Chapter in Monticello (20), the Arkansas River Valley Chapter in Russellville (18), the Central Mississippi Valley Chapter in Jonesboro (20), the Kokoci Chapter in Fayetteville (25), and the Kadohadacho Chapter in Magnolia (15).
- **Training Program.** Mitchem was co-director (with Tim Mulvihill, ARAS-UAFS, and Jami Lockhart, ARAS-CSP) of the 2015 and 2016 Training Programs at the Richards Bridge site. Parkin Archeological State Park and the City of Parkin provided support. Mitchem gave an evening lecture to participants (74) and professional staff (20) during the 2016 Training Program.

Volunteer Hours

- Volunteers contributed 5054 hours to field and laboratory projects during 2015–2016. This number includes 4992 hours during the 2016 Training Program at Richards Bridge.
- There were 710.5 volunteer hours during 2016–2017.

University of Arkansas at Fayetteville Research Station

LOOKING OUT INDIAN ROCKHOUSE CAVE

The ARAS-UAF station is located at the Survey coordinating office in Fayetteville, with additional office space in the Anthropology Department on the UAF campus. The station archeologist teaches in the Department of Anthropology at UAF and performs other faculty service to the Department and campus. The UAF station territory covers 12 counties and lies almost entirely within the Ozark Mountain region of northwest Arkansas. The archeology of the Ozarks is justly known for the excellent preservation of organic material such as basketry, textiles, woven sandals, and plant food remains in dry rock shelters. Large collections of such remains, excavated in the past from sites now inundated by reservoirs, are housed in the UA Collection Facility awaiting modern analysis. Station research in the last 30 years has broadened the archeological understanding of the region by focusing on ceremonial mound sites that link the Ozarks to the Mississippian and Caddo cultures. Other projects have emphasized historical sites left by pioneer Arkansans, Civil War related sites, and environmental history.

Jamie C. Brandon (Ph.D., University of Texas at Austin, 2004) has over 25 years of experience in the field of archeology, working at all stages of investigation and on sites dating from the Pleistocene to the twentieth century. He has been involved with projects in 13 southeastern states, and has authored or coauthored publications and/or technical reports on research in seven of those states. Dr. Brandon has worked with the Arkansas Archeological Survey in various capacities since 1997. He was the Survey's Research Station Archeologist at SAU/Magnolia for nine years before moving to the UAF station beginning with the Fall 2014 semester. He is also Research Associate Professor of Anthropology for the University of Arkansas Fayetteville and now teaches on the UAF campus. His research interests include historical archeology of the 19th century South, prehistoric and historic cultures of the Midsouth and Arkansas Ozarks, Ozark bluff shelters, cultural resource management, historical memory, and working with descendant communities.

Jerry E. Hilliard (M.A., University of Arkansas, 1980) moved to the position of Research Associate for the UAF station in 1994 after 15 years with the Survey doing public archeology, records management (he is a former Survey registrar), and research on prehistoric and historic sites in the Ozarks. His specializations include American Indian rock art and historic archeology in northwest Arkansas, especially Civil War related sites and Fayetteville area sites. He also works closely with local volunteers from the Ko-ko-çi Chapter of the Arkansas Archeological Society.

Archeology at Pea Ridge National Military Park

The ARAS-UAF research station (in conjunction with the ARAS Computer Services Program and the ARAS-SAU research station) continued a multiyear project on the Pea Ridge Civil War battlefield. This project is a collaborative endeavor with the National Park Service and is part of the federal Co-operative Ecosystem Studies Units (CESU) program. The first phase of this effort was a pilot project in 2015–2016 that tested a methodology combining large-scale remote sensing with traditional battlefield archeology techniques to gain a picture of the cultural resources on the battlefield at Ruddick's Field in Pea Ridge National Military Park.

In this second year, our focus shifted to the Leetown hamlet. Leetown was a small community on the western edge of the battlefield during the Civil War. It played an important role during the battle as a hospital for the numerous wounded, but the town faded away before the turn of the century, leaving little to indicate its presence and few accurate maps. A limited amount of archeology was conducted at the hamlet in the 1960s as a part of the initial National Park Service assessment, and twelve years ago an M.A. thesis attempted to explore the site with a combination of aerial and ground-based remote sensing techniques. However, neither of these projects gave conclusive answers to the number and types of buildings present at Leetown during the battle of Pea Ridge. Our work at Leetown this year used a combination of historic maps, remote sensing data, and

test excavations to identify the locations of historic structures in the Leetown vicinity, and to assess their functions and dates of occupation.

Spring Remote Sensing & 2017 NPS Geophysical Prospection Workshop

The first step in the investigation at the Leetown locality was during the spring of 2017. In March the UAF and SAU research stations assisted Dr. Jami Lockhart in conducting a comprehensive magnetometer survey of the open areas at the center of historic Leetown. Following (and complementing) our March fieldwork, we also provided support for the National Park Service's Geophysical Prospection Workshop in May.

For the last 27 years the Midwest Archeological Center (MWAC) of the National Park Service has held a workshop dedicated to the use of geophysical, aerial photography, and other remote sensing methods as they apply to the identification, evaluation, conservation, and protection of archeological resources across the nation. This year, MWAC chose to hold their workshop at Pea Ridge National Military Park in order to dovetail with our ongoing research at Leetown. Drs. Lockhart (ARAS-CSP), Drexler (ARAS-SAU), and Brandon (ARAS-UAF) all served as instructors for the week-long workshop, held from May 15–19, 2017, each providing their unique insight and expertise to the course. Over 30 instructors and students at the workshop lent their labor and experience to provide additional

Jared Pebworth (left) and Dr. Jami Lockhart (right) talking to Leetown descendants during the 2017 University of Arkansas archeological field school.



geophysical data to complement Dr. Lockhart's existing gradiometry and resistivity data for the site.

Dr. Lockhart's work, combined with the extensive efforts correlating historical maps, multisensory remote sensing data, and oral information from informants, guided a testing program which sought to identify structures and other historical features for further excavation.

2017 University of Arkansas Archeological Field School

Between May 30 and June 30, the University of Arkansas Archeological Field School, led by Drs. Brandon and Drexler (and assisted by Jerry Hilliard, Jared Pebworth, Lydia Rees, and Michael Evans), conducted an initial testing at Leetown. Over 18 undergraduate anthropology majors, archeology graduate students, faculty, and ARAS staff assisted in the excavation of 13 test units examining targets in the Leetown area. These excavations identified two outbuildings, a third possible outbuilding and/or activity area, and the back portion of the main house of the Lee/Mayfield farmstead, which would have been occupied

during the battle. Mid-to-late nineteenth century components were confirmed in the outbuildings and area surrounding the main house. Additionally, a large cellar, possibly associated with a detached kitchen and filled in the 1930s–40s, was partially excavated. This work was the first important stage in understanding the Leetown landscape.

At the close of 2016–2017 all artifacts recovered from these excavations had undergone initial processing and were awaiting analysis starting in the fall. In addition to the technical report due to be completed by December 2018, these excavations will provide material for an MA thesis by Victoria Jones and an undergraduate honors thesis by Jamie Middleton—both students in the Anthropology Department of the University of Arkansas at Fayetteville.

Plans are under way to return to Leetown with both a 2018 University of Arkansas Field School and the Arkansas Archeological Survey and Society Summer Training Program. In addition, we will be investigating wooded battlefield areas as well as farmsteads at both Foster's Field and Clemmen's Field as a part of the ongoing CESU during 2017–2018.

University of Arkansas undergraduate Ryan Smith profiling deposits from the cellar feature during the 2017 archeological field school at Leetown, Pea Ridge National Military Park.



Bluff Shelters in the Arkansas Ozarks

Despite our deep and continued involvement in the archeology at Pea Ridge battlefield, we found time to continue our region-wide research into Ozark bluff shelters. Prehistoric occupations in Ozark bluff shelters are a unique and important resource not only for Arkansas, but for the entire mid-continent. It is very rare that perishable remains like textiles, seeds, and basketry are preserved in archeological contexts, and the dry bluff shelters of Arkansas have more of these preserved items than most places in North America. Many of these artifacts sit on museum shelves as they have since they were excavated in the 1930s by the University of Arkansas Museum. At the same time, these precious sites, many considered sacred by Native American groups, are increasingly endangered by looting. Through continuing and new research projects, the ARAS-UAF research station is working to document bluff shelters in the region, and to interpret existing bluff shelter collections to the public.

Our grant-funded work creating the publicly oriented website “Bluff Shelters of the Arkansas Ozarks” has seen fruition and the site went live in the fall of 2016. This website will not only provide the general public with basics of current archeological knowledge about bluff shelters and why these sites are important, it will also be a platform for updating the public about ongoing bluff shelter research and educational events. Between November and July the bluff shelters website has had almost 10,000 page views. The URL for “Bluff Shelters of the Arkansas Ozarks” is <http://archeology.uark.edu/ozarkbluffshelters/>.

To both promote the website and to provide basic information about the resource, Dr. Brandon and Lydia Rees (ARAS-SRP) gave over thirteen public talks this year about Ozark bluff shelters, including talks to historical and genealogical societies across the Ozarks, and to Arkansas Archeological Society Chapters across the state. Additionally, this information was presented as a part of

several training workshops for Arkansas Master Naturalists and Heritage Resource Technicians with the US Forest Service.

Saltpeper Cave. On the heels of the website project, we at the UAF research station immediately geared up to undertake a new bluff shelter research project this year—the analysis and interpretation of excavations at Saltpeper Cave. The Arkansas Archeological Survey conducted excavations at Saltpeper Cave in Newton County in 1969 and 1970. Ken Cole, the first research station archeologist stationed at Arkansas Tech (then Arkansas Polytechnic College), conducted two seasons of excavation into this shelter, that had been previously visited by the University of Arkansas Museum in 1934. Cole excavated nine test units, the deepest of which contained almost 14 feet (4.11 meters) of archeological deposits representing at least 9000 years of Arkansas history. This deep, stratified deposit is all the more important to researchers as it is one of the few Arkansas bluff shelters investigated using modern excavation techniques. Thus, unlike the materials from the Dellinger excavations of the 1930s, researchers have detailed stratigraphic records, along with approximately 450 diagnostic hafted bifaces, and 42 radio-carbon samples. Unfortunately, Cole left the Arkansas Archeological Survey shortly following these excavations, leaving this collection curated, but largely untouched for 47 years.



Lydia Rees talking about Ozark bluff shelters at Arkansas State University.



Lydia Rees and University of Arkansas students during the salvage excavations at Walker Shelter in Bella Vista.

This year we worked in concert with Jared Pebworth and Lydia Rees of ARAS-SRP to undertake conservation of the records, rehabilitation of the collections, and some basic artifact analysis of the Saltpeter Cave collections. This project has made the Saltpeter Cave materials and records more useful for further work and has preserved the data for future researchers in Arkansas archeology.

The first outlined goal was to rehabilitate, reorganize, and inventory the records and artifacts from the 1969 and 1970 excavations at Saltpeter Cave. The records associated with the excavations have been preserved for future research through a combination of scanning and transcription, and all the scanned records associated with Saltpeter Cave will now be available through AMASDA, the state archeological site files.

Goal two of the project was to photograph and analyze a select portion of the collection in order to interpret the site and its importance to the general public of Arkansas and beyond. The deepest excavation unit, Unit E, was selected as the best candidate for analysis and interpretation for this project. The diagnostic hafted bifaces (along with all of the informal or non-diagnostic tools such as scrapers and modified flake tools) from this test unit have been analyzed and photographed. This work has allowed us to identify carbon samples associated with the diagnostic tools. Samples with the best association and most

research value are being selected to submit for radiocarbon dating. This site holds valuable information about the Archaic period of Arkansas prehistory and this analysis is the first step.

In addition to the lithic analysis, all ceramic artifacts, more than 500 sherds, from the site have been analyzed. A list of attributes including temper, decoration, and vessel form were recorded for each piece of pottery in the collection. Photographs of a selection of sherds were taken and will be available in addition to the database containing the ceramic data. This portion of the project was a pilot study for a region-wide examination of prehistoric ceramics in the Ozarks due to begin next year.

Walker Shelter. The UAF research station staff responded to several bluff shelter looting incidents this year, the most extensive of which was our salvage work at Walker Shelter in Bella Vista. The Bella Vista Museum contacted us about preventing further looting at an impressive shelter along the Bella Vista trail system. This area had been the target of much looting activity prior to the trail opening in the fall of 2016, and it was the Museum's hope that we could assist with documenting the damage and helping to deter subsequent looting.

In June, as a side-project of the University of Arkansas Archeological field school at Leetown, 10 students and members of the ARAS staff visited Walker Shelter. We created a detailed site map, documented the looting, and conducted salvage excavations along the looted areas. At least a meter and a half of archeological deposits were documented, including the recovery of a Middle Archaic Calf Creek projectile point. The looters' pits were backfilled and the Museum has plans for bringing in clean fill soil and signage at the site.

Van Winkle's Mill

Van Winkle's Mill was an important nineteenth-century sawmill community in Benton County. The mill community did not last into the twentieth century, but is now the focus of the "Historic Van Winkle Trail" in Hobbs State Park. This trail and its associated interpretation were made possible through an extensive research effort conducted by the ARAS-UAF research station between 1997 and 2009. These investigations have provided material for two Ph.D. dissertations, two M.A. theses, and an undergraduate honors thesis.

This year Dr. Brandon completed a book-length manuscript on Van Winkle's Mill to be included in the University of Arkansas Press's new "Ozark Studies" series. *Mountain Modernity and the Arkansas Ozarks: History, Archaeology and Cultural Memory at Van Winkle's Mill* was submitted, peer review has been concluded, and the manuscript has been accepted for publication pending minor revisions; these should be completed in fall 2017.

We are also working on a publicly oriented website on the archeology at Van Winkle's Mill that will accompany the publication of the book.

Collections Work

Jerry Hilliard has been leading an effort to analyze, catalog, and rehabilitate several collections relating to UAF projects.



Jamie Brandon leading a tour of Van Winkle's Mill for the National Association for Interpretation, Region 6 Conference.

The largest of these involves analyzing material from the Carden Bottoms project (CARV). Carden Bottoms is a rich alluvial floodplain in northeastern Yell County created by the Arkansas River and internationally known for its rich archeological heritage. In past years ARAS-UAF has been involved in a long-term, NEH-funded research effort in Carden Bottoms and the Central Arkansas River Valley (CARV). This year Hilliard completed work on the CARV material, conducting inventory and analysis of the 1990–1994 and 2009–2012 excavations. In total, Hilliard has inventoried 176,264 artifacts from the Carden Bottoms investigations.

UAF Research Station — Academic & Service Activities

Grants, Honors & Awards

- \$595 from the Arkansas Archeological Society's Archeological Research Fund, awarded to Jamie Brandon, Lydia Rees, and Jared Pebworth, for an AMS radiocarbon date from 3NW29.

Teaching & Higher Ed

- **UAF Anthropology Department.** Brandon taught four courses—ANTH 4443/5443 Cultural Resource Management (15 students), ANTH 4903/5903 Seminar in Historical Archeology (6 students), and ANTH 558V Independent Reading Course on Arkansas Historical Archeology (2 students), and ANTH 4256/5256 Archeological Field Session (10 students) during the 2016–17 academic year.
- Brandon currently serves on seven UA graduate student committees—four M.A. and three Ph.D.; six are in the Anthropology Department and one is in the Environmental Dynamics Program; of these he chairs three anthropology M.A. committees.
- Brandon also serves on four committees for the University of Arkansas undergraduate Honors College (three anthropology, one architecture). Of these, he currently chairs two (anthropology).
- Brandon assisted twice with visiting tours to the Arkansas Archeological Survey by Introduction to Archeology (ANTH 1033) classes.
- Brandon served as a coach for the University of Arkansas's "AnthroHogs" ArcheOlympics team.
- Brandon assisted the University of Arkansas's Anthropology Department in the recruitment and organizing of two of the four 2016–2017 Stigler Lecturers in Archeology.
- Brandon took part in the University of Arkansas's Anthropology Department Open House.



Jamie Brandon talking to visitors at the Anthropology Department's Open House.

Professional Service

- **ARAS Committees.** Hilliard and Brandon served on the Publications Committee. Brandon served on the Personnel Committee, the Web Steering Committee, and the Digital Data Collection Initiative (DDCI) working group.
- **Professional Organizations.** Brandon is a member of the Society for Historical Archaeology Editorial Board. He served as a judge on the 2017 SHA Student Paper Prize and the 2017 Arkansas Historic Places Film Prize.

Public Service & Outreach

- **Boards & Committees.** Brandon served as Chair of the State Review Board for Historic Preservation; President (July–December 2016) and Secretary (December–June 2017) of Preserve Arkansas; board member of the Arkansas Humanities Council; and Vice-Chair of the City of Fayetteville, Woolsey Farmstead Steering Committee.
- **Presentations & Programs.** Dr. Brandon and Lydia Rees gave public talks about Ozark bluff shelters at Buffalo Point amphitheater in the Buffalo National Forest (35), the South Sebastian County Historical Society in Greenwood, AR (30), the Tahlequah Archeology Society in Tahlequah, OK (15), the University of Central Arkansas in Conway, AR (65), the Friends of Hobbs Speakers Series at Hobbs State Park in Rogers, AR (25), and the Highlands Chapter of the Ozark Society in Fayetteville, AR (20). Dr. Brandon gave a public talk about Ozark bluff shelters to the Boone County Heritage Museum in Harrison, AR (26). Dr. Brandon gave public talks about Civil War archeology in Arkansas at the Elm Springs Historical Museum in Elm Springs, AR (30), Prairie Grove State Park in Prairie Grove, AR (5), the Searcy County Historical Society in Marshall, AR (50), and the Northwest Arkansas Civil War Roundtable (10). Dr. Brandon gave a talk about Van Winkle's Mill to a local chapter of PEO (Philanthropic Educational Organization) (75). Dr. Brandon and Pritam Chowdhury gave a talk to the Ozark Montessori Academy (45).
- **Tours & Workshops.** Dr. Brandon led tours of the Van Winkle's Mill Historic Trail at Hobbs State Park for members of the Osher Lifelong Learning Institute (OLLI) (25) and the National Association for Interpretation, Region 6 Conference (35); he helped with tours of the Arkansas Archeological Survey and University of Arkansas Museum Collections for students from Prism Education Center (25), Haas Hall Academy (30), 4H Day of Archeology (25), and the University of Central Arkansas Anthropology Club (10). Dr. Brandon taught two half-day workshops on basic archeology and Ozark bluff shelters to the North Central Chapter of the Arkansas Master Naturalists in Mountain Home, AR (combined audiences 75). Dr. Brandon taught a workshop on historical archeology and historic material culture as a part of the Ozark National Forest Service HRT Training program (25).
- **The Archeology Minute on KUAF.** Dr. Brandon and Marilyn Knapp again partnered with KUAF Radio, the University of Arkansas's NPR affiliate, to create a series of radio spots called "The Archeology Minute" for the 2017 Arkansas Archeology Month. These one-minute broadcasts aired every Saturday and Sunday in March and reached a potential audience of over 600,000 in a 14-county area of west and northwest Arkansas, parts of eastern Oklahoma, and southern Missouri.
- **Cedar Grove MAPP Project.** Dr. Brandon, in collaboration with Marilyn Knapp and Lydia Rees, completed a short documentary film about the Cedar Grove Cemetery project which was conducted in Lafayette County in the early 1980s. This documentary was a contribution to the Making Archeology Public Project (MAPP), a nationwide video series honoring the 50th anniversary of the National Historic Preservation Act. You can watch the video at: <https://vimeo.com/199336527>.
- **Archeology Day.** Brandon and Hilliard participated in the 4th annual "Celebrate Archeology Day!" sponsored by the ARAS coordinating office in Fayetteville. This Archeology Month event took place at the Survey building and grounds, with displays,



Jamie Brandon interviewing anthropology professor Jerome C. Rose about the Cedar Grove Cemetery project for the MAPP video commemorating the 50th anniversary of the National Historic Preservation Act.

exhibits, demonstrations, and games, as well as donations from local businesses Mojo's Pints and Pies and Harps Groceries. Over 100 people attended the event, which was covered by local media.

- **Media Outreach.** Brandon manages an active Facebook Page for the UAF research station, and also contributes to Ko-ko-çi Chapter social media. He (along with Hilliard and other ARAS staff including Lydia Rees and Jared Pebworth) was interviewed several times during the year for local and University news outlets.
- **Other Public Outreach.** Both Hilliard and Brandon answered numerous calls and or visited with members of the public who came to the station to discuss artifacts or sites, and visited sites upon request.
- **Consultations.** ARAS-UAF station staff provided consultation and advice regarding various archeological projects and concerns to the City of Fayetteville; the Center for Advanced Spatial Technology (CAST); the Arkansas Highway and Transportation Department; the Arkansas Historic Preservation Program; Preserve Arkansas; D. Jason Knowles, MFA (for a documentary film); *Arkansas Life* magazine; Ozark National Forest; Hobbs State Park and the Friends of Hobbs; Arkansas State Parks, about Prairie Grove State Park, Hobbs State Park, and Powhatan State Park; USFS regarding looting near Piney Creek (October); Prairie Grove State Park, for monitoring construction of Jim Park Shelter; Flat Earth Archeology, LLC; the Bella Vista Museum and the Bella Vista Trail System; and a private landowner.

Service to the Arkansas Archeological Society

- **Chapter Presentations.** Dr. Brandon and Lydia Rees gave public talks to the Ark-Homa Chapter in Fort Smith (10), the Tunican Chapter in Monticello (30), the Ko-ko-ci Chapter in Fayetteville (25), and the Central Mississippi Valley Chapter in Jonesboro (50). Dr. Brandon spoke to the new Three Rivers Chapter in Mountain Home (15).
- **Ko-ko-çi Chapter.** Brandon assisted with scheduling speakers for the monthly Ko-ko-ci Chapter meetings. Brandon and Lydia Rees prepare and distribute the Chapter newsletter. Hilliard supervised volunteers in lab activities with UAF station collections.
- **Three Rivers Chapter.** Brandon assisted with founding the new Three Rivers Chapter in Mountain Home, AR. He helped to line up speakers and gave advice on activities.

Volunteer Hours

- Volunteers (Society members, UAF anthropology graduate students, and others) contributed 300 hours to station projects in the laboratory and 1720 hours in fieldwork, for a total of 2020 volunteer hours during 2016–2017.

University of Arkansas - Fort Smith Research Station

EXCAVATING AT THE WILLHAF HOUSE

The ARAS-UAFS research station was established in 2005 at the request of the University of Arkansas - Fort Smith campus. The University purchased the Drennen-Scott House, 1838 home of the City of Van Buren founder, businessman, and Indian Agent John Drennen, with plans to use the property as a museum and training center for their Historical Interpretation degree program. The station's responsibilities include archeological investigations at the Drennen-Scott site and other assistance to the program at UAFS, working with the Ark-Homa Chapter of the Arkansas Archeological Society and other outreach activities in the Fort Smith area, and archeological research in the Arkansas River Valley between Fort Smith and Clarksville in cooperation with the UAF and WRI stations.

Timothy S. Mulvihill (M.A., University of Arkansas, 1996) joined the Survey in 1989 as station assistant at ASU, then moved to the Parkin research station, where he was station assistant from 1991–2005. In late spring of 2005, Mulvihill moved to Fort Smith to establish the new UAFS research station. His interests include Woodland and Mississippi period archeology, site survey methodologies, and mapping.

Anna Vincent (part-time lab assistant, October 2015–June 2017) Anna graduated in May 2017 with a degree in History from UAFS and will start graduate school in the fall.

Mulberry River Sites

A cooperative study was initiated with the USDA Forest Service on two sites (3FR46 and 3FR58) on the Ozark National Forest in the Mulberry River drainage. These sites would also serve as the location for the Arkansas Archeological Society/Survey Training Program for two weeks in June—this portion of the project being a collaborative effort involving the Survey, the Arkansas Archeological Society, the Ozark National Forest, and the Cass Work Center.

The Mulberry River study area is located in the Arkansas River Valley upstream from the Carden Bottoms locality where the 2009 Training Program was held, and downstream from the Spiro locality where the Arkansas and Oklahoma Archeological Surveys are currently collaborating in ongoing investigations. Both of the sites are currently maintained under the Forest Service's Mulberry River Native Vegetation Restoration program.

The sites were initially recorded in 1972 by Dr. John House (ARAS-UAPB research station archeologist), when he was conducting a survey of the Mulberry River basin in advance of a proposed impoundment project. More recent investigations by Dr. Mary Brennan, Zone Archeologist with the Ozark National Forest, confirmed House's earlier identification of Woodland and Mississippian culture components at these sites

and retrieved artifact samples, including ceramics, lithics, and charcoal. Brennan's team also identified potentially related sites in the vicinity, including rock shelters, rock art sites, an argillite quarry, and a possible mound, comprising an ancient cultural landscape reflecting Woodland to Mississippian cultural developments in the region.

During the winter and spring of 2017, ARAS and Forest Service archeologists conducted a series of preliminary investigations. Dr. Jami Lockhart, with the assistance of Tim Mulvihill, conducted extensive geophysical surveys at both sites, identifying multiple buried features, both natural and cultural. Brennan and Mulvihill then conducted backhoe trenching at 3FR46 and excavated small test units at both sites, confirming the presence of buried cultural materials in geological contexts reflecting human use of a dynamic riverine landscape. Students from an Introduction to Archeology class taught by Mulvihill at the University of Arkansas - Fort Smith participated in the test excavations as part of the class.

The Society/Survey Training Program was co-directed by Dr. Mary Brennan and Mulvihill. Approximately 100 participants volunteered to help with the excavations over a two-week period in June. Most of the work took place at 3FR46; however, retired Forest Service archeologist Gary Knudsen did supervise

Tim Mulvihill takes soil samples at 3FR46 during the Training Program.





Arkansas Archeological Society/Survey Annual Training Program at 3FR46.

a small crew at 3FR58. Features excavated at 3FR46 indicate that the portion of the site investigated was used for agricultural activities (storage pits, burned rock clusters, and associated tool manufacturing) during early to middle Woodland times. Lack of typical village debris (midden or trash deposits) and very few ceramics indicate that this part of the site was not used for long-term habitation, although there is likely a permanent settlement nearby.

Information recovered during the 2017 Training Program at 3FR46 provides insight into indigenous landscape management by early-to-mid Woodland period inhabitants of the Mulberry River Valley. The recovered data also influences new research into Woodland period landscapes along the Mulberry River and native grass restoration projects by the Ozark-St. Francis National Forests.

We hope that as analysis continues the findings will enable the Forest Service to work with descendant Caddo and Osage communities to develop best approaches for preserving ancient cultural landscapes in the Mulberry River Valley. The majority of lands along the Mulberry are privately owned and through the years have been converted to hay fields, pasture, and recreational areas. The government tracts where these sites are located provide valuable opportunities to restore and pre-

serve cultural resources within habitats managed to resemble indigenously maintained settings, and we hope to contribute to those efforts.

Willhaf House

Limited excavations were carried out in the fall of 2016 to investigate some of the features identified by a geophysical survey completed the previous May and to look for evidence of a previous room addition that existed on the back NW corner of the house (the addition was removed circa 1957). The geophysical survey was completed to aid in the development of a master plan for the property and as part of the overall archaeological investigations of the site. The Willhaf house 3CW1297, owned by UAFA and located in Van Buren, Arkansas, is just south of the Drennen-Scott Historic Site, which is also owned by UAFA and which opened as a museum and teaching laboratory in 2011. The historic part of the Willhaf house may serve as additional exhibit space, while the modern addition on the back of the historic structure will eventually be the new offices and lab of the ARAS-UAFA research station.

The most interesting anomaly discovered during the survey was found between the house and garage. It was identified by both ground penetrating radar and electrical resistance. It was



UAFS students helping Tim Mulvihill map the Pevehouse Cemetery in Crawford County.

at least 2m in size and the ground penetrating radar indicated it could be as deep as 2.5m to 3m. Excavations revealed that the anomaly was a forgotten cellar that was just behind the now-removed addition. Only a portion of the cellar was excavated, including an entrance with stone steps. The cellar walls were constructed of mortared stone. It was approximately 6–7 feet wide, with a dirt floor about 3.5 feet below the present ground surface, and the anomaly signature shown by the electrical resistance indicates it is about 10 feet in length. The cellar had a vaulted brick roof that was collapsed into the cellar when it was filled in. There were two broken crocks, fragments of barrel rings, and a rusted metal bucket in the entryway steps that were thrown in as the cellar was backfilled. There was little in the way of artifacts on the excavated portion of the cellar floor, except some fragments of a broken glass bottle in one corner.

Little structural evidence was found for the addition that had been removed except for one stone pier that may have supported the west porch of the addition. However, the deposits showed evidence in the form of artifacts that a structure had been located there. Artifacts included ceramic sherds, broken glass, food waste (animal bone), ash, and lots of nails. The south wall of the cellar steps may have also supported part of the addition. Another smaller anomaly was excavated just to the east of the cellar which was shown to be a stone-lined well. The well had been capped with concrete in the past and the cap was left in place for now because of safety concerns. Investigations of the Willhaf property will continue in the short term, as needed, for the rehabilitation of the house, and in the future, to learn more about the Willhaf family.

Pevehouse Cemetery

At the request of the landowner, Mulvihill mapped the Pevehouse Cemetery, located in the northern part of Van Buren, Crawford County. The family and other interested parties are working to clean up the cemetery and to get it listed on the National Register of Historic Places. Some of the early settlers of Crawford County are buried at this cemetery. Mulvihill also arranged for Dr. Steven Kite (UAFS) and his class on Interpreting Death to participate in the mapping and recording of the cemetery during the spring semester as a project for their class.

3FR1, a Late Woodland Site

During early January of 2017, archeologists (Tim Mulvihill, Dr. Jami Lockhart, and Dr. George Sabo) from the Arkansas Archeological Survey conducted a geophysical survey (remote sensing) of a Late Woodland site in the Arkansas River Valley. The site was originally researched during the 1960s, but no work had been done there since. A new contour map of the site was completed and forty-seven 20m x 20m units were then established to collect the data. At this point, only magnetometry data was collected using two Bartington 601-2 gradiometers. Magnetometry is a passive technology that measures very small variations in the earth's natural magnetic properties. Soils that have been disturbed reflect a change in this natural magnetic alignment. Likewise, materials that have fired have a measurably different magnetic signature than their surroundings. This technology works well to identify prehistoric features. In addition, the survey grids were georeferenced by Michael Evans using a Trimble Geo7X GNSS. Initial results were promising. Multiple anomalies identify the site area and some may even represent

structures. A low mound on the property is also quite apparent in the geophysical data. We hope to conduct further geophysical work at the site in the future using other technologies, but this limited work has shown that the geophysical surveys can identify prehistoric features, including possible house remains, on Woodland and Mississippian sites in this area, even when the sites have been impacted by plowing.

Other Projects

Spiro Landscape Archaeological Project: Mulvihill continued involvement in this multiyear project involving archeologists from the Oklahoma Archaeological Survey and Arkansas Archeological Survey to study the world famous Spiro site in eastern Oklahoma.

Cavanaugh Mound: Mulvihill and other ARAS staff carried out monitoring of erosion on the east side of the mound and preparation for repairs to the mound by The Archaeological Conservancy, which owns the site.

Richards Bridge: Mulvihill made maps and photo mosaics based on Training Program investigations the previous two years at this northeast Arkansas Parkin phase site for presentations at conferences and meetings.

Miscellaneous: The station continued processing and analyzing artifacts from various sites: Drennen-Scott (3CW1050), Willhaf (3CW1297), McClure (3CW34), and Pruitt (3LO769).

Restored east face of the Cavanaugh Mound in Fort Smith, completed in 2017. The site is owned by The Archaeological Conservancy. Inset shows the eroded condition of the mound at an earlier date prior to restoration efforts. Tim Mulvihill has worked for years in cooperation with the Conservancy to map the site, conduct remote sensing, and monitor its condition,.



UAFS Research Station — Academic & Service Activities

Teaching & Higher Ed

- Mulvihill taught ANTH 2203, Introduction to Archaeology (13 students) during Spring 2017 and ANTH 490V, Special Topics Archaeological Fieldwork (1 student) during Summer I 2017 at UAFS.
- Mulvihill worked with Steven Kite's Interpreting Death class during Spring 2017 at UAFS, teaching the students how to map with a total station on a project at Pevehouse Cemetery.
- Mulvihill's ongoing archeological research at the Drennen-Scott Historic Site and the Willhaf House serve the UAFS campus and its Historic Interpretation degree program.

Professional Service

- **Archaeological Conservancy.** Mulvihill continued to monitor erosion at the Cavanaugh Mound in Sebastian County, which is owned by the Conservancy, in preparation for restoration work.

Public Service & Outreach

- **Programs & Presentations.** Mulvihill gave two talks to Western Arkansas Master Naturalists (combined audience 15), and presented "Where the South Meets the Old West" (with Tom Wing) as an Osher Lifelong Learning class at the Drennen-Scott Historic Site (11 students).
- **Public Schools.** Mulvihill gave presentations on archeology to Greenwood Freshman Center students for Career Expo (39 students) and to East Hills Middle School 6th grade science classes (104 students). He conducted an archeological survey of the project area for a new safe room for the Mountainburg School District.
- **Public Interaction.** Mulvihill made contact with several landowners of sites in the river valley (Spinach Patch 3FR1, Gasfield 3FR9, Guy Brittain 3LO25) to discuss future access for research.
- **Media Outreach.** Mulvihill administered a Facebook Page for the ARAS-UAFS research station.

Service to the Arkansas Archeological Society

- **Chapter Presentations.** Mulvihill gave two public talks to the Ark-Homa Chapter in Fort Smith (combined audience 26), and also gave talks to the Arkansas River Valley Chapter in Russellville (24) and the Ouachita Chapter in Hot Springs (19).
- **Training Program.** Mulvihill co-directed the 2017 Training Program in northwest Arkansas and helped with research design, preliminary geophysical survey, and mapping, as well as excavations throughout the session (110 participants).
- **Ark-Homa Chapter.** The station advises and supports the Ark-Homa Chapter of the Society serving the Fort Smith area. Mulvihill makes arrangements for guest speakers and provides information to UAFS for press releases. He served as Chapter treasurer during 2016–2017. The station hosts lab sessions for Chapter members and provides fieldwork opportunities for volunteers.

Volunteer Hours

- Volunteers contributed 126 hours to station research projects in the field and laboratory during 2016–2017. In addition Arkansas Archeological Society members worked 6712 hours at the Training Program.



Winthrop Rockefeller Institute Research Station, Morrilton

The ARAS-WRI research station is located on the campus of the Winthrop Rockefeller Institute on Petit Jean Mountain. The Institute was established in 2005 as an educational and conference center of the University of Arkansas System. “The Rockefeller Institute’s mission is to develop diverse programs that nurture ideas, policies and activities to make life better in Arkansas.” The WRI research station of the Survey conducts archeological research in 11 counties of mountainous west-central Arkansas, including the southern fringe of the Ozarks (the Boston Mountains) and a large portion of the Ouachitas. The two mountain ranges incorporate varied upland and river valley environments and are separated by the Arkansas River corridor. Examples of important archeological resources in the station area range from rock shelters and rock art sites—including Indian Rock House in Van Buren County and numerous pictographs and petroglyphs at Petit Jean State Park in Conway County that are listed on the National Register—to finely made prehistoric ceramics from Carden Bottoms in Yell County—to the early 19th century town of Cadron in Faulkner County, also on the National Register of Historic Places.

Emily Beahm (Ph.D., University of Georgia, 2013) joined the Survey as an assistant at the WRI research station September 1, 2013 and was promoted to station archeologist beginning July 2015, and is also a Research Assistant Professor of Anthropology for the Department of Anthropology, University of Arkansas Fayetteville. Her major fields of interest are archeology of the eastern United States, Mississippian culture, ceramics, regional settlement patterns, social interaction, style, and iconography. Before coming to the Survey, she worked primarily in Tennessee and Georgia, with experience in directing major field projects, college teaching, and archival research.

Larry Porter is a native of Logan County, Arkansas, and has been a member of the Arkansas Archeological Society since 1979. He participated in summer Training Programs and spent eight years doing contract archeology for various private firms, mostly in the Ouachita National Forest, before joining the Survey in 1999 as archeological assistant at the ATU (now WRI) research station. His interests include the prehistoric Woodland and Mississippian periods of the northern Ouachita Mountains and Petit Jean River Valley, as well as early historic settlement in Arkansas. He is also an accomplished artist whose depictions of archeological subjects have appeared in publications and museum exhibits.



The Woodland garden in July, looking neat and tidy.

Teaching Gardens at WRI

This was the second year for the teaching gardens. The Native American Teaching Gardens at the WRI research station are designed to be an interactive way to learn about Native American gardening techniques, tools, and the plants used both before and after the introduction of corn into the Southeast. It is especially important to showcase the native plants that were domesticated locally that are not well known to the general public, like maygrass, chenopodium, and marshelder. Native plants used for fiber such as dogbane and rattlesnake master are also featured in the gardens. The gardens also include a side plot with teosinte, the Mexican ancestor of corn, to demonstrate the process of domestication of this important food crop.

These gardens are open to the public for viewing, and visitors may also work in them using replicas of Native American gardening tools constructed by ARAS staff members Jared Peabworth and Mike Evans in Fayetteville. In addition to providing a hands-on experience in planting and tending the crops, harvesting, preservation, and preparation of the food we grow will be an interactive experience for the interested public. Experimenting with the fiber-producing plants is another hands-on activity we hope to do with this project.

Gathering, Gardening, and Agriculture 5th Grade Social Science Curriculum

Emily Beahm worked with Jodi Barnes (ARAS-UAM), Elizabeth Horton (ARAS-TMRS), and George Sabo (ARAS Director) on the *Gathering, Gardening, and Agriculture* 5th Grade Social Science Curriculum. The final draft of the curriculum was completed in February of 2017. Larry Porter provided several original illustrations for the curriculum, including the cover. In addition to creating the curriculum, several workshops

for teachers were organized. A brief presentation was held on March 2nd and a day-long workshop was held on March 18th. The curriculum is available for free to Arkansas teachers as a printed workbook or as PDFs and PowerPoints that can be downloaded from a dedicated website on the Survey's main website (<https://archeology.uark.edu/gga/>).

Wild Violet Site, 3LO226

The report on the Wild Violet site (3LO226) excavations was further revised during the 2016–2017 fiscal year. This involved the inventory and examination of material excavated by Skip Stewart-Abernathy in 1990, shovel testing done in 1992, and Porter's excavation in 2009 as well as decades of surface collected material.

Porter continued to monitor the Wild Violet site to assess further damage to the site from periodic flooding and looting activities. While flooding damage was minimal, Porter observed and documented several instances of looting at the site. In March, two looters were apprehended while in the process of digging at the site.

Bluff Shelter Research

The artifacts from the 3CN362 excavations last year were inventoried and analyzed during 2016–2017. Emily Beahm and Larry Porter began processing the flotation samples obtained from these excavations. Beahm is in the process of completing a preliminary report of the excavations at this site.

Based on the artifact analysis Beahm tentatively concluded that there are two components represented in the archeological deposits at 3CN362. The earlier component lacks shell-tempered pottery, while the later component includes shell-tempered and grog-tempered ceramics as well as mixed shell- and



Kids practice data recording during 2017 Project Dig at the Winthrop Rockefeller Institute.



"Artifact" display from the 2017 Project Dig student symposium at the Winthrop Rockefeller Institute.

grog-tempered ceramics. Primary flakes and chert cobble cores indicate that stone tool manufacture was taking place at the site, while the presence of tiny microflakes indicates tool resharpening also occurred at 3CN362.

Project Dig

Project Dig is a cooperative project with the Arkansas Archeological Survey WRI research station and the Winthrop Rockefeller Institute. This program is designed to teach fifth and sixth grade students about archeology and culture. In the process of this semester-long project, students are taught about the different aspects of culture, they invent their own unique culture covering all those aspects, and create artifacts that reflect their culture. Another class “excavates” those artifacts and attempts to describe the “unknown” culture based on the artifacts and what they can interpret from them.

Project Dig was undertaken during the spring of 2017 with classes from Dardanelle, Perryville, Hector, Pottsville, and Dover schools. Emily Beahm made class visits in January to explain the program and get started. Each class conducted a day of fieldwork at WRI in April, and final presentations by the classes were made at WRI in May. The students did a fantastic job of using their imaginations and new knowledge of culture to analyze the data they collected and come to evidence-based conclusions.

2017 Training Program

Emily Beahm served as the laboratory director for the 2017 “Society Dig” at Cass, AR. This involved overseeing the washing, sorting, and labeling of artifacts from 3FR46 and 3FR58. Larry Porter worked with the Basic Excavation class in Area A of 3FR46 during the first week of the dig. The second week Porter moved to Area C of the site, where he worked to ground-truth an anomaly seen in the magnetometer survey. The anomaly turned out to be a large pit feature.

CCC on Petit Jean Mountain

The Civilian Conservation Corps was key in developing Petit Jean as a State Park. Company V-1781 was stationed on Petit Jean Mountain from 1933 to 1941. This company was unusual in that it consisted of veterans, while most CCC camps employed young men around 17 to 25 years old. These veterans were around 35 to 45 years old, and were more often local men from Arkansas.

On the south side of Highway 154 within Petit Jean Mountain State Park is an open field where the Civilian Conservation Corps camp was located. Within this area, the outlines of building foundations and a single standing chimney can be seen. This area was mapped by former (now retired) ARAS archeologist Leslie Stewart-Abernathy and volunteers in 2009. As service to Petit Jean State Park, Beahm has been researching the CCC on

Field lab at the 2017 Training Program at Cass, Arkansas.



Petit Jean. The goal is to produce a publication to educate park visitors about the CCC's role in creating Petit Jean Mountain State Park, and what the lives of these men were like during their time on the mountain.

Also in this area, to the south of Highway 154, there are two interesting concrete sculptures. One is in the form of a split log bridge. This is listed on the National Register of Historic Places as "Concrete Log Bridge" under the multiple properties listing "Facilities Constructed by the Civilian Conservation Corps in Arkansas 1932–1942." According to the nomination:

The Concrete Log Bridge was constructed c. 1935 at Petit Jean State Park by the men of the 1781st Company of the Civilian Conservation Corps, Arkansas District, stationed at Morrilton, Arkansas as a pedestrian bridge to be used by park's staff and visitors for the recreational enjoyment of the park.

In early 2017, Beahm was contacted by B. T. Jones of Petit Jean Mountain State Park regarding the removal of a second concrete sculpture in the shape of a flower basket and stump on park property. The park superintendent, Joe Buckley, requested that the sculpture be removed for possible future restoration. The origin of this sculpture, and of the concrete bridge, contrary to what is stated in the National Register nomination, has been attributed to the Mexican sculptor Dionicio Rodriguez (1891–1955). And although there is strong resemblance of these sculptures to known work done by Rodriguez, there is no definitive record that Rodriguez made these sculptures. Beahm

researched the work of Rodriguez and the CCC in an attempt to positively attribute the sculptures to Rodriguez.

No positive evidence for attribution of these sculptures to Dionicio Rodriguez has yet been found. However, the case for the cement sculptures having been the work of Dionicio Rodriguez lies in their strong resemblance to his style, and the fact that he created other works, albeit on a much grander scale, in Arkansas around the time that the CCC camp was in existence.

Other Projects

Van Buren County Rockshelters: Beahm and Porter worked with the police department and Deltic Timber to record two bluff shelter sites and document looting that took place at those sites.

Johnson County Homesite: Beahm and Porter conducted documentary research and surface collection at a homesite in Johnson County. Architectural remains of a house, a probable well feature, and a probable cellar feature were observed and recorded. Artifacts, including historic ceramics, indicate that the site was occupied in the 1880s to 1930s.

Other ARAS Research Stations. Porter assisted Tim Mulvihill (ARAS-UAFS) with excavations at the Willhaf House in Van Buren and helped the ARAS-ASU station with emergency excavations at a Clay County site being leveled for agriculture. Beahm and Porter assisted the Toltec research station with moving furniture and equipment as their offices and lab were renovated.

Fragment of concrete basket sculpture removed from Petit Jean State Park for restoration.



WRI Research Station — Academic & Service Activities

Service to Winthrop Rockefeller Institute

- **Native American Garden Project.** Station staff managed the Native American gardens at WRI, including planting, tending, and harvesting, processing the food and fiber plants, and preparing the gardens for winter.
- **Project Dig.** Station staff, cooperating with WRI Program Coordinators, again presented Project Dig, a program for Gifted and Talented students that uses archeological concepts and active learning to teach critical thinking and the scientific method; classes from Dardanelle, Perryville, Hector, Pottsville, and Dover schools participated, along with their teachers and some parents.

Professional Service

- Beahm served on the DDCI (Digital Data Collection Initiative) working group within ARAS.
- Beahm planned and hosted a Human Osteology workshop at WRI station.

Public Service & Outreach

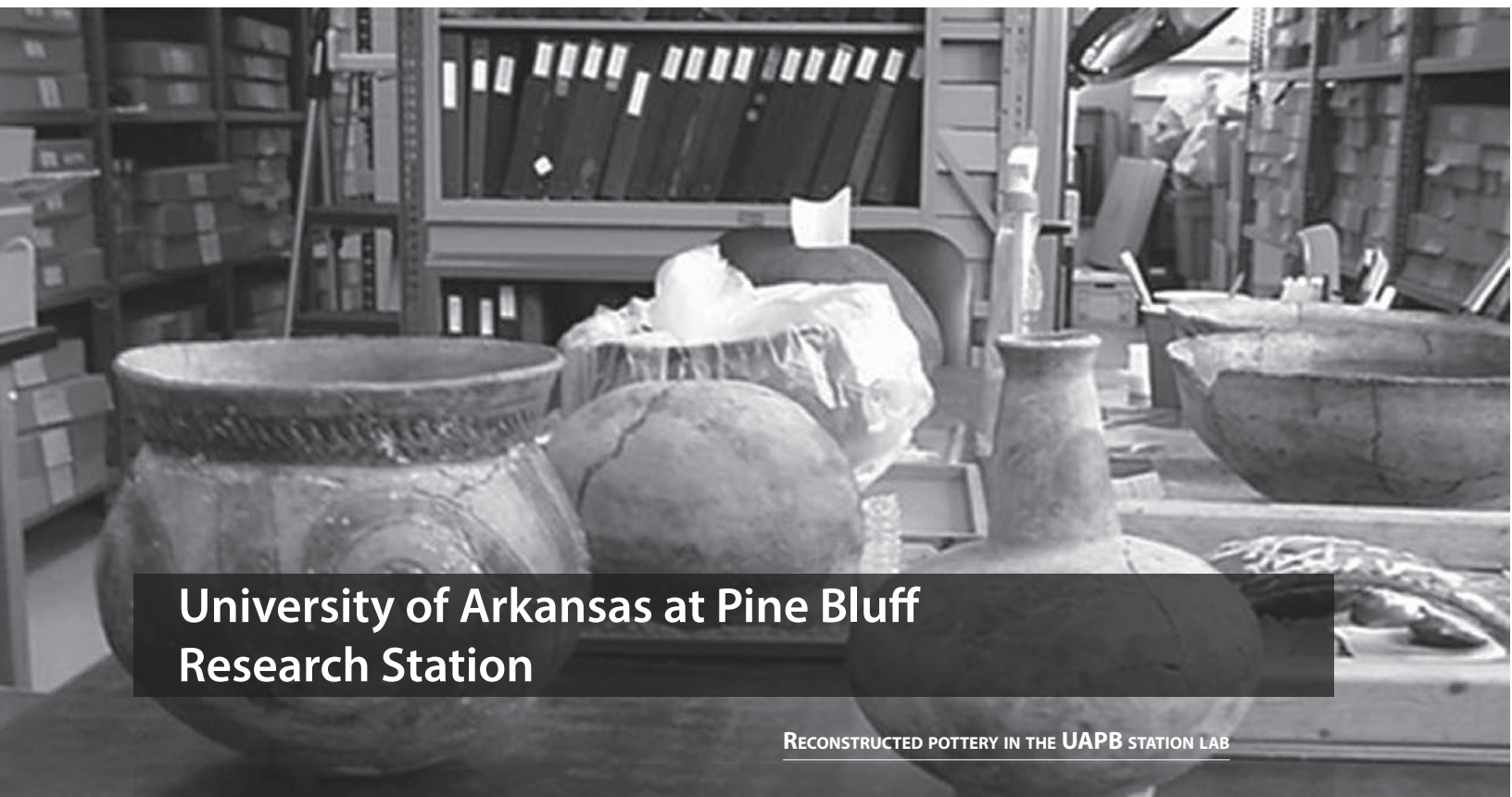
- **Programs & Presentations.** Emily Beahm gave a tour and talk about the Native American Gardens at WRI for visitors from Petit Jean State Park on the park's Archeology Day, and for the Pope County Master Naturalists (combined audience 45). Beahm set up a display about the garden project at the "Go Native, Grow Native" event at the Forest Service in Russellville. Beahm gave public talks to the Rotary Club of Morrilton (20) and Perry County Historical and Genealogical Society (12).
- **Public Schools & Universities.** Larry Porter completed a series of illustrations for the "Gathering, Gardening, and Agriculture" 5th grade curriculum. Emily Beahm planned and hosted a teacher's workshop for the GGA curriculum at WRI. Beahm gave presentations at Career Day at Paris Elementary School (200 students). The station hosted Project Dig with five local schools participating; set up information displays at "Archeology Day" and "Food Day" at Arkansas Tech University; and provided station and garden tours for an ATU class on the Anthropology of Food. Beahm coordinated with Dr. Rebecca Wiewel at ATU to enable her students to participate in volunteer Lab Days at the station.
- **Archeology Month.** Station staff planned and hosted its annual Open House for Archeology Month, and helped with ArcheOlympics at Toltec Mounds State Park.
- **Other Outreach & Consultations.** Emily Beahm and Larry Porter assisted Van Buren County law enforcement and timber company representatives in responding to human remains found in a bluff shelter. Porter and Beahm continued working with the Corps of Engineers to compile and digitize records for the Wild Violet site (3LO226) investigations, to complete a final report, and to monitor the site. Beahm and Porter assisted Petit Jean State Park with research on CCC camps and CCC-era concrete statuary. Beahm and Porter recorded a site in a public park for the city of Clarksville.
- **Media Outreach.** Emily Beahm administers a Facebook Page for the WRI research station and ARV Chapter.

Service to the Arkansas Archeological Society

- **Chapter Presentations.** Emily Beahm gave a tour of the station and gardens to the members of the Ouachita Chapter (8). She gave public talks to the Ouachita Chapter of Hot Springs (18), Ark-Homa Chapter of Fort Smith (12), Arkansas River Valley Chapter of Russellville (18), and Kadohadacho Chapter of Magnolia (4).
- **Training Program.** Emily Beahm managed the field lab at the June 2017 Training Program in Cass, AR. Porter worked as a site area supervisor during both weeks of the Training Program excavations.
- **Arkansas River Valley Chapter.** The WRI research station advises and supports the Arkansas River Valley Chapter, serving the Russellville/Morrilton and Petit Jean Mountain area. Emily Beahm serves as Secretary/Treasurer, handles publicity and logistics for monthly meetings, produces a newsletter, and schedules speakers. The staff host field/lab days for volunteers whenever possible.

Volunteer Hours

- Volunteers contributed 82.5 hours to station research projects in the field and laboratory during 2016–2017.



University of Arkansas at Pine Bluff Research Station

RECONSTRUCTED POTTERY IN THE UAPB STATION LAB

The ARAS-UAPB research station is located on the University of Arkansas Pine Bluff campus. The station archaeologist teaches courses in the UAPB Department of Social and Behavioral Sciences. The station conducts archaeological research in eight counties of east-central Arkansas, extending from Little Rock to the Mississippi River. This territory encompasses portions of diverse physiographic regions including the Delta, the Gulf Coastal Plain, and the Ouachita Mountains. The archaeological heritage of the area includes sites representing the earliest Paleoindians at about 11,500 BC, through Colonial and Historic Arkansas. The best-known site in station territory is Menard-Hodges in the Osotouy Unit of Arkansas Post National Memorial. Menard-Hodges is part of a complex of sites thought to include the Quapaw village of Osotouy and the earliest Arkansas Post, which was the first European settlement in what became France's Louisiana colony.

John H. House (Ph.D., Southern Illinois University at Carbondale, 1991) is the Survey's Research Station Archeologist for UAPB, and Research Professor of Anthropology for the Department of Anthropology, University of Arkansas Fayetteville. He has been involved with Arkansas archeology since he was a high school student in Mountain Home, and attended the first ever Arkansas Archeological Society Training Program. House joined the Survey in 1978 as an assistant at the UAPB station. He served as station archaeologist at UAM from 1983 to 1985, and again during 1988, before returning to head the UAPB station. His interests include North American prehistory, material culture studies, and the archeology of colonial era Native Americans.

Robert J. Scott (M.A., University of Alabama, 2004) has worked previously for the Illinois State Museum, the Center for Archaeological Investigations at Southern Illinois University Carbondale, and Panamerican Consultants, Inc. He worked as the station assistant at the Survey's UAM research station (2004–2007), leaving to enter the Ph.D. program in Anthropology at Southern Illinois University Carbondale. Scott was a teaching assistant at University of Alabama and Southern Illinois University, and for the archeological field schools at both institutions. His past experience includes work with WPA-era museum collections, studies of historic artifacts, faunal analysis, and the analysis of prehistoric pottery. He re-joined the Survey as station assistant at ASU in September of 2010, and transferred to UAPB station in the fall of 2013.

Menard Locality

The Menard locality at the southern tip of the Little Prairie in Arkansas County is believed to correspond to the late seventeenth century Quapaw village of Osotouy and the location of the first Arkansas Post, established by Henri de Tonti in 1686. Important archeological sites in the Menard locality include Menard-Hodges (3AR4), Lake Dumond (3AR110), and Wallace Bottom (3AR179). In 1997 the U.S. Congress authorized and funded the creation of an Osotouy unit of Arkansas Post National Memorial, encompassing the Archaeological Conservancy's Menard-Hodges archeological preserve and the outlying Lake Dumond site. The Wallace Bottom site lies just outside the boundary of the Osotouy Unit, on the Dale Bumpers White River National Wildlife Refuge.

In 2014 the Arkansas Archeological Survey, in partnership with the National Park Service Midwest Archeological Center, began a multiyear comprehensive archeological inventory of the Osotouy Unit. John House and Jami J. Lockhart, ARAS Computer Services Coordinator, represent the Survey as co-principal investigators for this project. Lockhart directed geophysical surveys of parts of the Menard-Hodges site. Results indicated what appeared to be numerous cultural features beneath the surface, and guided the Phase 2 fieldwork which began in 2015. This included further geophysical mapping and ground-truthing excavations on selected potential cultural features. Osotouy Inventory fieldwork resumed in March 2016 with excavation on three additional anomalies identified by the 2014 remote sensing.

The current focus of the Osotouy Inventory project is analysis and writing at the Midwest Archeological Center in Lincoln, Nebraska. House continues to participate through ongoing consultation with MWAC personnel, helping to select chronometric dating samples, and analysis of artifacts from the 2015–2016 excavations.

A related ongoing project is work on an article about the colonial era Native American graves at the Lake Dumond site. Six graves encountered at Lake Dumond during the Society/Survey Training Program in 1997 were excavated under a permit from the Arkansas Historic Preservation Program and in consultation with the Quapaw Tribe of Oklahoma. Poorly preserved human remains were found in four of the graves, in some cases accompanied by European trade items. The graves are estimated to date to the very late 1600s or early 1700s and possibly are those of Quapaws. The ongoing analyses emphasize detailed reconstruction of the grave features and comprehensive description of accompanying artifacts. The Quapaw Tribe of Oklahoma reburied the human remains in 2003 at the location where they were unearthed, after the remains had been analyzed and reported.

A third important archeological site in the Menard locality is Wallace Bottom. Results of fieldwork carried out from 2001 to 2006 support the identification of Wallace Bottom as a portion of the late 1600s Quapaw village of Osotouy and the location of the early 1700s French Arkansas Post. Building on

a comprehensive inventory of specimens from the 2001–2006 investigations, House published an article in the journal *Southeastern Archaeology* in 2013 about the Native American material culture from Wallace Bottom. Results of analysis of plant remains from Wallace Bottom by Kelsey O. Nordine, Gayle J. Fritz, and Jocelyn C. Turner were included as a chapter in Research Series No. 67, published by the Arkansas Archeological Survey in 2016.

Fourche Island

The Thibault Plantation locality adjacent to the Little Rock Port Industrial Park in Pulaski County has been a major research focus for the ARAS-UAPB station since 2007. This field investigation is part of our ongoing response to accelerating impacts on cultural resources from residential, commercial, and industrial development in the Little Rock area. In the 1870s and 80s, J. K. Thibault excavated pottery vessels from a number of small mounds on his plantation on Fourche Island in the Arkansas River floodplain south of Little Rock. Thibault subsequently donated and loaned a series of vessels to the Smithsonian Institution. These vessels were among those reported in 1886 by W. H. Holmes in the Bureau of American Ethnology Annual Report. These were some of the first artifacts from Arkansas to be reported in the scientific literature. The Thibault site is now within a 160-acre tract acquired by the Quapaw Tribe of Oklahoma in 2012.

Topographic mapping and systematic shovel testing in the dense woods and undergrowth adjacent to Thibault Road, begun in 2012, continued in 2016–2017. The 24 shovel tests completed then supplemented 110 shovel tests from previous years to comprise a total of 134 shovel tests across ca. Sha (12 acres) of wooded ground. Four volunteers participated in the 2016–2017 mapping and shovel testing at Thibault, joined by ARAS-TMRS station assistant Katy Gregory and ARAS-SAU station assistant Fiona Taylor. The topographic map, when completed, will form a basis for determining the relationships among natural and cultural features in the tract.

The Arkansas Archeological Survey has entered into a contract with the Quapaw Tribe of Oklahoma to conduct a geophysical survey in portions of the cultivated field on the Thibault site. This survey, tentatively scheduled for late 2017, has the potential to indicate the presence of graves and other cultural features below the surface and will aid the Tribe in long-term management and preservation of the Thibault site.

Mississippian and Protohistoric Period Architecture in Eastern Arkansas

House's article "Mississippian and Protohistoric Period Architecture in Eastern Arkansas" was published in *The Arkansas Archeologist* in 2016. The article reports data from 110 structures at 33 archeological sites in 17 counties ranging from the Missouri state line on the north to the Louisiana state line on the south. The structures date from approximately AD 900 to 1700 and encompass both ceremonial and domestic functions.



Volunteer Gabrielle Hargrove from Gillett, Arkansas, working at Tarleton Creek Mounds.

Tarleton Creek Mounds 3AR15

In April, May, and June 2017, John House and Robert Scott conducted topographic mapping and small scale excavation at the Tarleton Creek Mounds site (3AR15) near Ethel in Arkansas County. This was part of a continuing ARAS-UAPB research station program of revisits to mound sites on private land. House and Scott first visited Tarleton Creek Mounds in January 2015 at the invitation of the landowner. Tarleton Creek Mounds turned out to be a site initially recorded in March 1940 during the Central Mississippi Valley Archaeological Survey, a collaboration among archeologists from Harvard University, University of Michigan, and Louisiana State University. The site had not been revisited by professional archeologists over the ensuing 75 years.

Returning to Tarleton Creek Mounds in April 2017, House and Scott began excavating a 1x2m test unit on the summit of Mound A, a 3.5m (12 foot) platform mound. By mid-June the test unit had been excavated to a depth of 60cm exposing a thick layer of burned clay debris (daub) representing the burning of a Native American structure on the summit of an earlier mound construction stage. In the process of the excavation, they collected samples of pottery fragments and other cultural material by screening mound fill through one-fourth inch mesh.

The excavation confirmed that the mound was a platform (not a burial) mound and had been built during the Mississippian period, AD 900–1600. Concurrent with the excavation of the test unit, Scott directed total station mapping of Mound A and the surrounding landscape. Results to date suggest that the site plan is that of a village/mound ceremonial center with a large mound (Mound A) and smaller mounds arrayed around a plaza. Two volunteers assisted House and Scott with the work at Tarleton Creek Mounds.

Lonoke County and the Pettus site

House continued collaboration with an avocational archeologist from Carlisle, Arkansas to investigate sites in southeastern Lonoke County, an area which has hitherto seen limited archeological investigation. The collaboration has included recording and revisiting sites along Bayou Meto and Crooked Creek and photographic documentation of artifacts collected from the surface at these sites.

In conjunction with archeological reconnaissance in Lonoke County, the UAPB station conducted data-gathering at the Pettus site 3LN27 on Baker's Bayou near Pettus. The site was reported to the University of Arkansas Museum in 1960 by a local Arkansas Archeological Society member, Wallace Wills.

Material collected and recorded over the ensuing decades indicated that Pettus is a major Plum Bayou culture habitation site, contemporary with Toltec Mounds, 9 miles to the west. The work at Pettus in October and December 2016 was guided by Wills' detailed sketch map showing the location of midden concentrations, burials, and other site features. The October work consisted of excavation on two conjoined 1x2m test units on what Wills indicated as a "trash dump" (midden) on the highest part of the site. Cultural material, which was found only in the plowzone, consisted of typical Plum Bayou artifacts, e.g., plain grog-tempered pottery, quartz crystal, and one arrow point, but also included a small number of shell-tempered pottery sherds indicating later Mississippi period occupation. Specimens from the plowzone also include fragments of bones of deer and other mammals, fish, and turtles.

Work in December focused on a controlled surface collection consisting of thirty-two 10x10m units laid out in two perpendicular transects. Results from the surface collection helped to define the boundaries of the site as well as augmenting the sample of artifacts from Pettus. Altogether, 11 volunteers participated in the October and December fieldwork at Pettus. Planning of the 2016 work at Pettus was guided by Wallace Wills' 1960 sketch map showing site features not visible today plus information from current interviews with a local resident who grew up next to the site.

The Cahokia Horizon and Barrett

In summer 2016, House, Scott, and emeritus UAM station archeologist Marvin Jeter collaborated on a paper reporting distinctive Cahokia horizon artifacts in the ARAS-UAPB and ARAS-UAM station territories in Arkansas. Jeter read the

paper, "Artifactual Evidence of Possible Cahokian (Or Other Northerly Mississippian) Contacts in Eastern and Southeastern Arkansas," at the Mid-South Archaeological Conference in Memphis in July 2016. The conference brought together investigators from the Midwest and Mid-South to update evidence of interaction, ca. AD 1250, between the Cahokia Mounds in Illinois and local cultures in nine states in the greater Cahokia Interaction Sphere. Jeter et al.'s paper, retitled "Possible Cahokian Contacts in Eastern and Southeastern Arkansas," has been accepted for publication by University of Florida Press in a volume of papers from the July 2016 conference.

Consideration of Cahokia Horizon in east Arkansas prompted House to reexamine materials collected in 1983 from salvage excavation of Mound A at the Barrett site (3LE3) in Lee County. Artifacts from that project include a number of indicators of contact between Barrett and Cahokia. Among the samples collected from the base of Mound A in 1983 was a tiny (600 milligrams) piece of wood charcoal in what appeared to be a lens of silt derived from erosion of the earliest of four mound construction stages identified in the stratigraphic profiles. The sample was too small to be radiocarbon dated by the techniques available in 1983 but was of sufficient size to be dated by accelerator mass spectrometry (AMS), the current preferred method in use today. Half of the charcoal sample was sent for AMS dating to Beta Analytic in Miami, Florida. The analysis returned a date of Cal. AD 1020–1165 at 2-sigma (95.4%) probability. These results place the early stages of construction of Barrett Mound A in the era of explosive growth at Cahokia (the "Big Bang") beginning around AD 1050, and the ensuing century of intense activity at that site. The dating was funded by the Arkansas Archeological Survey.

Emergency excavations at Barrett Mound A, March 20, 1983. ARAS Negative No. 833250.



Robert Scott's Research

Tillar Archeological Project. As part of his doctoral research at Southern Illinois University Carbondale, Robert Scott has been conducting an archeological study along Bayou Bartholomew in Drew County. The purpose of the research is to test alternative hypotheses for the timing and causes of depopulation in the northern Lower Mississippi Valley in the late Mississippi period, approximately AD 1400–1700. Through field survey and analysis of collections, Scott identified 70 sites within the study area dating to this interval.

Scott completed fieldwork on the Tillar Project in late 2016 and has since focused on analysis of pottery samples from sites in the Tillar study area. When completed, Scott's dissertation will offer new perspectives on settlement and chronology along Bayou Bartholomew in the era of earliest European contact. Preliminary results suggest that population decline occurred gradually and that Old World disease epidemics were not a causal factor driving depopulation in the study area. Scott's SIU doctoral committee includes ARAS-UAPB station archeologist John H. House.



Volunteers surface collecting at the Pettus site, 9 December 2017.

UAPB Research Station — Academic & Service Activities

Grants, Honors & Awards

- \$595 from the Arkansas Archeological Society's Archeological Research Fund to Robert Scott for "Dating Late Mississippian Tillar Phase Ceramics and Subsistence Remains in Southeast Arkansas," and AMS date for 3DR359.

Teaching & Higher Ed

- John House taught SOCI 2330, Introduction to Anthropology (36 students) during the Fall 2016 semester and SOCI 3360, Peoples and Cultures of Africa South of the Sahara (4 students) during the Spring 2017 semester at UAPB.
- Robert Scott (hired as an adjunct Instructor) taught SOCI 2330, Introduction to Anthropology (24 students) during the Spring 2017 semester at UAPB.
- John House serves on the doctoral dissertation committee for Southern Illinois University Carbondale Ph.D. candidate Robert Scott, and as chair of UAF Anthropology Ph.D. student Jessica Cogburn's dissertation committee.
- John House served as judge for the Junior and Senior High School exhibits in the Social and Behavioral Sciences Division of the annual UAPB Regional Science Fair.

Public Service & Outreach

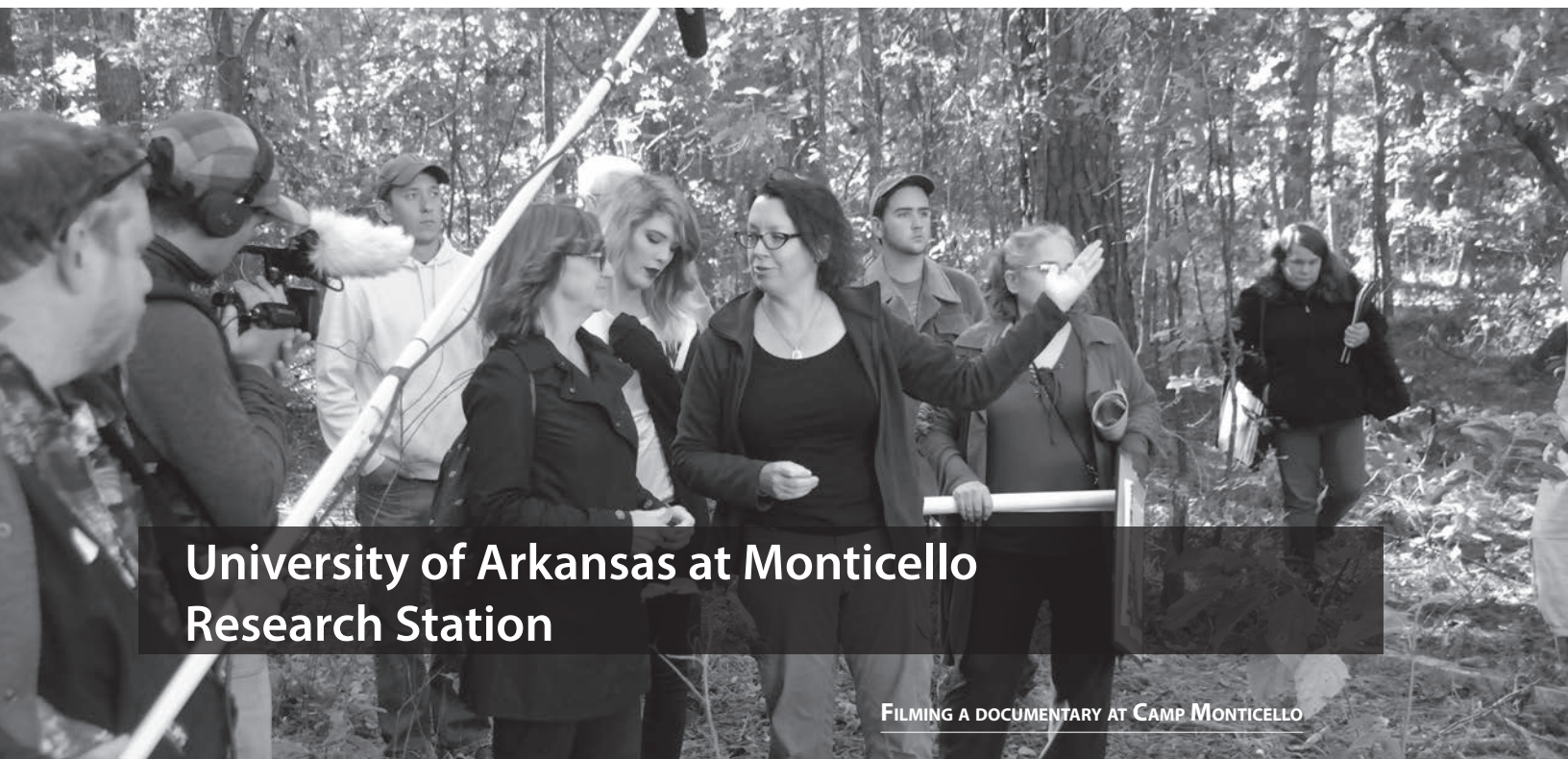
- **Programs & Presentations.** Robert Scott joined Jodi Barnes (ARAS-UAM) in teaching a 4H workshop on cemetery mapping and documentation at Rohwer Japanese Internment Camp, and gave a presentation to students at a 4H Day of Archeology camp in West Helena (32). John House gave two talks at Trinity Village Retirement Community in Pine Bluff (combined audiences 60), one at Pine Bluff-Jefferson County Historical Museum (10), and helped with an Artifact ID Day at Lonoke County Museum. House and Scott participated in the Cabot Public Library's History Fair (100 attendees). House led participants in The Archaeological Conservancy's Lower Mississippi Valley Tour on a visit to Menard-Hodges (30).
- **Historic Cemetery Preservation Initiative.** Robert Scott mapped and recorded an undocumented cemetery (3PU1019) in College Station, AR at the request of the property owner, 3M Corporation. John House responded to requests for information and consultation on Sand Hill Cemetery (3PR284) and Hickory Grove Cemetery (3LN592), and assisted with mapping at 3PU1019.
- **Agencies.** John House consulted with Chris Null of Natural Resources Conservation Service about a site near Pine Bluff that was recorded in 1978. In addition to the work at the Osotouy Unit, House loaned a display of probable Quapaw artifacts from Wallace Bottom to Arkansas Post National Memorial as part of a celebration of the 100th birthday of the National Park Service.
- **Media Outreach.** Robert Scott administers a Facebook Page for the UAPB station.

Service to the Arkansas Archeological Society

- **Programs & Presentations.** John House gave public talks to the Central Mississippi Valley Chapter in Jonesboro (25) and the Ouachita Chapter in Hot Springs (30).
- **Training Program.** John House and Robert Scott participated in the 2017 Training Program at Cass, Arkansas. House taught the Basic Excavation Seminar, supervising excavations in Area A at 3FR46. Scott taught the Site Survey seminar and helped supervise excavations.
- **Volunteer Opportunities.** The station invites local Society members to assist in the lab or fieldwork whenever opportunities arise.

Volunteer Hours

- Volunteers contributed 48 hours to station research projects in the field and laboratory during 2016–2017.



University of Arkansas at Monticello Research Station

FILMING A DOCUMENTARY AT CAMP MONTICELLO

The ARAS-UAM research station is located on the University of Arkansas Monticello campus, where the station archeologist teaches anthropology courses in the School of Social and Behavioral Sciences. Station territory covers seven counties in southeastern Arkansas. The eastern portion consists of landforms deposited by the ancestral Arkansas and Mississippi rivers and their tributaries and contains numerous small to moderate habitation sites and occasional mound and/or mortuary centers of the later prehistoric and protohistoric periods. Several mound sites are mentioned in the reports of Victorian era archeologists. To the west are uplands of the West Gulf Coastal Plain, dissected by the Saline-Ouachita drainage and its tributaries. This area contains some older Archaic period sites as well as the later sequence. Among many significant sites in station territory, the small Lake Enterprise Mound is affiliated with the famous Poverty Point culture and is the oldest known Indian mound in Arkansas. More recent sites range from the National Register listed Taylor/Hollywood Plantation 1840s log house and Lakeport Plantation in Chicot County—Arkansas’s only remaining pre-Civil War plantation mansion on the Mississippi Delta—to World War II internment sites such as Camp Monticello, Rohwer, and Jerome.

Jodi Barnes (Ph.D., American University, 2008) is the Survey’s Research Station Archeologist at UAM and Research Assistant Professor for the Department of Anthropology, University of Arkansas Fayetteville. She joined the Survey in January 2013. She was previously staff archeologist and GIS coordinator for South Carolina’s State Historic Preservation Program. She has published articles in the *International Journal of Historical Archaeology* and *Historical Archaeology*, and a number of book chapters. She also edited a book titled *The Materiality of Freedom: Archaeologies of Post-Emancipation Life*, and is co-editor with Frank McManamon and Andy Stout of a volume titled *Managing Cultural Resources: Global Context, National Programs, and Local Actions*. Since her arrival, Dr. Barnes has secured funding and grants to support research and public outreach in southeast Arkansas, published articles on this research, conducted public outreach activities, and is teaching “Cultural Anthropology,” “Sex, Gender, and Culture,” and “Introduction to Archeology” at UAM.

Katherine Gregory (M.A., Florida Atlantic University, 2006) joined the Survey as station assistant at UAM in October 2014. She earned her B.A. in Anthropology from Marquette University and previously worked for the Seminole Tribe of Florida Tribal Historic Preservation Office. In October 2016 Ms. Gregory transferred to the Toltec Mounds research station.

Service & Public Education

2016–2017 was a year of service and public education at the ARAS-UAM Research Station. Dr. Barnes became President of Preserve Arkansas, a non-profit that works to build stronger communities by reconnecting Arkansans to our heritage and empowering people to save and rehabilitate historic places. She worked with Drs. Emily Beahm (ARAS-WRI), Elizabeth Horton (ARAS-TMRS), and George Sabo (ARAS Director) to develop a 5th grade social studies curriculum aligned with the Arkansas Department of Education (ADE) 5th grade Social Studies Curriculum Framework. Dr. Barnes also taught two classes at UAM, continued research at Hollywood Plantation and Camp Monticello, hosted an array of Archeology Month events, and worked on improvements for the Archeology Room at the Drew County Historical Museum.

Gathering, Gardening, and Agriculture

The ARAS-UAM Research Station spear-headed the development of the curriculum, “Gathering, Gardening, and Agriculture: Plant-based Foodways in the Southeastern United States,” which was made possible with funding from the Southeastern Archaeological Conference’s Public Outreach Grant, the Arkansas Archeological Society’s Bill Jordan Public Outreach Fund, the Arkansas Humanities Council, and the National Endowment for the Humanities. The curriculum focuses on plants, because as critical parts of our foodways plants not only fulfill nutrient needs, they teach us about culture, history, and economics. Biologically, people need food to survive, but what we eat is part of our history and culture.

In addition, Arkansas, along with the surrounding Mid-South region, is one of only ten world centers of independent

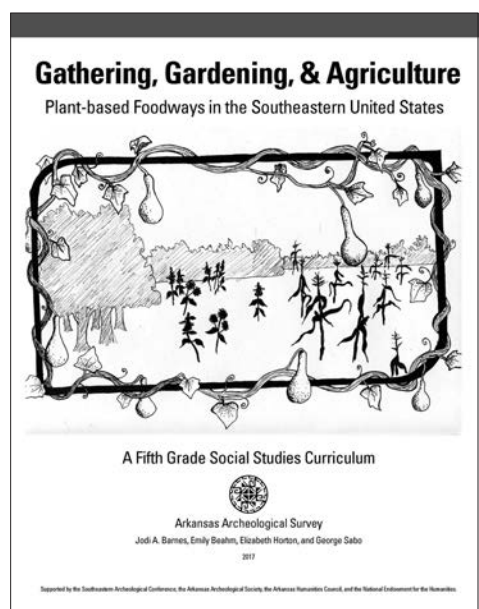


Bicyclists learning about the Woodruff House during Preserve Arkansas’s 2017 Most Endangered Places bicycle ride.

As President of Preserve Arkansas, Dr. Barnes attended quarterly board meetings along with monthly executive committee, finance, education, and development committee meetings. She gave the keynote presentation at the 2016 Preservation Awards banquet in Little Rock. She nominated “Cemeteries, Burial Grounds, and Graveyards” as one of the 2017 Most Endangered Places and assisted with the announcement in Little Rock during Arkansas Heritage Month. She also co-organized the Most Endangered Places Bicycle Ride with Joseph Brajcki, attracting over 40 people for a casual ride around Little Rock’s most endangered places.

crop domestication. Preserved plant remains excavated from dry bluff shelters in the Arkansas Ozarks (and now curated at the University of Arkansas) represent most of the evidence supporting this identification.

The curriculum is designed to celebrate this important aspect of Arkansas’s past. It consists of five lessons to be taught over the course of one week, plus a bonus lesson. Each lesson is approximately one hour in length. The lessons use the SE’s Instructional Model (Engagement, Exploration, Explanation, Elaboration, Evaluation) and focus on a temporal comparison of plant use in the southeastern United States that draws spe-



Cover of the Gathering, Gardening, and Agriculture Curriculum workbook with artwork by Larry Porter (ARAS-WRI).



Dr. Horton showing teacher workshop participants rock art depicting sumpweed on the walls of Rockhouse Cave.

cific examples from Arkansas. The lessons model the processes of archeological inquiry pertaining to plant-based foodways. Students look at archeological evidence, including site maps, artifacts, and seeds, and their relationship to each other (context) to reconstruct and interpret the past. Students use archeology to discover how diets changed when people shifted from hunting, fishing, and gathering wild foods to growing their own food through gardening and agriculture.

In a bonus lesson, students explore the effects of European colonization in the Americas by mapping the exchange of plants on a global scale. “Gathering, Gardening, and Agriculture” provides hands-on activities and guided investigation of three archeological sites in Arkansas (Rockhouse Cave, Toltec Mounds, and Parkin) in which students learn scientific literacy while gaining new knowledge about Native American plant-based foodways in the southeastern United States.

Dr. Barnes designed the “Gathering, Gardening, and Agriculture” webpage to promote the curriculum and make it easier for teachers to use (<http://archeology.uark.edu/gga/>). She made all of the teaching materials available as easy downloadable PDFs so that teachers do not have to photocopy the activities from the book. The free digital downloads can be found on the curriculum webpage. In addition, Dr. Barnes co-taught two teacher’s workshops: an hour-long presentation at the Arkansas Gifted and Talented Educators Conference in Little Rock and a full-day workshop at the Winthrop Rockefeller Institute (WRI) in Morrilton. During the workshop, educators put the curriculum into practice by doing the class activities, took a tour of the foraging and woodland period gardens at WRI, and visited Rockhouse Cave, a site featured in the curriculum.

Camp Monticello (3DR305)

The ARAS-UAM Research Station assisted Sylvia Bizio and Matteo Borgardt with footage for the Arkansas Humanities Council supported documentary on Camp Monticello, a World War II Italian prisoner-of-war camp. Dr. Barnes gave a short lecture on the archeology of the camp and a tour of the site to UAM students and Monticello community members. The documentary, which highlights the important history of the site, is the story of Bizio’s father’s internment at the camp. In addition, Dr. Barnes continued work on publications about the research for the journals *Historical Archaeology* and *Southeastern Archaeology*. The photo on page 58 shows Dr. Barnes talking to Silvia Bizio about the archeology of Camp Monticello during filming for the documentary.

Taylor House or Hollywood Plantation (3DR26)

The ARAS-UAM Research Station continued research at Hollywood Plantation to aid the University of Arkansas at Monticello in the restoration of the property. In October, ARAS staff, students, and volunteers conducted excavations to locate the cistern. All of the artifacts have been washed and the primary analysis completed. Secondary analysis on the glass and nails continues. Dr. Lucretia Kelly is analyzing the faunal remains and Dr. Carl Drexler (ARAS-SAU) is analyzing the ammunition.

Dr. Barnes and Dr. Nancy Theiss, with the Oldham County Historical Society in Kentucky, coauthored a paper for the 2016 Arkansas Archeological Society meeting on the interconnections between the Taylor House and Mauvilla and the travel of the Taylor family and their enslaved laborers between the two



Fall 2016 excavations at Hollywood Plantation.

locations. Dr. Barnes also expanded on the topic of health and healing for presentations for the annual meetings of the Society for Historical Archaeology and the Society for the History of Medicine and Health.

Archeology Month 2017

Dr. Barnes designed the 2017 Archeology Month poster, with a collage of photos celebrating the 50th anniversary of the Arkansas Archeological Survey. It can be seen in color on the Archeology Month webpage <http://archeology.uark.edu/learn-discover/archeology-month/> and on the cover of this Annual Report.



Cheri Miller, a UAM student, photographing artifacts for the collection inventory in the Drew County Historical Museum.

In addition to a flintknapping workshop and the Archeology Minutes broadcast on Crossett radio station, the ARAS-UAM Research Station partnered with the Department of Agriculture, Desha County 4-H to host a Day of Archeology as part of Archeology Month celebrations. As a way to introduce 4-H young people to archeology, youth from across south-east Arkansas visited Rohwer Japanese American Internment Cemetery and the World War II Japanese American Internment Museum in McGehee. Over 50 people toured the site and the museum, doing educational scavenger hunts, and learned to map a cemetery.

Drew County Historical Museum

The ARAS-UAM Research Station and UAM students are updating the exhibits in the archeology room. They inventoried all of the collections, created a database of all of the artifacts, identified type and time period for the artifacts where possible, and designed new exhibit panels. The new exhibit opened in September 2017.

UAM Research Station — Academic & Service Activities

Grants, Honors & Awards

- \$19,688 grant awarded to Jodi Barnes from ANCRC for “Continued Research at Hollywood Plantation: Monitoring, Analysis, and Public Education.”

Teaching & Higher Ed

- Jodi Barnes taught Cultural Anthropology (12 students) and Introduction to Archeology (5 students) during Spring 2017. Archeology students went on a field trip to Little Rock to participate in the Mardi Gras parade as they read the related textbook *Strung Out on Archaeology* by Laurie Wilkie. Cultural Anthropology students visited a local Thai restaurant.
- Jodi Barnes gave a presentation on “Material Masculinities: Archaeology of a World War II Prisoner of War Camp” for the University of Arkansas Archeological Field School in Fayetteville, AR.
- Jodi Barnes advised student Cheri Miller as she works on collateral studies in anthropology as an ad hoc minor. Barnes has developed and taught three Independent Study courses for Cheri Miller’s program including two on Museum Studies, in which Miller has accomplished projects for the Turner Neal Museum on the UAM campus. Barnes also serves on the M.A. committee for Anthropology student Victoria Jones at UAF.
- Jodi Barnes continued to work with other UAM faculty on the Taylor House project. She monitored construction of the ell kitchen and back porch, and prepared and submitted a report on the archeology at Taylor House for ANCRC.
- Jodi Barnes discussed development of new exhibits and projects at Turner Neal Museum on the UAM campus; participated in Scholars Day at the UAM library; and attended the School of Social and Behavioral Sciences Awards Banquet, where her student Cheri Miller received an award.
- Jodi Barnes led UAF anthropology students from Dr. Natarajan’s class Anthropology of Violence on a guided tour of the World War II Japanese Internment Museum and Rohwer Japanese American Relocation Cemetery in McGehee.

Professional Service

- **Society for Historical Archaeology.** Jodi Barnes serves on the SHA’s Gender and Minority Affairs Committee and Academic and Professional Training Committee; she took part in two anti-racism workshops and helped organize a forum on structural racism for the annual meeting. Barnes also served as a judge for the 2017 SHA Student Paper Prize and peer-reviewed a submission to the journal *Historical Archaeology*. This year she was asked to join the Membership Committee.
- **Preserve Arkansas.** Jodi Barnes began her term as President in December 2016. She attended monthly executive, finance, development, and education committee meetings and quarterly board meetings, and met with the Executive Director to plan the 2017 year. Activities this year included:
 - Planning and grant proposal for 2017 “Behind the Big House” program at Lakeport Plantation
 - Speaker at the 2016 Awards Banquet
 - Panelist (“The Role of Affordable Housing and Historic Preservation in Economic Development in Rural and Urban Communities,” organized by Donald Pryor) at the Annual Fair Housing Fair Lending Conference in Little Rock
 - Most Endangered Places: Barnes co-organized (with Joseph Brajski) the Most Endangered Places Bicycle Ride; Barnes created promotional materials, designed a t-shirt, planned the route, coordinated speakers, conducted research, prepared posters, and gave the tour (40+ participants; Barnes also wrote a nomination for cemeteries, burials, and graveyards to the “Most Endangered Places” list and participated in the official announcement of the MEP list for 2017
- **Southeastern Archaeological Conference.** Jodi Barnes planned a symposium for the 2017 SEAC on “50 Years of Public Archaeology.”
- **Drew County Historical Society & Museum Commission.** Jodi Barnes serves on the Commission and helped the Museum with plans for updating their Archeology Room and helped develop the new exhibits. She also served as assistant editor for the new issue of the *Drew County Historical Journal*.
- **Other Organizations.** As President of Preserve Arkansas, Jodi Barnes serves on the Board of the Arkansas Preservation Foundation. Barnes is active in the Arkansas Historical Association, Arkansas Archeological Society, Southeastern Archaeological Conference, Society for Historical Archaeology, Drew County Historical Society, and Drew County Museum Commission.

Public Service & Outreach

- **Programs & Presentations.** Jodi Barnes worked with Hope Bragg to hold the 4-H Day of Archeology at Rohwer (48); she created activity sheets to help participants learn about mapping, guided them in making a map of the cemetery, and helped with other activities to explore the camp and WWII Japanese American Internment Museum (48 participants). Barnes presented “The Archeology of Health and Healing on an Arkansas Plantation” to the Society for the History of Medicine and Health Professionals at the University of Arkansas Medical School in Little Rock (46).
- **Exhibits.** Jodi Barnes helped develop an exhibit on “Gathering, Gardening, and Agriculture” for the Arkansas State House. Her poster on the work at Hollywood Plantation was displayed for the Chancellor’s Exhibit at UAM and now hangs in the Memorial Classroom Building. Barnes is also working on a new exhibit for that building, as well as one for the Archeology Room of the Drew County Historical Museum.
- **Archeology Month Activities.** Jodi Barnes designed and created the poster for Archeology Month 2017. She revised the Archeology Minutes to be aired on the Crossett radio station KAGH 104.9 FM. Barnes also organized and procured materials for a flintknapping workshop taught by Ray Sibley.
- **Social Media.** Jodi Barnes continued to develop public outreach and education on social media.
- **Consultations.** Jodi Barnes provided assistance to local, state, and federal agencies on archeological issues, including Arkansas Highway & Transportation Department. Barnes visited sites in ARAS-UAM territory with Jessica Crawford of The Archaeological Conservancy.
- **Arkansas Community Foundation.** Jodi Barnes was asked to serve on a grants selection committee for a grant cycle called Arkansas Delta Endowment for Building Communities.

Service to the Arkansas Archeological Society

- **Tunican Chapter.** The station advises and supports the activities of the Southeast Arkansas Tunican Chapter, including Lab Days for volunteers. Jodi Barnes organized the speaker series, wrote articles for the newsletter, and prepared press releases and fliers.
- **Annual Meeting.** Jodi Barnes and the ARAS-UAM research station worked with the Tunican Chapter and the ARAS-SAU research station to organize, promote, and host the 2016 Annual Meeting in El Dorado. Barnes organized a panel discussion for the meeting on working with descendant communities, and presented a paper.
- **Training Program.** Jodi Barnes taught Basic Excavation during the summer Training Program on the Mulberry River near Cass, Arkansas. She wrote an article for *Field Notes* (the Society newsletter) based on the Basic Excavation participants’ experiences.

Volunteer Hours

- Volunteers contributed over 113 hours to station research projects in the field and laboratory during 2016–2017.



Henderson State University Research Station, Arkadelphia

TRUBITT AND OUACHITA CHAPTER MEMBERS AT 2016 AAS MEETING

The ARAS-HSU research station is located on the campus of Henderson State University in Arkadelphia, where the station archeologist teaches anthropology courses in the Department of Sociology, Human Services, and Criminal Justice. The station territory covers nine counties of southwestern Arkansas. This area is dominated by the Ouachita Mountains, but extends across parts of the Little Missouri, most of the Middle Ouachita, and the Middle Saline river basins on the Gulf Coastal Plain. Ouachita Mountain novaculite, mined extensively in the 19th century as “Arkansas whetstone,” and also quarried by prehistoric American Indians for toolmaking and trade, is a resource that affected early settlement and land use in the uplands. In the river basins, salt-making was an industry pursued by American Indians and later by settlers. Both activities are represented by important archeological sites.

Mary Beth Trubitt (Ph.D., Northwestern University, 1996) is the Survey’s Research Station Archeologist at HSU/Arkadelphia, and Research Professor of Anthropology for the Department of Anthropology, University of Arkansas Fayetteville. She joined the Survey in 2000 after a teaching position at Western Michigan University. She has previous field experience in ten states and Belize, including work in southern Arkansas in the 1980s, and extensive research at the Cahokia site, where she studied the role of prestige goods in the political strategies of chiefdoms, among other topics. She is an expert on various prehistoric technologies and procurement strategies, including the shell bead industry, novaculite and other lithic extraction and tool making, and ceramics.

Chelsea Cinotto (M.A., University of Reading, 2014) began working in February 2017 as the new assistant for the ARAS-HSU station. Chelsea earned a B.A. in anthropology from the University of Oklahoma and an M.A. in archaeology from University of Reading in the United Kingdom. She has experience working for the Oklahoma Archeological Survey, the National Cowboy & Western Heritage Museum, and Sam Noble Oklahoma Museum of Natural History. Chelsea has stepped in to work with students and volunteers during the station’s weekly lab days, and has been assisting ongoing research.

Station Collections and Records: Archiving our History

As a result of new Survey initiatives, the ARAS-HSU Research Station made strides in FY 2016–2017 to inventory curated artifact collections. In addition to updating the station's box inventory database with counts and weights of each category of artifact (chipped lithics, ground stone, ceramics, etc.), site revisit forms are submitted to the Survey Registrar to be added to AMASDA, and new information is added to the "Arkansas Novaculite" website database. Mary Beth Trubitt supervised the work of volunteers in weekly Archeology Lab Days in 2016, and trained new station assistant Chelsea Cinotto to take over the supervisory role when she began work in February 2017. Inventory of artifacts accessioned during 1967 through 1974 was completed, and work on 1975 boxes began. Trubitt wrote a short piece highlighting discoveries about the station's history for *Field Notes*.

Volunteers Janice Fisher, Florence Davis, and Denise Evans working with ARAS-HSU assistant Chelsea Cinotto (at the computer) on collections inventory during a Lab Day (photo by Mary Beth Trubitt).

During weekly Archeology Lab Days, station staff and volunteers have been inventorying artifacts like this ceramic vessel sherd in curated collections (photo by Mary Beth Trubitt).





Mary Beth Trubitt and Chelsea Cinotto, assisted by volunteers from the Ouachita Chapter of Arkansas Archeological Society, Garland County Historical Society, and Henderson State University, documented marked and unmarked graves at the Pest House Cemetery (3GA1061), to advise the City of Hot Springs about its preservation.

Older paper records were scanned as needed for projects. Cinotto and Marilyn Whitlow (ARAS-TMRS) scanned station black-and-white photo cards with ceramic vessels from the Hodges, HSU Museum, and Lemley collections. With the acquisition of a new high-capacity slide scanner, Trubitt began scanning the color slides curated at the ARAS-HSU Research Station and updating associated indexes. Over 2000 of the approximately 14,000 slides were scanned, including those from the station's earliest decade (1967–1976). Some of the digital images have been used in the station's "On This Day" series on social media to showcase aspects of the Survey's 50-year history.

Investigating Tool Production and Exchange Using Arkansas Novaculite

One major research focus of the ARAS-HSU Research Station is the acquisition of novaculite, an important toolstone quarried from mountain ridges in the Ouachita Mountains, and its manufacture into chipped stone tools distributed far beyond

this region during the Archaic period (8000–1000 BC). Mary Beth Trubitt regularly updated the "Arkansas Novaculite" website database with information submitted by colleagues and the public on novaculite artifacts found in and beyond the quarry zone. Trubitt also wrote and illustrated a new web page on non-novaculite stone resources used in the Ouachitas. While inventorying the station's curated collections, Trubitt and Chelsea Cinotto identify artifacts that are diagnostic of time periods in Arkansas's long history, and add that information to the novaculite website. Ultimately, the novaculite distribution map will be expanded to create maps for each time period.

A station project that combined research and public archeology was archeological survey and shovel testing at 3GA22, a major novaculite quarry in Hot Springs National Park, during FY 2015–2016. That project was initiated by the park's need to install water-monitoring equipment on the mountain. Trubitt finished cataloguing novaculite debris from the 3GA22 shovel testing, and then wrote and illustrated a final report on the

results (AMASDA Project 6994). The artifacts were transferred to Hot Springs National Park for curation, and copies of field and lab notes, maps, and photographs were sent to the Survey Registrar and the National Park Service (MWAC, HSNP). Trubitt led a tour of the site for Hot Springs National Park law enforcement personnel in November 2016.

Trubitt wrote a manuscript reporting the results of an inventory of curated novaculite debris from an older testing project at another quarry site, 3GA48 Spanish Diggings, and submitted it for eventual publication in *Field Notes*. She continued writing and revising a book manuscript on quarry landscapes with her co-author, Anne S. Dowd. *Extracting Stone: The Archaeology of Quarry Landscapes* will be published by Oxbow Books as part of their American Landscapes series.

Historic Cemetery Preservation Initiative

Responding to public inquiries and a request by the City of Hot Springs in 2016, Mary Beth Trubitt made several visits to city property that is now recognized as the former Pest House Cemetery or City Cemetery, 3GA1061. She provided an interview for a TV story on the cemetery with Josh Berry (KARK) in November. The location of a “pest house” or city quarantine facility constructed in response to the 1895 smallpox epidemic, the site was also used as a cemetery for the burial of casualties of the epidemic as well as for poor residents and unidentified visitors to the city. In 2017, Trubitt and Chelsea Cinotto met with representatives from the City, the Arkansas Historic Preservation Program, and a newly formed “friends” group, and made a conditions survey of the cemetery. Over the course of seven field days in February, March, and April, Trubitt, Cinotto, and eleven local volunteers mapped the cemetery with total station and GPS, and photographed gravestones, funeral home markers, and depressions indicating unmarked graves, as well as plantings and historic items, so as to advise the City on cemetery preservation and continued maintenance. Over 590 marked and unmarked graves were documented in the cemetery, which was in use between 1895 and 1984. Trubitt and Cinotto wrote a final report with large format maps, and submitted it with recommendations for cemetery upkeep and protection to the City of Hot Springs in June.

Ancient Caddo Lifeways in the Saline and Ouachita River Valleys

Another major research focus at the ARAS-HSU Research Station combines analysis of old collections and new excavations to interpret Caddo Indian lifeways in this region. Mary Beth Trubitt continued to analyze and interpret results of major excavations conducted during the 2013–2014 Training Programs at 3MN298, the Dragover site. This research uses architecture, foodways, and material culture to interpret social identity and community interconnections in the Ouachita Mountains, especially during the Mississippian or Caddo cultural period (AD 1000–1700). Robert Scott (ARAS-UAPB) finished his analysis of mussel shell from a large refuse pit

excavated at the site. Trubitt assembled information from the 3MN298 ceramic sherd analysis, and selected a sample for chemical characterization using Instrumental Neutron Activation Analysis (with funding from the U.S. Forest Service and the University of Missouri Research Reactor Archaeometry Lab). Trubitt made a research trip to the University of Arkansas Museum in July 2016 to analyze a sample of ceramic sherds from 1939 excavations at 3GA1, the Adair site. She selected a sample of sherds from Adair for INAA. Adair, also located in the upper Ouachita River valley, would have been the nearest mound center to Dragover. Trubitt presented a paper on the Works Projects Administration (WPA) excavations at Adair at the annual meeting of the Arkansas Archeological Society, and made a presentation on comparisons of ceramic sherd assemblages from Dragover and Adair at the 2017 Caddo Conference. The INAA analysis of 35 sherds and two mussel shells has been completed by the MURR lab, and results are being interpreted. Prior to sending the sherds for analysis, Trubitt removed soot and burned residues from inside two rim sherds for possible radiocarbon dating; a grant proposal was submitted for this analysis, but was not funded. Trubitt finalized a report on results of a survey conducted at 3MN2831 as part of a 2013–2014 Training Program site survey seminar (AMASDA Project 7034).

The long-term project to document pottery vessels in the Joint Educational Consortium’s Hodges Collection, curated at the ARAS-HSU Research Station, continues. Trubitt scanned analysis sheets, and Marilyn Whitlow (ARAS-Toltec) entered data from the vessel documentation into the master database. Trubitt discussed curation plans, NAGPRA, and tribal consultation with the HSU administration. Project results were included in a presentation Trubitt made at the annual Southeastern Archaeological Conference in October 2016. She subsequently wrote an article on effigy vessels in the Hodges Collection that was published in *Caddo Archeology Journal* in February 2017. Trubitt wrote a brief summary of recent research at the ARAS-HSU Research Station for the current research section of *CAJ*, and sent updates to Timothy Perttula for his revised version of the *Caddo Bibliography*. Trubitt made a presentation on Caddo effigy vessels at the Caddo Iconography Workshop, held in February before the 2017 Caddo Conference in Natchitoches, Louisiana. Trubitt and Cinotto updated the station’s index of pottery patterns and designs with photograph numbers and vessel identifications, and forwarded it and scanned photo cards to Ann Early (State Archeologist) for use as she finalizes the descriptive or “collegiate” system for publication. Many of the Hodges Collection pots are the “type vessels” for this classification system of Caddo pottery decorative treatments.

Chelsea Cinotto researched the brief 1973 excavations at Caddo Hills site (3MN22) and prepared a summary for future research into the ceramics found there. One feature appears to be a pit with minimal disturbance and intact stratification. Cinotto made plans to analyze the ceramic sherd assemblage from the Feature 2 pit to compare with a Caddo pit feature from Dragover (3MN298).



Mary Beth Trubitt (third from right) with other participants, including ARAS colleagues George Sabo and Ann Early, at the Caddo Iconography Workshop held in Natchitoches, Louisiana in February 2017.

Trubitt resumed work on comparisons between two Caddo mound sites (3HS60, the Hedges site, in the Ouachita River valley, and 3SA11, Hughes, in the Saline River valley). Past excavation projects uncovered residues of burned structures next to the main mounds at both of these contemporaneous Late Caddo period sites. The analysis will interpret the timing and activity patterning in these ancestral Caddo communities. Trubitt completed analysis and artifact inventories of Hedges site materials in the lab in the spring, and wrote a short “current research” page about the project for the Survey website.

Mississippian Societies in the Midwest and Southeast

Work continues on Mississippian period research projects that link Arkansas to the macroregion. After publication of the Tom Green festschrift (edited by Trubitt) in 2016 as No. 67 of the Survey’s Research Series, Trubitt did some promotion of the volume. She participated in a Southeastern Archaeological Conference symposium organized by Duncan McKinnon and Amanda Regnier on Caddo-Mississippian interaction, presenting a paper bringing together novaculite research and the “Arkansas Novaculite” website, JEC Hodges Collection effigy vessels, and INAA studies on ceramics. Following discussions at the conference, Trubitt initiated a collaborative article on INAA results from Arkadelphia area sites with Rebecca Wiewel. A positive book review of *Caddo Connections: Cultural Interac-*

tions Within and Beyond the Caddo World (by Jeffrey S. Girard, Timothy K. Perttula, and Mary Beth Trubitt, 2014) was published in *American Antiquity*. Trubitt provided information and an abstract for a chapter on Craig Mound projectile points to Eric Singleton for a planned Spiro Exhibit catalog publication.

Exhibits for Henderson State University

Chelsea Cinotto updated the exhibit case in Henderson State University’s Huie Library. This exhibit is changed often to display interesting and informative artifacts from the ARAS-HSU Research Station’s curated collections. One exhibit illustrated how changing technology has affected archeological research and record keeping. Another showcased three vessels from the Sargent donation. These are Southwestern ceramic vessels from the Mogollon culture and included a painted olla, a Ramos Polychrome bowl, and a painted bowl. The May and June exhibit had nineteenth-century artifacts from past station excavations at 3MN22. This display included historic ceramics, metal, and glass, and focused on how changes in artifact styles through time can be used to date a site’s period of use. One of the more distinctive artifacts was a pair of brass cufflinks/sleeve buttons with engraved initials “D” on one link and “C” on the other. These short exhibits give Henderson students and visitors a chance to see some of the station collections and learn more about different aspects of archeology.



One of the rotating exhibits placed in Henderson State University's Huie Library highlighted changes in technology used by archeologists over the decades (photo by Mary Beth Trubitt).

HSU Research Station — Academic & Service Activities

Grants, Honors & Awards

- \$710 awarded by the Arkansas Archeological Society's Archeological Research Fund to Mary Beth Trubitt and Katie Leslie for "Dating Architecture from the 2014 Society Training Program Excavations" (for botanical identification and AMS dating of a sample from 3MN298 Structure 2).

Teaching & Higher Ed

- **Teaching & Advising.** Trubitt taught ANT4053/SOC4063, World Cultures (38 students) and ANT3043, North American Indians (16 students) in Henderson State University's Department of Sociology, Human Services, and Criminal Justice during Spring 2017.
- Trubitt discussed undergraduate anthropology opportunities, graduate school, and careers in anthropology and archeology with current and former students from Henderson State University, Ouachita Baptist University, and National Park College. She agreed to serve as an MLA committee member for an HSU graduate student.
- **Other Service to HSU.** Trubitt attended department meetings and HSU Ellis College meetings on campus. She provided photographs of anthropology student activities to the Ellis College dean's office, recommended book purchases to HSU's Huie Library, served on two faculty search committees, and wrote a letter of support for a tenure application.
- **Joint Educational Consortium.** Trubitt met with HSU Provost Stephen Adkison about station buildings and JEC Hodges Collection curation and exhibit plans; attended a meeting with campus police as building representative; drafted a memorandum of understanding about NAGPRA documentation of human remains and associated funerary objects in the JEC Hodges Collection as requested; assisted the HSU administration as they prepared a new grant proposal for future exhibit of the JEC Hodges Collection; provided a copy of the CAJ article on JEC Hodges Collection effigies to the HSU President; provided copies of old museum correspondence to HSU Archives.
- **Exhibits & Talks.** Three exhibits were installed in HSU's Huie Library, "Changing Technology in Archeology," "Casas Grandes," featuring Southwestern vessels from the Sargent donation, and "1800s Artifacts," with historic ceramics, metal, and pieces of glass from 3MN22 excavations. These exhibits are estimated to reach 25 people a month. Trubitt presented a talk on "Caddo Indian Foodways in the Ouachita Mountains" to Marvin Schultz's honors class on foodways at College of the Ouachitas (10 students), and a guest lecture on "Cultural Resource Management" to David Sesser's Introduction to Public History class at HSU (15 students).

Professional Service

- **Committees.** Trubitt serves on the ARAS Personnel Committee, and as chair of the Southeastern Archaeological Conference's Patty Jo Watson Prize committee.

- **Peer Reviews & Editorial Boards.** Trubitt became editor-elect for *Southeastern Archaeology*, the journal of the Southeastern Archaeological Conference, in October 2016. Since that time, she has discussed plans and procedures with editor Elizabeth Reitz, learned the electronic editorial management system used by the journal publisher Taylor & Francis, updated the reviewer database, acquired a new copyeditor, and become acquainted with the procedures to invite reviewers and correspond with authors, copyeditor, and publisher about manuscripts. Trubitt participated in discussions as part of the SEAC board. Trubitt is also a member of the editorial board for *Caddo Archeology Journal*. Trubitt peer-reviewed manuscripts submitted to *American Anthropologist*, *Caddo Archeology Journal*, and an edited volume. She read and evaluated student papers submitted for the Illinois Archeological Survey's Stephens Award.

Public Service & Outreach

- **Programs & Presentations.** Trubitt presented public talks to the Clark County Historical Association in Arkadelphia (30), the Mena Lions Club (25), and the Garland County Library (70). Trubitt and Joyce Shepherd (HSU) gave a presentation on race to a group of students at Malvern High School (about 60 students).
- **Exhibits.** Cinotto set up an exhibit using whole vessels from the Sargent donation at the Garland County Library for Arkansas Archeology Month in March 2017 (estimated audience 45).
- **Media Outreach.** Trubitt and Cinotto administer the ARAS-HSU Research Station's Facebook page, which had over 570 "likes" by the end of FY 2016–2017. As part of the Survey's 50th anniversary celebration in 2017, Trubitt created an "On This Day" series highlighting past station activities. Trubitt updated station web pages on the HSU and Survey websites, and wrote or coauthored several short pieces for the "50 Moments" series on the Survey website.
- **Historic Cemetery Preservation Initiative.** Trubitt visited cemeteries in Saline County (Bryant Cemetery, 3SA372; Kirkpatrick Cemetery, 3SA313), and discussed the Mt. Tabor Cemetery gravestone documentation project with the cemetery committee. She discussed a "lost in the woods" cemetery (3HS606) with an interested HSU history grad student, who later did additional oral history with area residents and submitted a revisit form. She advised two Ouachita Chapter members on cemetery site recording procedures. Trubitt and Cinotto visited the Pest House Cemetery (City Cemetery), 3GA1061, in Hot Springs and organized a mapping and documentation project with 11 volunteers from the Ouachita Chapter and Arkansas Archeological Society, Garland County Historical Society, and Henderson State University. This project was spurred in part by the interest of Karen and Brian White, who researched the cemetery, contacted the City to see about access and upkeep, and began a "friends" group. A historic site, 3GA1081, bordering the cemetery was also recorded.
- **Consultation.** Cinotto and Trubitt assisted the Clark County Sheriff's office with identification of bones. Trubitt discussed a site disturbance issue with Tim Dodson (AHPP) and Kimberly Bogart (Entergy); she and Cinotto attended a meeting with them in May 2017 to talk about strategies for dealing with impacts to sites along the Entergy lakes (Hamilton and Catherine). Trubitt discussed plans for new park signage at Hot Springs National Park with Tom Hill. Other inquiries and assistance about sites and local archeology included agency contacts from the Ouachita National Forest, Arkansas Forestry Commission/Nature Conservancy, Natural Resources Conservation Service, and the Caddo Nation's Historic Preservation Office.
- **Other Public Service.** Trubitt and Cinotto advised local residents, teachers, park interpreters, and historical society members about sites, cemeteries, artifacts, and collections via telephone and email queries, and visits at the station or with landowners. Cinotto and Trubitt visited with residents in Clark, Garland, Grant, Hot Spring, and Saline counties during the year, and recorded six new archeological sites (3SA414, 3GA1081, 3GA1083, 3GA1084, 3HS707, 3HS708). Trubitt provided information on Cherokee Indians to a local elementary school teacher. She loaned the research station's show and tell boxes to Lake Ouachita State Park interpreter Austin Davidson for two public programs. Trubitt created a new educational flyer on archeology in the Lake Ouachita region that is distributed via the Survey's website. Trubitt updated her M. R. Harrington entry in *The Encyclopedia of Arkansas History & Culture* to include a reference/link to the Survey's new "Ozark Bluff Shelters" website. Cinotto was contacted by a local resident following her participation in the 2017 Society Training Program, and made plans for a site visit to Saline County.

Service to the Arkansas Archeological Society

- **Training Program.** Cinotto participated in the June 2017 Training Program in Cass. Preparation included cleaning, repairing, and inventorying ARAS-HSU Research Station field equipment. Cinotto helped supervise Basic Excavation seminars during both weeks of the dig at 3FR46. She wrote a summary of the Society Dig with photographs for the July edition of the Ouachita Chapter's *Ouachita Newsletter*.

- **Ouachita Chapter.** Trubitt and Cinotto regularly attended monthly meetings of the Ouachita Chapter in Hot Springs. Trubitt served as Secretary for the chapter in 2017. Trubitt also edits and distributes the Ouachita Chapter newsletter and assists with administering the chapter's Facebook page, which had over 320 "likes" by June 2017. She assisted Meeks Etchieson with the Ouachita Chapter field trip to Arkadelphia area sites for International Archaeology Day, October 15, 2016. Trubitt and Cinotto assisted the chapter with planning Archeology Month events, and distributed posters and brochures. Trubitt wrote a short piece on the Ouachita Chapter's children's book for the education section of the Survey's website. Cinotto created and set up the Ouachita Chapter's Arkansas Archeology Month exhibit in the Garland County Library.

Volunteer Hours

- Volunteers contributed 599 hours to station research projects in the field and laboratory during 2016–2017.



Arkansas Archeological Society member Janice Fisher inventories artifacts in station curated collections during an Archeology Lab Day in September 2016 (photo by Mary Beth Trubitt).

Southern Arkansas University Research Station, Magnolia



SMALL ARMS MUNITIONS FROM ELKINS FERRY

The ARAS-SAU Research Station is located on the Southern Arkansas University campus in Magnolia, where the station archeologist teaches in the School of Liberal and Performing Arts. The station is also helping to develop a new Southern Arkansas Museum on the campus. Station territory covers 11 counties in southwestern Arkansas, stretching from the southern edge of the Ouachita Mountains to the Arkansas/Louisiana state line, and incorporating the Great Bend region of the Red River. Among the numerous important sites in ARAS-SAU station territory are Crenshaw, the earliest known Caddo ceremonial center, and Historic Washington State Park, an antebellum town restored and interpreted by Arkansas State Parks and the Pioneer Washington Restoration Foundation.

Carl G. Drexler (Ph.D., The College of William and Mary, 2013) joined the Survey in 2011 after working for the National Park Service, Colonial Williamsburg Foundation, and the U.S. Army Corps of Engineers. In his career, he has worked in the Caribbean, Mexico, and the U.S. Southeast, Southwest, Midwest, and Mid-Atlantic. He is an expert on conflict archeology, historical archaeology, and spatial analysis in archeological research.

Fiona M. Taylor (B.A., Texas A&M University, 2015) was hired as the Arkansas Archeological Survey research station assistant at Southern Arkansas University in Magnolia in January 2017. Following graduation, she moved to rural northern Nevada to fulfill an AmeriCorps position teaching science and outdoor ethics to underprivileged schools and communities. Fiona has been a member of the Arkansas Archeological Society since 2010 and has participated in numerous archeological projects around the state. Her research interests include collections management, environmental anthropology, and conflict.

The ARAS-SAU Research Station made significant contributions in the areas of research, records management, and public outreach this year. Much of this work reflects our focus on conflict sites and Conflict Archeology, but also includes the full sweep of southwest Arkansas heritage. We were fortunate to add a station assistant this year, filling the post Dr. Drexler vacated upon his promotion to station archeologist. Ms. Fiona Taylor, a long time Arkansas Archeological Society member and graduate of Texas A&M University, joined us at the start of 2017, and contributed significantly to much of the work described in the following report.

Irregular Warfare in Southwest Arkansas

The Civil War in southwest Arkansas was a unique, yet still-understudied event. Limited historical scholarship indicates that a constant and significant conflict arose within the region. Lacking documentary evidence for many aspects of the war in this part of the state means that archeology is one of the main tools we have to recover knowledge of this war-within-the-war. We are just now learning to query the archeological record to recover these stories.

Building on research at Dooley's Ferry (3HE12) and other places around southwest Arkansas, Dr. Drexler authored a book chapter for an edited volume on asymmetrical warfare and archeology focused on the region. This was a blending of archeology and modern military theory, particularly the counterinsurgency manual (Field Manual 3-0: Operations) used by the U.S. Army.

World War I Arkansas

This year marks the start of the World War I centennial observations in Arkansas. There has been little archeological work done on the event in the state, but the Arkansas Historic Preservation Program has sought our assistance with publicizing this aspect of the state's history. Much of this work focused on the Little Rock Picric Acid Plant, a World War I munitions plant that operated near the current site of the Little Rock Airport.

Picric acid was a high explosive used in artillery shells and the manufacture of chemical warfare agents. Shells filled with Arkansas-made picric acid are part of the "iron harvest" in northern France and Belgium that are part of World War I's enduring legacy. The station staff recorded a podcast on the Little Rock Picric Acid Plant for the Arkansas World War I Centennial Commission website. In addition, information on the site was supplied to a number of bomb disposal technicians and explosives researchers interested in the history of picric acid and its use as an explosive.

Historic Unexploded Ordnance

In addition to the research on picric acid, the station maintained a database of historic ordnance (pre-World War I) finds and remediation cases across the country, which helps archeologists, bomb technicians, and cultural resource managers understand the frequency and scope of unexploded

ordnance finds in the United States. Maintaining this database attracted the attention of the media following the discovery of a lot of Civil War cannonballs on Folly Island, South Carolina, in December.

Several requests from archeologists and bomb technicians for information on possible unexploded ordnance finds were fielded. Some of these turned out to be actual pieces of ordnance, others turned out to be ordnance-like objects that were not dangerous to responding personnel.

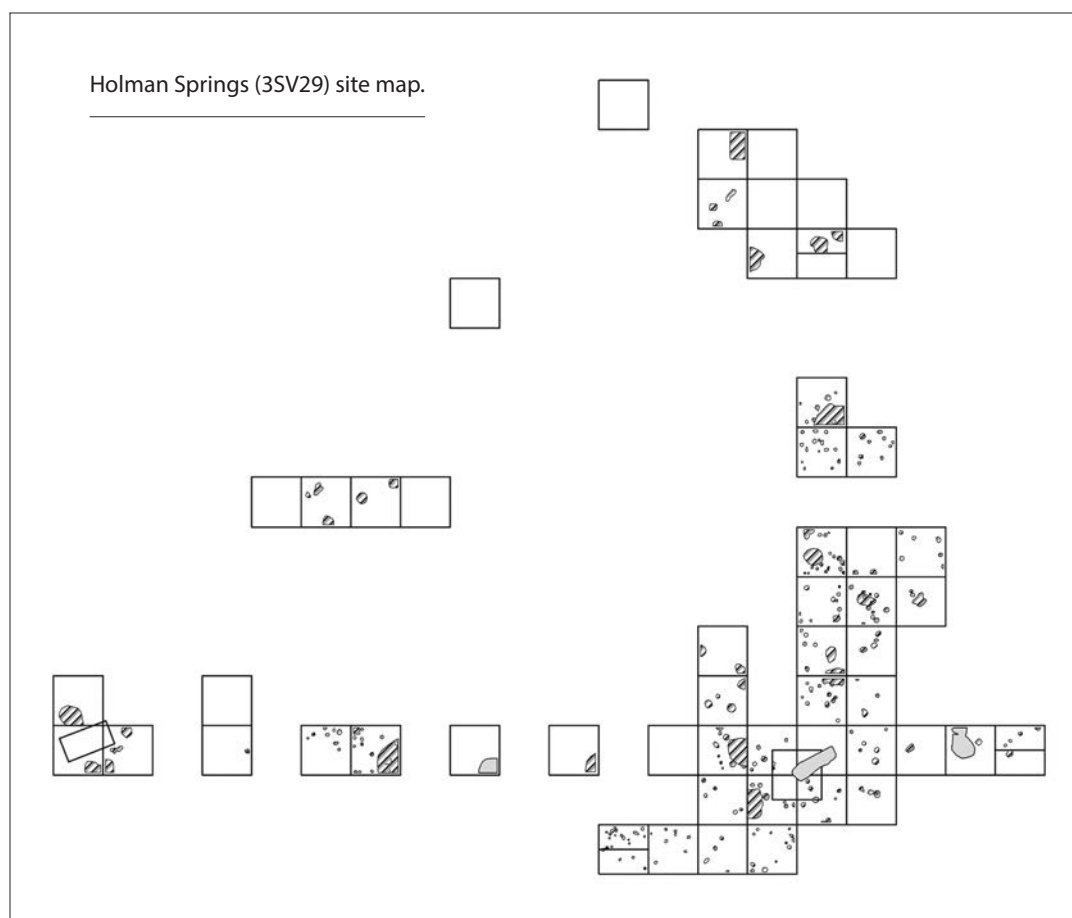
Archeology, Heritage Tourism, and the Camden Expedition

Communities across southwest Arkansas currently work to improve interpretation on a number of sites associated with the Camden Expedition of 1864, the last campaign of the Civil War in Arkansas. These sites are in uniquely good condition, and offer the opportunity to greatly increase tourist visitation, improving and diversifying rural economies. The station has been deeply involved with several of these efforts.

We concluded the project at the Elkins' Ferry battlefield (3NE217), submitting the final report to the Arkansas Historic Preservation Program near the start of the fiscal year. This report was also presented to the Arkansas Archeological Society in the form of a conference paper at the annual conference.

Iron object that proved NOT to be a Civil War landmine.





That project and others on Camden Expedition sites fed into a presentation on archeology and heritage tourism in Arkansas made at the Society for Historical Archaeology conference in Fort Worth, Texas. This presentation was recruited for expansion into a book chapter in the coming year.

Additionally, at the request of the Arkansas Historic Preservation Program, we wrote a work plan for three weeks of field-work at the site of the Battle of Prairie D'Ane. This action took place immediately after the engagement at Elkins' Ferry, giving us the unique opportunity to study sequential actions and potentially identify commonalities in the archeological record between the two. The work was funded, and will be completed next year.

Caddo Salt Processing at Holman Springs

Not everything done by this station focused on conflict sites. We started a project to complete analysis of the results of 1984–1986 Arkansas Archeological Society Training Program digs at the Holman Springs site (3SV29), in Sevier County. This was a large Caddo salt-processing site, and one of the first such sites excavated in the state. Analysis and reporting of the site will be a significant addition to our understanding of foodways, settlement, and life in the region.

We started this analysis by developing a database of project records collected in 1984–1986. These were scanned first, then field serial number catalogs, photograph forms, and other records were transcribed into a searchable database. We scanned the plan maps from the level forms and used them to construct the first overall map of features and excavation units at the site, synthesizing three years of spatial information. This resource will be used to guide future analyses.

Records and Collections Management

One of our largest challenges at present is the wealth of collections and records amassed during nearly 50 years of very active research in the ARAS-SAU Research Station. There has not been a centralized database of either collections or records developed prior to this year. Answering this need, we developed databases for both and started to populate those databases with the pertinent information. When this process is completed, we will have a set of searchable resources that will give us immediate access to our holdings. This will facilitate collaborations with scholars outside of the station and outside of the Survey, and help in moving forward projects begun but still waiting final reporting.

SAU Research Station — Academic & Service Activities

Grants, Honors & Awards

- \$30,324 from the Arkansas Historic Preservation Program for Archeological Survey of the Battlefield at Prairie D'Ane (Carl Drexler, principal investigator)

Teaching & Higher Ed

- **Department of History, Political Science, and Geography, SAU.** Drexler taught ANTH/SOC1013, General Anthropology (18 students), ANTH/HIST3143, North American Indians (25 students), and SCIE3003, Geographic Information Systems (9 students). Drexler guest lectured on Civil War archeology in SAU's Civil War and Reconstruction class (HIST4073), and assisted a student (Holli Howard) with a project focused on Arkansas archeology for a library science course.
- **Graduate Committees & Other Advising.** Dr. Drexler sits on two master's degree committees at the University of Arkansas. He discussed career plans in archeology with two SAU undergraduates and a recent Kansas State University graduate.
- **Other Service at SAU.** Dr. Drexler assisted SAU with an application for a National Endowment for the Humanities grant for a heritage smartphone app for U.S. Highway 82. He also participated in numerous candidate interviews for two departments at SAU.

Professional Service

- **ARAS Committees.** Drexler headed the Digital Data Collection Initiative working group.
- **Professional Organizations.** Drexler served as Continuing Education Coordinator and member of the Academic and Professional Training Committee of the Society for Historical Archaeology.
- **Boards and Committees.** Drexler served on the Board of Trustees of the Arkansas Historical Association, chaired the Westbrook and Gingles Awards committee, and moderated the Association's Facebook page. He also served on the Board of Trustees of the Friends of the Arkansas State Archives and moderated their Facebook page.

Public Service & Outreach

- **Programs & Presentations.** Drexler gave a talk at SAU on his recently published edited volume *Historical Archaeology of Arkansas: A Hidden Diversity* (25). Drexler also presented a talk to the Magnolia Lion's Club (5). Taylor assisted 4H with a Day of Archaeology at Historic Washington State Park (30) and gave a talk to the Rotary Club of Camden (20).
- **Consultation and Advisement.** Drexler gave advice and assistance to various groups and organizations, including the Howard County Historical Society, William & Mary Center for Archeological Research, Panamerican Consultants, Inc., the Little Rock Police Department and Federal Bureau of Investigation, Nevada County Depot and Museum, Arkansas World War I Centennial Commission, and Historic Washington State Park. Drexler assisted the National Park Service and ARAS-Computer Services Program with the NPS Archeological Prospection Workshop at Pea Ridge National Military Park.
- **Historic Cemetery Initiative.** Drexler assisted with documentation on cemeteries in Hempstead, Lafayette, Calhoun, Nevada, and Union counties.
- **Unexploded Ordnance.** Drexler consulted on a number of cases of archeologically recovered pieces of unexploded ordnance, including a discovery of Civil War cannonballs on Folly Island in South Carolina.
- **Media Outreach.** The station web page had 12 new blog posts during the year. The Twitter and Facebook social media resources garnered 24,794 hits.

Service to the Arkansas Archeological Society

- **Kadohadacho Chapter.** The station hosted six meetings of the local Chapter and a Lab Day for volunteers. Drexler operated two booths at local festivals during Archeology Month (about 100 attendees).
- **Programs & Presentations.** Drexler gave a public talk to the Central Mississippi Valley Chapter in Jonesboro (~25).

Volunteer Hours

- Volunteers contributed 48 hours to station research projects in the field and laboratory during 2016–2017.

JULIE MORROW WITH A CAST OF A SLOAN DALTON POINT

Arkansas State University Research Station, Jonesboro

The ARAS-ASU Research Station is located on the Arkansas State University campus in Jonesboro, where the station archeologist teaches in the Department of English, Philosophy, and World Languages. The ASU research station territory includes 17 counties of northeastern Arkansas. American Indian cultural development from 12,000 BC to historic times and early Euroamerican settlements are represented in the archeological record. Among the well-known sites are the Dalton period Sloan site—the oldest known cemetery in North America—and the King Mastodon, which was featured in *National Geographic* magazine. A large number of sites date from the scientifically critical transition that occurred about 12,000 years ago between the Ice Age (Pleistocene) and modern (Holocene) climatic regimes. Geographically, the ARAS-ASU station territory incorporates the eastern border of the Ozark Plateau and the vast lowland areas of the Mississippi River basin and its tributaries. It thus provides ideal natural laboratories for the study of diverse adaptations in Arkansas prehistory.

Juliet Morrow (Ph.D., Washington University in St. Louis, 1996) is the Survey's Research Station Archeologist for ASU/Jonesboro, and Research Professor of Anthropology for the Department of Anthropology, University of Arkansas Fayetteville. She came to the Survey in 1997, from the Office of the State Archeologist of Iowa's Highway Archeology Program, and had worked for various private research firms and the U.S. Army Corps of Engineers. Morrow's background in earth sciences provides expertise in geoarcheology, geomorphology, and site formation processes. Much of her archeological research has focused on the Paleoindian period and multidisciplinary studies of hunter-gatherer lifeways, stone tool technology, and Pleistocene/Early Holocene ecology.

Brandy Dacus (M.S., The University of Memphis, 2011) is the Senior Assistant at the ARAS-ASU Research Station since April 2016. After graduating from Middle Tennessee State University, she worked in Cultural Resource Management throughout the Southeast and pursued graduate studies at the University of Memphis and Southern Illinois University Carbondale. While a graduate student, she had the opportunity to co-instruct several field schools at the Castalian Springs and Kincaid Mound centers. Her research interests include leadership strategies, architecture, and iconography of late prehistoric Mississippian societies in the Southeast.

Sarah Stuckey (B.S. in Physics, Arkansas State University, 2013) is ARAS-ASU Station Assistant since January 2014. She had worked as a volunteer at the ASU station for several years. Her senior capstone project, under Morrow's direction, explored the use of FTIR (Fourier transform infrared spectroscopy) for sourcing Burlington chert, an important lithic raw material that was quarried from many locations in the midcontinent.

Sarah Stuckey studying rim sherds for the Western Lowlands Project in the ARAS-ASU laboratory .

Western Lowlands Project (WLP)

Under the direction of Julie Morrow, volunteer Robert Taylor continued to teach Sarah Stuckey how to record ceramic attributes, and how to orient ceramic rim sherds in order to render accurate drawings. Stuckey completed drawings of ceramic rim profiles from key sites in the Western Lowlands of Arkansas. Coding of ceramic attributes concluded in October 2016. Drawing of rim and base profiles is ongoing. Sarah also finalized a map for the WLP. In January, Julie Morrow began writing a synthesis of the Western Lowlands for *The Arkansas Archeologist*. In February, Robert Taylor provided his interpretations regarding chronology. Morrow researched funnels and worked on a short article about this artifacts category.

Graddy Site (3CY258) Excavation

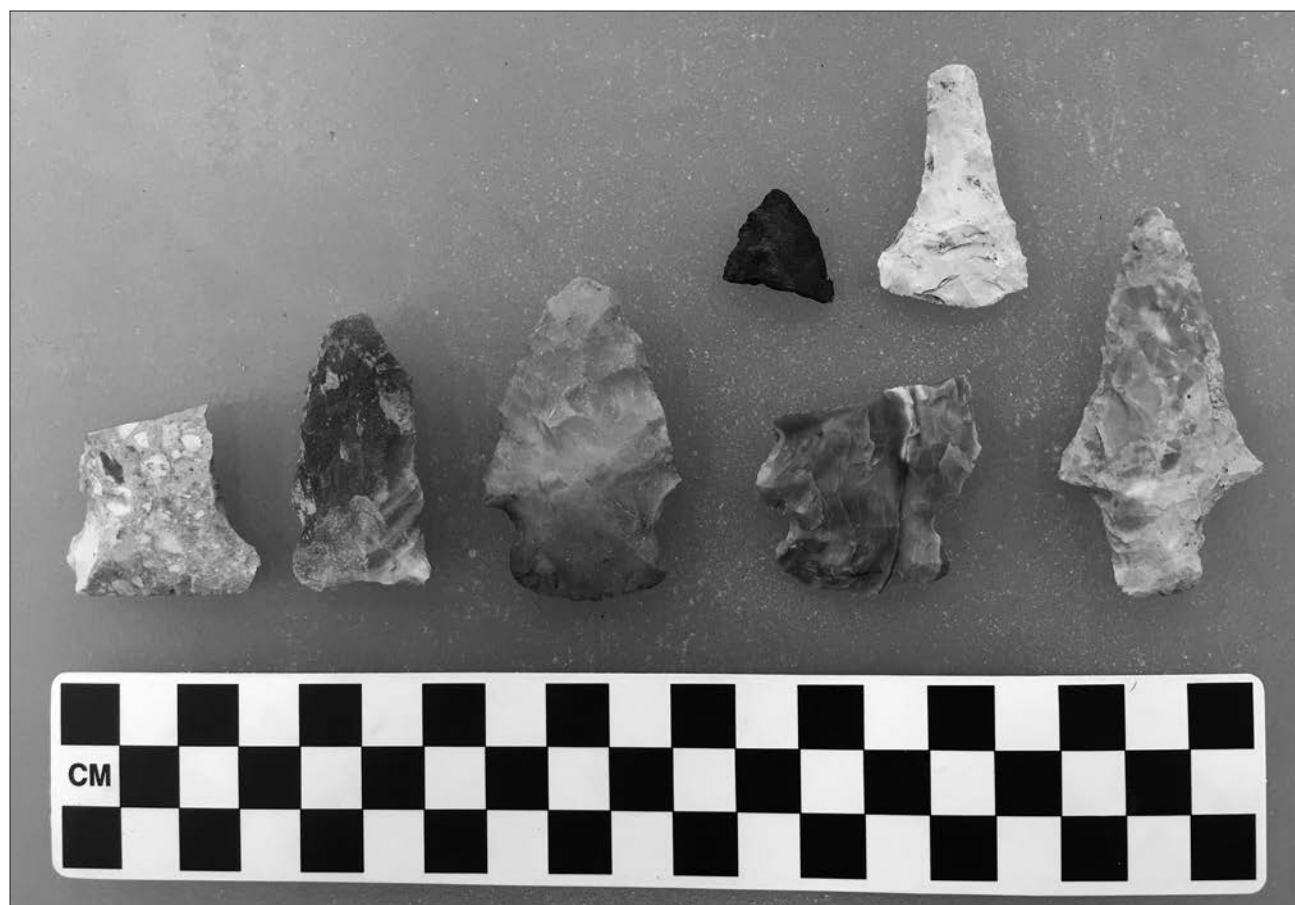
From August to December 55 pit features and 37 possible post molds were mapped and sampled at the Graddy site in Clay County, Arkansas. Several volunteers and Survey employees helped with the fieldwork. Based on pottery and projectile points the site was periodically occupied during the Archaic, Woodland, and Mississippi time periods. Students from Morrow's Introduction to Archeology and Introduction to Cultural Anthropology courses washed artifacts from the site and assisted with water screening. All of the artifacts are processed and ready to be inventoried. What we learned from the investigation is that the site was very large but was never mapped in 1984 when ceramics were salvaged from three pit features. Recent investigations at the Graddy site produced pieces of flat-bottomed flower pot type vessels from the Woodland period, red-slipped ceramic vessels comparable to the Varney type, and leached shell-tempered ceramics. Notable artifacts include a ceramic elbow pipe similar to two found in pit features at the Bruce Catt site (3CY91), a very productive Early Mississippian site where hundreds of features were excavated in 2010.

Old Town Ridge (3CG41) Mapping and Research

Julie Morrow coordinated with the landowner and a new farmer to continue efforts to preserve the Old Town Ridge site. The ARAS-ASU station has worked on Old Town Ridge since 2008. Under the supervision of Julie Morrow, Brandy Dacus and Sarah Stuckey improved the topographic map of the northern portion of the site. Permanent datums were set at the four corners of the northern portion of the palisaded Middle Mississippian village. Morrow and a team plan to investigate the earthquake features to determine the earthquake chronology at the site.

Brandy Dacus and Bob Scott (ARAS-UAPB) working hard at the Graddy site (3CY258).





Diagnostic artifacts from 3CG5. Left to right, bottom row: Early Archaic point base fragment (>8000 years old, made of Penters Breccia from the Ozarks); Matanzas point (ca. 5000 years old, of Jefferson City chert from the Ozarks); Big Creek (ca. 3500 years old, of local Crowley's Ridge chert from the Lafayette Formation); Big Creek point (Jefferson City chert from the Ozarks); Gary/Dickson point (ca. 3000–2500 years old, of Penters Breccia from the Ozarks). Top row: Point tip fragment; bifacial perforator probably made on a heavily resharpened point.

3CG5 Mapping and Testing

In September, a landowner/farmer was concerned about Native American burials at a site in Greene County on the alluvial apron of Crowley's Ridge. Under the direction of Julie Morrow, Sarah Stuckey and Brandy Dacus conducted fieldwork to determine the integrity and research value of the cultural deposits at the site. Stuckey and Dacus set several permanent datums, collected mapping data, and excavated ditch profiles and shovel tests. Prior to the ARAS-ASU investigation, another agency archeologist spent about an hour at the site surveying the surface and excavating a shovel test. While at the site, he found a Late Archaic point chipped from Crowley's Ridge chert that resembles a terminal Late Archaic Table Rock/Merom/Trimble point. These points are about 3000 to 2500 years old based on associated radiocarbon dates from states adjacent to Arkansas. Some archeologists think these are arrow points, others think they are spear points; they could be either or both. The presence of midden (organic-rich refuse) below the plow-zone necessitated further investigation. Scientific interest in the

site was based on high potential for information about Native Americans in the Central Mississippi Valley from 2000 to 5000 years ago. People in northeast Arkansas had domesticated plants by this time but the extent to which they were cultivating plants as compared to gathering plant foods and medicines is not well understood. Sites of short duration can help us understand the transition from foraging to farming.

Based on the occupational history of the site, the lack of artifacts and midden in ditch scrapes, and turbative processes evident in shovel tests, Julie Morrow thinks that the site has low potential to yield information about a specific time period. Time diagnostic artifacts indicate that the occupational history is very complex. Many different groups of people occupied the site periodically from as early as 8000+ years ago up to 2500 years ago. Tiny fragments of burned bone recovered from the midden are likely animal bone fragments. No human skeletal remains were observed at any time and the site investigation provided valuable training for students and Survey staff. Two additional sites were found elsewhere on the landowner's farm.

One of these additional sites was buried and produced a Cache River point suggestive of occupation about 12,000 years ago; the other was a surface site with an Early Achaic occupation.

Richards Bridge (3CT11/22)

During the Annual Training Program of the Society/Survey in June 2016, Julie Morrow supervised trenching and sample collection to determine the age and function of a large feature at a predominantly Middle Mississippian site in Crittenden County, Arkansas. Preliminary analysis of soils, artifacts, and the spatial distribution of cultural materials indicate that the feature consists of several coalesced borrow pits dating to the Middle Mississippi period and earlier. Several prehistoric and one possible historic feature were found in excavated trenches in or near the pit. One of the historic features was a medium-sized unfired or poorly fired shell-tempered ceramic vessel that appeared to have been thrown into the borrow pit. Overburden probably crushed the vessel, but it can probably be refitted. Sarah Stuckey prepared artifacts to be returned to the Parkin Research Station and created maps and profiles from Morrow's sketch maps and transit data collected by Tim Mulvihill (ARAS-UAFS) and Robert Scott (ARAS-UAPB).

Arkansas Paleoindian Point Survey

Julie Morrow wrote a brief article for *Field Notes* to bring awareness to the fact that most early hafted bifaces, particularly Paleoindian and Early Archaic period points, are found by avocational archeologists and collectors. Many of these early recorded points do not have good site provenience. The *Field Notes* article is intended to help us learn more about Paleoindian site locations and behavior patterns.

Attribute data for Paleoindian artifacts was entered into a database and GIS maps were created to analyze the roughly 30 years of data recorded by ARAS-ASU personnel and volunteers. A presentation was prepared for the fall meeting of the Arkansas Archeological Society, and attendees were invited to bring Paleoindian artifacts to be documented.

Mansker (3RA529)

The Mansker site was documented, mapped, and tested in the spring of 2015. The site is located on Mansker Creek north of Pocahontas, Arkansas in Randolph County. In the early 1800s, William Mansker reportedly had a cabin at the location but the only above-ground structure remaining today is a well. Shovel tests, conducted by students from Arkansas State University under the direction of Julie Morrow, produced a diversity of historic artifacts dating from the early 1800s to the early 1900s. Sarah Stuckey completed the map for the Mansker site this spring.

Collaboration with Ashley Smallwood

Julie Morrow agreed to allow Dr. Ashley Smallwood to analyze Dalton replicas made and used for various tasks in 2009–2010. These were sent to Smallwood's lab at Georgia State University in the spring of 2017. Two of the seven had not yet been used. Morrow suggested using them on a soft plant (blue stem or similar grass) and a hard plant (wood). Morrow did not send her own experiment forms because she wants it to be a double blind study, an important scientific research tool which protects outcomes from influence of observer bias.

Records & Collections Management

Brandy Dacus completed tasks related to closing of the ARAS-Blytheville Research Station in 2015 and transfer of collections to the ARAS-ASU. These included initial organizing and inventorying of collections primarily from the Eaker site, 3MS105. Brandy also scanned archival materials, including photographs and slides from Eaker and other sites in Mississippi and Crittenden counties. Sarah continued to improve the digital version of the Plant Sciences East (PSE) general inventory, and inventoried six collections at ARAS-ASU, including the general inventory of non-lithic materials from the 1999 Society Training Program at Greenbrier 3IN1.

ASU Research Station — Academic & Service Activities

Teaching & Higher Ed

- **Teaching & Advising.** Morrow taught Introduction to Archeology (17 students) and Introduction to Cultural Anthropology (21 students) during the 2016–2017 academic year at ASU. The archeology students were required to complete 20 hours of labwork as part of the course; Sarah Stuckey and Brandy Dacus supervised students in the lab. Morrow also supervised ASU Honors student Jayce Mize on a bioanthropology project.
- **Other Campus Assistance & ASU Museum.** Julie Morrow met with ASU Museum Director Marti Allen regarding collector Scott Ferguson's request for a meeting at the ASU Museum this fall. Morrow identified artifacts for Museum staff. Morrow assisted Museum staff with an assessment and inventory of a large collection from Mississippi County belonging to Dr. Shaneyfelt that was to be donated. Morrow identified replicas (modern folk art) in the collection for the ASU Museum.

Professional Service

- **Peer Review.** Morrow reviewed works submitted to the journals *North American Archaeologist*, *Quaternary Research*, *Quaternary International*, *Journal of Archeological Method and Theory*, *Reviews in Anthropology*, and *Journal of Archaeological Research*. Morrow edited a special issue of *Quaternary International*, Vol. 444(2017), and wrote a summary for the volume.
- **Boards & Committees.** Morrow served as a member of the Survey's Publications Committee.

Public Service & Outreach

- **Programs & Presentations.** For Arkansas Archeology Month (March) Sarah Stuckey assisted in identifying artifacts for the public at the ARAS-Parkin Research Station's annual artifact identification day (11), Brandy Dacus assisted the Delta Gateway Museum in Blytheville in an artifact identification day (5), and Julie Morrow held an artifact identification day at the Arkansas State University Museum in Jonesboro (9). Morrow gave two different talks about archeology to 4th graders (65 students, 6 teachers) and 6th graders (70 students, 6 teachers) in Batesville.
- **Historic Cemeteries Initiative.** Morrow continued to provide assistance to local groups working on preservation of historic cemeteries in northeast Arkansas, including a visit to Lundsford Cemetery.
- **Other Public Outreach.** Morrow answered a request for help with new exhibits at Delta Gateway Museum. She consulted with Corps of Engineers personnel about 3MS50 and other sites in Mississippi and Crittenden Counties. Station staff responded to approximately 30 citizen contacts, identifying artifacts, visiting sites at landowner request, and discussing or providing information about archeology.

Service to the Arkansas Archeological Society

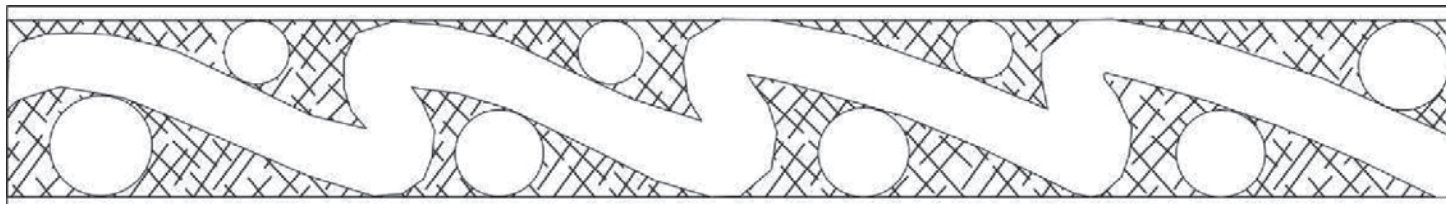
- **Programs & Presentations.** Dacus presented public talks to the Central Mississippi Valley Chapter in Jonesboro (20) and the Kadohadacho Chapter in Magnolia (10).
- **Central Mississippi Valley Archeological Society.** Morrow continued to arrange guest speakers for the monthly meetings and provide guidance. In April 2016 Brandy Dacus assumed membership responsibilities for the Chapter. Sarah Stuckey provided audio-visual and computer assistance for meetings. Volunteer opportunities are provided in the station lab and field projects.
- **Training Program.** Sarah Stuckey and Brandy Dacus assisted as Area A site supervisors for students in the Basic Excavation seminars at the 2017 Training Program in Cass, Arkansas, and otherwise helped wherever needed.

Volunteer Hours

- Volunteers contributed 650.5 hours to station research projects in the field and laboratory during 2016–2017.



Coordinating Office



SABO WITH THE "GATHERING, GARDENING, AND AGRICULTURE" TEAM: JODI BARNES, ELIZABETH HORTON & EMILY BEAHM

The Survey Director, George Sabo III, Ph.D.

George Sabo III (Ph.D., Michigan State University, 1981) was appointed Director of the Arkansas Archeological Survey in 2013 after a national search. He first joined the Survey as ARAS-UAF Research Station Archeologist in 1979. He eventually earned the title of Professor of Anthropology in the University of Arkansas–Fayetteville Fulbright College of Arts and Sciences, where he taught undergraduate and graduate level courses for nearly thirty years, served on numerous graduate student committees, was the Department's Director of Graduate Admissions for several years, and is a Co-Director of the interdisciplinary Environmental Dynamics Ph.D. Program. Prior to accepting the position in Arkansas, he spent nine years doing archeological research in the Upper Great Lakes and the Canadian Arctic, and held a position as assistant to the State Archeologist of Michigan while attending graduate school. His work in northwest Arkansas has included mound excavations in the western Ozarks, the cultural landscapes and interpretation of rock art sites, studies of historic pioneer farmsteads, the ethnohistory of Arkansas Indians, especially the Caddo, environmental history, and development of New Media educational resources. In addition to many articles and book chapters, he is the author of a popular history of Arkansas Indians (*Paths of Our Children*), and coauthor of *Arkansas: A Narrative History*, published by the University of Arkansas Press.

Dr. Sabo's goals for the organization include supporting all staff members as they pursue the Survey's mission in their individual and collegial capacities, strengthening and developing cooperative research projects that maximize the strengths of the ARAS staff by working across research station territories and making use of cost-share agreements and collaborative research funding, an initiative to inventory, digitize, and preserve decades of ARAS records and documentation, improving our ability to serve the educational community, stabilizing job descriptions in an employee handbook, and revitalizing the Publications Program.

Teaching & Higher Ed

- **George Sabo III**, Survey Director since 2013 and **Professor of Anthropology**, serves as **Co-Director of the Environmental Dynamics Interdisciplinary Ph.D. Program**, which is part of The Graduate School and International Education at the University of Arkansas.
 - Sabo served on 4 Anthropology Department and Environmental Dynamics Program M.A. and Ph.D. student committees.
 - Sabo taught ANTH/ENDY 6033, Society and Environment (4 students).
 - Sabo presented guest lectures: “Arkansas Archeological Survey Research Opportunities” to a UAF Introduction to Archeology class visiting the Survey (12 students) and “Spiro Archeology” to archeology students at UAFS (25 students).

Professional Service

- **Peer Review:** Sabo provided peer review for the journals *North American Archaeologist* and *Southeastern Archaeology*, and for two National Science Foundation grant proposals.

Public Service & Outreach

- **Exhibits:** Sabo served as Curator for “Native American Storytelling,” a temporary exhibit in Mullins Library, and for “Arkansas Native Americans,” a permanent exhibit in the Arkansas Union on the UAF campus.
- **Public School Presentations:** “Carden Bottoms Archeology” (Cherokee Village Library, audience 25); “What is Archeology” (Fayetteville Virtual Academy, 25 students & teachers); “Science in Archeology” (STEM Career Day, Alma High School, 100 students and teachers).
- **Teacher Workshops:** Sabo presented “Caddo Indian Storytelling” at a teacher workshop at Caddo Mounds State Historic Site in Alto, Texas (25 teachers) and participated with the ARAS team who wrote the “Gathering, Gardening, and Agriculture” 5th grade curriculum in a teacher workshop at Winthrop Rockefeller Institute in Morrilton to introduce the curriculum (4 teachers).
- **Arkansas Archeological Society:** Sabo presented a talk on the 2017 Training Program to the Ark-Homa Chapter in Fort Smith (25). He participated in a panel discussion at the 2016 Annual Meeting in El Dorado, and attended and helped supervise the 2017 Training Program at 3FR46 and 3FR58 along the Mulberry River near Cass, Arkansas and gave one of the evening lectures.



Dr. Sabo teaches about the Zimmerman Petroglyphs 3FR512 during the 2017 Training Program.

Scholarly Activities

- Invited panelist (with Stephen Silliman, Jamie Brandon, Rachel Patton, and Tammela Tenpenny-Lewis), “Working with Descendant Communities: A Panel Discussion” presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado, 2016.
- Invited panelist (with Pete Gregory, Tim Perttula, Ann Early, Tom Middlebrook, George Avery, Jeffery Girard, David Kelley, Joe Frank, and Dayna Lee), “Caddo Contact Sites Panel Discussion” presented at the 59th Caddo Conference, Natchitoches, LA, 2017.
- Participant in the Caddo Iconography Workshop at the 59th Caddo Conference, Natchitoches, LA, 2017.

ANN EARLY TALKS WITH A STUDENT IN THE ARKANSAS ARCHEOLOGICAL SURVEY LAB

The State Archeologist, Ann M. Early, Ph.D.

The duties of the State Archeologist involve all aspects of public archeology, from site reporting to liaison with the public agencies to public education and outreach programs. These activities include preservation planning, review of nominations of archeological properties to the National Register of Historic Places, and establishing guidelines for archeological research in the state. Information on state laws pertaining to archeological sites in Arkansas is available from this office. The State Archeologist also oversees the Survey's collections and records management programs, cooperative relationships with the Arkansas Archeological Society, and educational outreach activities including Publications.

Ann M. Early (Ph.D., University of Massachusetts – Amherst, 1973) is a Research Professor of Anthropology at the University of Arkansas – Fayetteville Department of Anthropology, and is the second person to serve as State Archeologist for Arkansas. She was hired to the position in 1999 after 27 years as Station Archeologist at the ARAS-HSU Research Station in Arkadelphia. Early is the author of numerous books and articles on Arkansas archeology. Her research has focused on human ecology in the uplands of the Trans-Mississippi South, Caddo Indian cultural traditions and relationships, Caddo pottery design and typology, and the effects of Euroamerican cultural perceptions on popular images of the past. As State Archeologist, she has been active in historic cemetery preservation initiatives, among many other projects.

Research & Scholarly Activities

3LA5. Ann Early is analyzing and preparing a report on one of the first excavations undertaken as a joint effort by the Survey and the Arkansas Archeological Society, the 1970 Training Program at the Johnny Ford site (3LA5). Situated in far southwest Arkansas, the Johnny Ford site was an Archaic and early Woodland camp and cremation cemetery. A week of excavations revealed that this was the largest known cremation cemetery in the Trans-Mississippi South. A report on the research was never published, although a student study was completed in the early 1990s. Rare both for the early Woodland age and the burial features, the site is worthy of careful analysis and full publication.

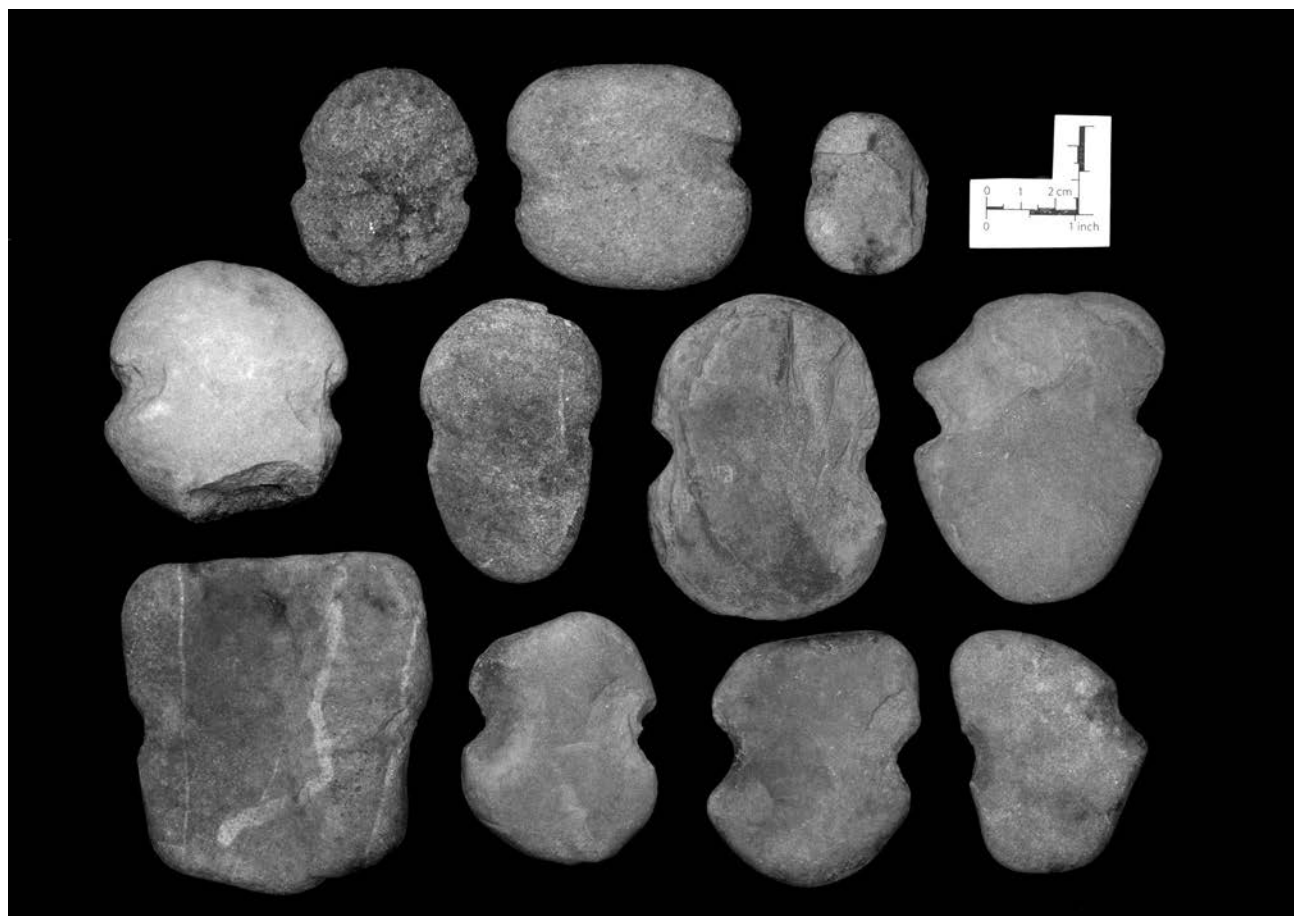
Lemley Collection. In cooperation with collection managers at the Gilcrease Museum in Tulsa, Early is reviewing and correcting curatorial information on 3200 pottery vessels in the Harry J. Lemley collection at that institution. As part of an IMLS funded digital curation project intended to create a web accessible public database of pottery vessels from Arkansas, Early reviews data remotely and returns comments and corrections to Gilcrease. The Lemley collection consists of these pottery vessels and thousands of other artifacts gathered from

throughout Arkansas between 1900 and 1954 and subsequently sold to Thomas Gilcrease, founder of the Gilcrease Museum. Coupled with Lemley's exhaustive catalog information, this is the largest well-documented heritage collection of Arkansas Native American material culture.

Caddo Pottery. From the mid 1970s through the late 1990s, Frank Schambach, Ann Early, and a few other colleagues compiled a catalog of designs found on Native Caddo pottery that were taken from an archive of about 6000 photographs. The intent of the catalog is to document the range of variation and detailed characteristics of ceramic decoration across the Caddo area, and to create a guide that can be used to study the geographic range and underlying design-grammar principles behind ceramic manufacture and decoration. The catalog currently contains 200 patterns and 2000 designs documented in museum collections, but it exists only as a rough draft form. Early began working with ARAS graphics and editorial personnel to bring the catalog to publication.

Sargent Collection. As a final part of preparing the Sargent Collection for curation, Early supervised data collection from a sample of over 700 Middle Archaic chipped stone artifacts, referred to as netsinkers, from one of Forest Sargent's collecting

Netsinkers from the Sargent collection.



areas. This is the largest known assemblage of these 5000-year-old artifacts from any location, let alone from a single site. These data will be used to evaluate the range of variation and manufacturing techniques exhibited by the sample, and will be shared with other researchers interested in Middle Archaic societies in Arkansas.

Miscellaneous Projects. In the last year the Survey has come into possession of material remains associated with an episode of lynching in late 19th century Arkansas. Early has begun background research on the episode in order to determine the best way forward to curate and document the remains.

Volume 3 of the Historic Arkansas Museum publication *Arkansas Made* finally went into publication this year. Early is author of a chapter on Indians.

Early reviewed and identified several hundred artifacts in the Drew County Museum collections for an exhibit project undertaken by the Museum and the ARAS-UAM station archeologist.

Early contributed to the final research report for the Survey's excavation project at the Wild Violet site (3LO226). She also provided input to Dr. Michael Dougan in his revision of his *Arkansas Odyssey* book.

Early participated in an organizational workshop for a group of scholars interested in forming a Caddo Iconography research group (see photo on page 68). She made a presentation based on pottery research and participated in planning how the group might move forward.

Early reviewed several manuscripts for the *Encyclopedia of Arkansas History and Culture*, and answered occasional questions posed by the editors.

Academic & Service Activities

Grants, Honors & Awards

- Ann Early prepared a successful grant extension proposal for the latest NAGPRA documentation grant. This award allowed the Survey to spend the final \$12,000 remaining from the previous grant cycle to document and prepare notices of inventory completion for a new group of human remains and funerary objects. Upon completion, the Survey will be in full compliance with NAGPRA requirements early in FY 2017–18.

Teaching & Higher Ed

- Ann Early served as a member of Jessica Cogburn's Ph.D. committee (UAF Department of Anthropology) and Katie Newman's M.A. thesis committee (Texas Tech University).
- Throughout the year Early taught basic collection management procedures to anthropology students working as volunteers or as part of course requirements in the ARAS Archeology Lab.

Professional Service

- **Organizations.** National Association of State Archeologists (member).
- **Peer Review.** Early reviewed an article submitted to a peer-reviewed journal.
- **Committees.** ARAS Web Steering Committee.

Public Service & Outreach

- **Boards & Commissions.** State Review Board for Historic Preservation (interim Secretary); Arkansas Genealogical Society (Board member); Arkansas Women's History Institute (Board member).
- **Public Outreach.** Early responded to about 150 contacts and activities from the public (individuals or organizations) concerning artifacts, cemeteries, American Indians, and other general archeology topics. There were 110 contacts and activities with archeologists, land managers, agency persons, CRM firms, and other professionals about site and collection management, cemetery laws, scholarly information, and other topics related to preservation, plus 71 contacts, consultations, and activities with the public education community.
- **Arkansas Archeological Society.** Early taught Beginner's Orientation classes five times and one Site Stewardship Workshop at the June Training Program. She gave talks to the Central Arkansas River Valley Chapter in Russellville (audience 18) and the Tunican Chapter in Monticello (audience 20).
- **Programs, Presentations & Exhibits.** Early assisted Commissioner of State Lands with an exhibit on Arkansas Indians, advised Hampson Museum State Park on development of exhibits, and contributed to an exhibit for a teacher workshop at the Clinton Presidential Center in Little Rock.

Records & Collections Management

- **Permission Requests.** Early responded to 27 requests to re-use or re-publish Survey text or graphic products.
- **Loans.** Early monitored loans of artifacts and supervised loan requests and returns, or collections accessions, with the following institutions: Texas Tech University, University of Central Arkansas, Minden LA Museum, UA Department of Anthropology, ARAS-SAU, Hampson Museum State Park, Arkansas State Parks, University of Memphis.

Cultural Resource Management

- **Project & Permit Reviews.** Early reviewed all Federal grant applications, Corps of Engineer Permit Requests, Arkansas Historic Preservation Program Section 106 letters, Arkansas Grant Proposal Clearinghouse lists, and contract reports for work done in Arkansas. She provided input and advice to AHPP staff members as requested.
- **Collections.** Early completed documentation of the Sargent Collection pottery, supervised documentation and accession of Lyon College collection, and worked on other collection and records management issues.

Volunteer Hours

- Students and volunteers contributed 189 hours in the laboratory at the Arkansas Archeological Survey coordinating office, supervised by Dr. Early.



LELA DONAT, ARAS REGISTRAR, FILING DOCUMENTS

The Survey Registrar

Managing the State's Archeological Site Files

The ARAS registrar's office spends most of its time reviewing and encoding site forms, reports, and images for the various electronic databases, reviewing accession paperwork, evaluating and curating new archeological collections from contracts and donations, and reviewing and encoding the paperwork associated with collections.

The **AMASDA** (Automated Management of Archeological Site Data in Arkansas) database is a potent research tool that can be linked to various GIS programs. Entering data daily keeps this resource current. This year **495** new sites were recorded, bringing the total for the state of Arkansas to **48,779**. New information for **606** previously recorded sites (revisited by various persons during the year) was also reviewed and encoded. New archeological projects numbered **125** this year, bringing the total projects listed in AMASDA to **7071**. Finally, **22** archeological collections were accepted for curation.

Arkansas Archeological Survey Site File Activity, 2016–2017

New Sites Recorded	495	Total no. of sites in Arkansas site files: 48,779
New Data for Known Sites	606	
Access to Site Records	210	52 paid subscribers; 11 students & researchers; 112 State & Federal; 35 on site
Collections Accessioned	22	
New Projects Entered in AMASDA	125	Total no. of projects in AMASDA: 7071

The Survey Registrar is responsible for reviewing, processing, and curating all archeological site data in Arkansas. The registrar manages and maintains all paper, photographic, microfilm, and electronic records of archeological sites, projects, and collections; oversees encoding of all new and updated site information in the various digital databases; and assists and regulates access to records and collections by government agencies, private firms, professional colleagues, and students engaged in archeological research in Arkansas. The office also maintains a research library and a map library, and participates in the Survey/UA Department of Anthropology student internship program.

Lela Donat (M.A., University of Arkansas, 1992) became Survey Registrar in 1994, after three years as Assistant Registrar and a previous 17-year career in nursing. Her degree specialization was bioanthropology. Donat is proficient in the use of database applications and has archeological and bioanthropological field and laboratory experience in Arkansas and Chile.

Teka McGlothlin (M.A., University of Arkansas, 2014) was hired as Assistant Registrar in July 2014. She has worked in the office since 2008, first as a part-time work-study student, and later under various grant-funded projects while completing her Master's degree. Teka's studies have focused on antebellum historical archeology, cultural interaction and settlement, and the use of ArcGIS as a way to represent patterns in archeology. Teka served as part of the Survey's Digital Data Collection Initiative (DDCI) working group.

Jessica Howe Cogburn (M.A., Southern Illinois University Carbondale, 2011) has been a member of the Arkansas Archeological Society since 2005. She worked as the station assistant for the ARAS-UAM Research Station in Monticello from 2008 to 2014, when she entered the graduate program in anthropology at the University of Arkansas. As the Survey's graduate assistant, she has been updating the National Register of Historic Places eligibility for archeological sites in the AMASDA database. Her dissertation research focus is on late prehistoric and protohistoric sites in the Central Arkansas River Valley.

Katherine Sargent (B.A., University of Arkansas) recently completed her Bachelor's degree in anthropology at the University of Arkansas. She has been a member of the Arkansas Archeological Society since 2013. Her work in combining and streamlining project and oversized map spreadsheets from all the stations into one master spreadsheet has built on Kathleen Cande's 2014 inventory of records.

Sarah Hunt Shepard (M.A., University of Arkansas, 2016) became a Research Assistant with the Registrar's Office in November 2016. She has worked in the office since 2014 on various projects including scanning technical reports and mapping projects. In addition to working on AMASDA and digitizing station records, Sarah continues to work on a National Park Service grant supporting efforts to maintain the Survey's compliance with the Native American Graves Protection and Repatriation Act.

Assistance to Researchers & Agencies

Another major function of the office is assisting private archeological contractors, state and federal agencies, University of Arkansas faculty, staff, and students, the 10 ARAS research stations, and others performing legitimate research in the state.

The office fielded approximately **1225** requests for site information during FY 2016–17 (by email, telephone, and in person), primarily from the Arkansas Highway and Transportation Department, the State Historic Preservation Office, the U.S. Army Corps of Engineers (Memphis, Vicksburg, and Little Rock Districts), the Natural Resources Conservation Service, and the Ozark-St. Francis and Ouachita National Forests. In the course of the year, the registrar's office also assisted about **44** private firms doing research in Arkansas. A list is provided on page 92.

Contractors now have access to AMASDA Online (as of July 5, 2015). The current fee schedule is \$50 per project or \$1200 per year. An "Access to Records" form must be submitted for each project. The fees will help pay for updates to servers

and equipment for the AMASDA database to keep it functional and continue its serviceability to our various users. For the 2016–2017 fiscal year, we had **157 per-project and three annual subscribers**. Twelve contractors visited the office.

Teaching Service

The registrar's office conducts tours of its facilities for students enrolled in classes at UAF during the academic year. Office staff also assisted students (undergraduates, master's, and Ph.D. students) with their respective projects for class work or thesis research. This year student researchers included Jordan Schaefer (University of Arkansas), a project on spatial distributions of rock art sites around the Buffalo River, Little Red River, and White River subareas to see what environmental decisions were considered for their placement; Kelly Ervin (Washington University in St. Louis), Regional Poverty Point Settlement Systems; Shelby Dye (UA Museum), an exhibit for 50 years at the Arkansas Archeological Survey; Andrew Mickelson



Sarah Shepard checking in collections.

(University of Memphis), Mississippian Settlement Patterns in the Mississippi River Valley: A Diachronic Analysis; Seth Price (University of Arkansas), a GIS based exploration of environmental variables related to rock art sites at Petit Jean State Park; Cheri Miller (UAM), a project on Sulphur Spring history; Dr. Leslie Walker (Ph.D., University of Arkansas), continuing research at Carden Bottoms; Phyllis Lear (Northwestern State University of Louisiana), Lake Enterprise Mound Data Collection on Baked Clay Objects Affiliated with Poverty Point Culture; Anna Swartz, assisting Dr. Horton with ARAS-TMRS Archives Project.

The Survey employed two UA undergraduate students in the registrar's office, Katherine Sargent and Madelyn Rose, and one graduate student, Jessica Howe Cogburn.

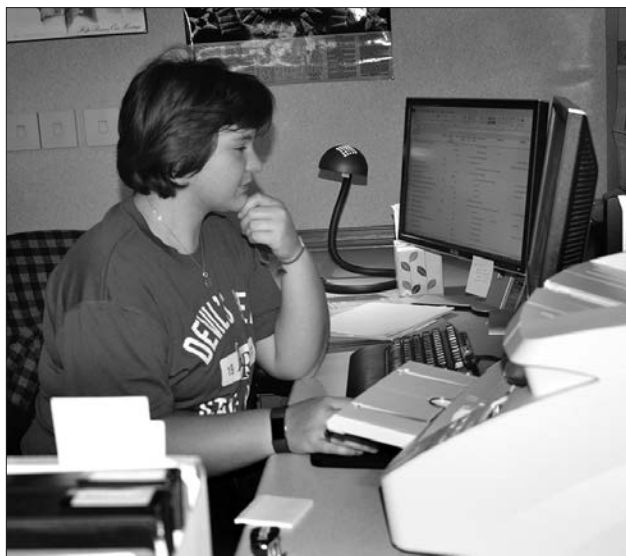
Eligibility of Sites

Jessica Cogburn continued to add information to our AMASDA database regarding eligibility of sites for the National Register of Historic Places, as determined by the State Historic Preservation Office. Fields include: Site National Register Eligibility, AHPP Tracking Number, and Date of Determination.

NAGPRA Functions

The Office has worked to achieve and maintain NAGPRA compliance with the Survey's collections, with the following accomplishments this year:

- 8 Notices published in the Federal Register:
- 2 Notices of Intent to Repatriate unassociated funerary objects to the Caddo Nation and Quapaw Tribe of Oklahoma
- 5 Notices of Inventory Completion regarding human remains and associated funerary objects attributed to the Caddo Nation, Quapaw Tribe of Oklahoma, Osage Nation, and Tunica-Biloxi Tribe of Louisiana
- 1 Correction Notice for Osage Nation collections
- Transfer of Control agreement with the Osage Nation to return ownership of collections
- Assisting outside agencies with NAGPRA compliance:
 - Arkansas Highway and Transportation Department, Arkansas State Parks, University of Arkansas Department of Anthropology, University of Memphis, U.S. Army Corps of Engineers



Katherine Sargent scanning records.



Madelyn Rose re-boxing collections.

New Developments

Inventory Management of Curated Artifacts. A new project is creation of an inventory control database to provide the location of artifacts in the curation room. This database will be classified by row, bay, and shelf or container. *Inventory* can be searched or sorted by location, accession number, project name, and/or site number.

Digitization of Records. A few years ago, the Survey embarked on a project to ensure the survival of our 50 years of site documentation and excavation records. Kathleen Cande visited all the research stations to assess what records existed, what had been backed up as duplicates at the coordinating office and what hadn't, and what existed only on paper as opposed to a digital version. This was presented in a summary document. Since then, the stations and the ARAS registrar's office staff have been working to ensure that paper records are digitized and backed up on our servers. This year records from ARAS-TMRS, ARAS-Parkin, and ARAS-WRI research stations were scanned.

Curation Costs. The office reevaluated its curation costs and standards in order to present a proposal to increase fees. This would be the first time curation fees have been raised in nearly two decades.

Modernization. The office sought more efficient ways to receive site forms and project information, including GIS shape files.

Funded Research

The registrar's office pursues outside funding to support several projects for upgrading and improving database delivery and collections management.

ANCRC Grant 16-003. ARAS Project No. 16-02, funded by an award of \$20,396 from the Arkansas Natural and Cultural Resources Council, allowed the office to continue scanning old catalog cards dating from the late 1960s and early 1970s. In addition, several project records from the ARAS-WRI and ARAS-UAM research stations that needed to be duplicated for backup are also being scanned.

Collection Rehabilitation. The Survey houses several Corps of Engineers and Forest Service collections that need to be brought up to current curation standards. Funding from the Ozark-St. Francis National Forests was received for artifact preparation and curation.

NAGPRA Documentation Grant. Under an extension of the previous grant, Sarah Hunt Shepard completed scanning the Native American Grave Protection and Repatriation Act (NAGPRA) burial inventories and incorporated that information into AMASDA. These inventories are linked to their respective site number in AMASDA.

The registrar's office provided assistance to the following firms, groups & agencies during 2016–2017

Federal

Buffalo National River, Harrison, Arkansas
Bureau of Land Management, Jackson, Mississippi
Corps of Engineers – Memphis, Little Rock, Vicksburg, and
St. Louis Districts
National Park Service / Midwest Archeological Center
National Center for Cultural Resource Stewardship & Part-
nerships / National NAGPRA Program
Natural Resources Conservation Service, Little Rock
U.S. Fish & Wildlife Service
U.S. Forest Service
• Ouachita National Forest
• Ozark-St. Francis National Forests

State

Arkansas Humanities Council
Arkansas Highway & Transportation Department
Arkansas History Commission
Arkansas Historic Preservation Program
Arkansas Department of Parks & Tourism
Arkansas Army National Guard
University of Arkansas

Local

Faulkner County Museum
Shiloh Museum, Springdale

Out of State Museums and Universities

University of Memphis
Missouri State University

American Indian Tribes

The Quapaw Tribe of Oklahoma
The Caddo Nation – Binger, Oklahoma
The Osage Nation – Pawhuska, Oklahoma
The Choctaw Nation of Oklahoma
The Cherokee Tribe
Tunica-Biloxi Tribe of Louisiana

Private Firms

- 10,000 Lakes Archaeology
- Afendras Archaeology, LLC
- AMTEC (Knoxville, TN)
- AK Environmental
- American Resources Group
- Apex Titan
- Arcadis
- AR Consultants, Inc.
- Archaeological Research Center of St. Louis, Inc.
- Archeological Assessments, Inc.
- Archeological Environmental Consultants, LLC
- Archeology Mississippi, Inc.
- Atkins
- Blanton and Associates
- Burns & McDonnell, Kansas City
- CDM Smith
- C-Dimensions, TX
- CenterPoint Energy
- Center for Archaeological Research
- Centus Environmental Solutions, LLC
- CH2M Hill
- Coastal Environments Inc.
- Cultural Resource Analysts, Inc.
- EBI
- EMR
- Environmental Research Center of Missouri
- Environmental Corporation of America
- Environmental Resource Management
- Enercon Services, Inc.
- Ethnoscience, Inc.
- Flat Earth Archaeology, LLC
- GraVitae
- Historic Preservation Associates
- JP Archaeological, LLC
- Open Range Archaeology
- Panamerican Consultants, Inc.
- Search, Inc.
- Sphere 3 (TX)
- Stone Point Services
- SWCA
- TerraXplorations
- TRC Environmental Corp.
- William Self Associates
- URS



Sponsored Research Program

MIKE EVANS AND JARED PEBWORTH DEMONSTRATE ARTIFACT REPLICAS FOR TOUR GROUP

The Sponsored Research Program (ARAS-SRP) conducts externally funded research based on grants, contracts, and cost-share agreements. Projects range in scope from field documentation of cultural resources in Arkansas, to information and collections management activities, to assisting with the study and interpretation of sites on state and federal lands in Arkansas. With their wide-ranging skill sets, including archival research, all phases of archeological fieldwork, flotation and soil sample processing, survey and precision mapping, geophysical imaging, production of CAD and other computer graphics, historic and prehistoric artifact analysis, data interpretation, and report writing, SRP staff members are invaluable contributors to station research projects, emergency salvage operations, grant-funded research, specialized laboratory and computer tasks, cost-share projects, consulting, and public outreach. To date, SRP has completed more than 1000 projects. SRP service to the university community includes assistance to faculty and providing field and lab training and employment opportunities for students.

Sponsored Research Program Personnel

Kathleen H. Cande (M.A., University of Arkansas, 1984) works as Survey Project Archeologist and Lab Supervisor. She joined the Survey in 1987. Her specializations include historical archeology, material culture, archival research, the colonial Southeast, collections management and curation, and prehistoric lithic analysis. Cande also coordinates the Survey's historic cemetery research and preservation program, acting as primary point-of-contact for inquiries about cemetery related projects.

Michael Evans (Research Assistant) has been with the Survey since 1991. His specialized skills include maintenance of high precision GPS spatial control for archeological field projects, digital Total Station and theodolite mapping, AutoCAD and Surfer map production, data editing and management, geophysical fieldwork and data interpretation, archeological fieldwork planning and supervision, project background research, and report production. Evans is interested in flintknapping, traditional methods of construction and architecture, blacksmithing, and primitive technology and replication.

Jared Pebworth (Research Assistant) has been with the Survey since 1991. His specialized skills include Total Station and theodolite mapping, geophysical fieldwork, data interpretation, archeological fieldwork planning and supervision, site mapping, project background research and report writing, lithic analysis, historic ceramics and material culture, and metal conservation and analysis. Pebworth is interested in historic archeology, traditional Ozark architecture, lithic raw material studies, and primitive technology and replication.

Lydia Iris Rees (M.Ed., University of Florida, 2009) was a Research Assistant with SRP during the last two fiscal years working under grant-funded projects. Rees digitized historic field records associated with 1930s bluff shelter excavations, analyzed the ceramic assemblage from Saltpeter Cave, and created an award-winning, publicly oriented web page. She is interested in southeastern archeology, especially the Ozarks, prehistoric ceramics, and public archaeology. Rees has field experience in Arkansas, Texas, and Florida over the past 16 years. She is currently an M.A. student in anthropology at the University of Arkansas. Her thesis focuses on prehistoric ceramics in the Arkansas Ozarks.

This year SRP staff provided valuable assistance to several ARAS projects along with service to local municipalities, cemetery groups, university and public education groups, and citizens requesting assistance with site assessment and artifact identification.

Kathleen Cande continued providing assistance and direction for ARAS collection inventory and document archives projects, and contributed to projects undertaken by the University of Arkansas Museum and the Center for Advanced Spatial Technologies in the University of Arkansas Fulbright College of Arts and Sciences. Cande along with Mike Evans and Jared Pebworth assisted a number of local cemetery preservation groups across the state with preservation, documentation, and mapping. Cande also helped ARAS-UAM Research Station archeologist Jodi Barnes prepare a nomination adding cemeteries, burial grounds, and graveyards statewide to Preserve Arkansas's list of Arkansas's most endangered sites.

Evans and Pebworth worked on several field and lab projects for the ARAS-UAF, UAFS, ASU, and Parkin research stations. Throughout the year, they provided ancient technology demonstrations for numerous K-12 school groups, 4H groups, university classes, Archeology Month events, and Arkansas state parks. Evans and Pebworth also helped private citizens record archeological sites and identify prehistoric and historic artifacts, and consulted on artifact identification and site evaluation with archeologists working for private contracting firms.

During FY 2016–2017, ARAS research station and SRP staff completed several projects supported by external funds that had been extended to this year. These projects include the NAGPRA documentation project funded by the National Park Service (NPS), AMASDA enhancement and Arkansas Bluff Shelters preservation and interpretation projects funded by the Arkansas Natural and Cultural Resources Council (ANCRC), investigations at Pea Ridge National Battlefield and the Osotouy Unit of the Arkansas Post National Memorial funded by NPS, a survey of the Wallace's Ferry Civil War battlefield funded by the Arkansas Humanities Council, the search for Hernando de Soto's cross at Parkin Archeological State Park funded by the Elfrieda Frank Foundation, and the Gathering, Gardening, and Agriculture 5th grade social science lesson package funded by grants from the Southeastern Archaeological Conference (SEAC), the Arkansas Archeological Society, and the Arkansas Humanities Council. More information about these projects is provided in other sections of this Annual Report.

ANCRC Projects

The following projects received new funding from ANCRC in support of activities contributing to the preservation and enhancement of state cultural and historic resources. Additional details by individuals participating in these projects are provided in other sections of this Annual Report.

Preserving the Prehistoric Heritage of South Arkansas (ARAS Project 17-01)

This project involves continuation of a collaboration between ARAS and UA Museum Collections, supervised by Marie Imus under the general direction of Dr. George Sabo III (ARAS Director). Overall goals include updating inventory information and evaluating the condition of artifact collections from southern Arkansas archeological sites in the UA Museum Collections. Following inventory, collections are re-boxed in containers that meet modern conservation standards. During 2016–2017, Imus and team inventoried and reorganized nearly three dozen collections comprising more than 13,000 objects. Many items in these collections had been donated, but others, including materials from the Cooper site 3HS1, are excavated collections with substantial research potential. Information about these objects comprised 516 new catalog records in the University Museum database. The ongoing inventory, cataloging, and re-boxing of collections under this project brings major portions of the UA Collections Facility into better order for ongoing curation, research, display, and teaching needs.

Preserving and Interpreting Saltpeter Cave (ARAS Project 17-02)

Dr. Jamie Brandon (ARAS-UAF Research Station archeologist), Lydia Rees, and Jared Pebworth (ARAS-SRP research assistants) obtained ANCRF funding to study artifact collections from Saltpeter Cave 3NW29 in Newton County, excavated in 1969–1970 by then ARAS research archeologist Ken Cole. Cole's use of modern excavation and documentation protocols confers on these collections great potential for adding to our understanding of Native American prehistory in the Ozarks.

Brandon, Rees, and Pebworth outlined three goals for the project: 1) rehabilitate, reorganize, and inventory the records and artifacts from the 1969 and 1970 excavations; 2) photograph and analyze a select portion of the collection in order to interpret the site and its importance to the general public of Arkansas and beyond; and 3) create a public-oriented, online exhibit about the Saltpeter Cave site and its unique archeological materials to be featured on the "Bluff Shelters of the Arkansas Ozarks" website funded by ANCRF Grant Number 16-004 (<https://archeology.uark.edu/ozarkbluffshelters/>).

The deepest excavation unit, Unit E, was selected for analysis and interpretation. The diagnostic hafted bifaces from this test unit have been identified and typed, providing a valuable chronology for the Archaic period of Arkansas prehistory. Analysis of ceramic artifacts from the site has also been



Jared Pebworth and Lydia Rees work on photographing artifacts from Saltpeter Cave 3NW29.

completed, and carbon samples associated with stratigraphically documented artifacts have been selected for radiocarbon dating. Ongoing study of these collections will produce a report of major importance to our understanding of Native American cultural development in the Arkansas Ozarks.

Historic Properties (ARAS Projects 17-03 & 17-04)

ARAS archeologists were involved in two other projects supported by ANCRF funding awarded to their host institutions. Dr. Jodi Barnes, ARAS-UAM Research Station archeologist, conducted additional excavations at the Taylor House 3DR26 (17-03) to investigate the cistern. Dr. Barnes also continues to supervise UAM students in lab processing of artifacts retrieved from the cistern excavation and from earlier excavations of the smokehouse.

Tim Mulvihill, ARAS-UAFS Research Station archeologist, supervised excavation of several features previously identi-



fied by geophysical survey in the yard of the Willhaf house 3CW1297 (17-04), a nineteenth century structure located in Van Buren and acquired by the University of Arkansas - Fort Smith for development as an extension of the nearby Drennan-Scott Historic Site heritage preservation teaching lab and museum.

National Park Service Projects

Two projects, both begun during FY 2014–2015, received continuing support from the NPS through the federal Cooperative Ecosystem Studies Units program, administered for the University of Arkansas System by the UA Division of Agriculture. Both are multiyear efforts that will continue into the future. Additional information on these projects is provided in the CSP, UAF, and UAPB sections of this report.

Comprehensive Archeological Investigations in the Osotouy Unit, Arkansas Post National Memorial (ARAS Project 16-07)

During FY 2016–2017, Dr. Jami Lockhart (ARAS-CSP) and Dr. John House (ARAS-UAPB) continued work on the third phase of a projected four-phase, four-year collaborative effort with the Midwest Archeological Center of the NPS.

Excavations at the Taylor House/Hollywood Plantation continued in Fall 2016.

The larger goal of the project is to conduct new investigations designed to integrate all previous studies conducted (beginning in the nineteenth century) at several prehistoric, protohistoric, and contact/historic era sites reflecting the Quapaw presence in the area currently recognized as the Arkansas Post National Memorial. These sites represent the first encounters between Native American communities and seventeenth to eighteenth century French and Spanish colonists in what later became the State of Arkansas. The project includes mapping, geophysical prospection, archeological testing, and data integration using the latest digital technologies. House continued analysis of artifacts from 1997 excavations at the Lake Dumond site 3AR110, in addition to studying ceramics and other artifacts from 2015–2016 test excavations in the northern periphery of the Menard-Hodges site 3AR4. Lockhart continued analysis of geophysical and LiDAR data collected for the study area to develop landscape-scale interpretations of Native American settlement and land use.

Comprehensive Archeological Inventory of Leetown Hamlet and Ruddick's Field, Pea Ridge National Military Park (ARAS Project 16-06)

This is another multiyear project undertaken in collaboration with the NPS Midwest Archeological Center. The current effort involves assimilation of spatial data employing GPS and Total Station survey data, LiDAR, aerial photography, and other sources of information to produce a comprehensive geospatial framework to encompass two areas of the park important to investigation of its Civil War history: Leetown and Ruddick's Field. The geospatial framework is then used to guide archeological excavations designed to produce new information for research and interpretation of Civil War events associated with the park. During FY 2016–2017, Lockhart synthesized geophysical data, historic maps and aerial photographs, modern photos, and LiDAR to create a comprehensive reconstruction of potential archeological features representing the Civil War-era settlement of Leetown. Brandon and Lockhart, along with Dr. Carl Drexler, Jerry Hilliard, Lydia Rees, Michael Evans, and Jared Pebworth, also supervised excavations at Leetown that included the 2017 University of Arkansas Department of Anthropology field school in archeology. Analysis of artifacts and other materials retrieved during the excavations continues in the ARAS central lab, involving ARAS staff in addition to numerous undergraduate and graduate student volunteers.

Other Projects

Davidsonville Historic State Park Kiosk (with CAST)

Kathleen Cande continued work on this project with a week-long visit to the Northeast Arkansas Regional Archives (NEARA) in Powhatan, Arkansas, in February. The archives



Jami Lockhart using the magnetometer at Leetown, Pea Ridge National Military Park.

houses the Lawrence County government records, a 500 cubic foot collection of records donated by the Lawrence County Historical Society. A documents library will be added to the three-dimensional map of the town of Davidsonville. Thirteen original documents have been chosen for the library and will be uploaded to the kiosk. The original documents will be scanned by NEARA staff and Cande has transcribed each document and provided commentary and explanations for objects mentioned in probate records and other inventories.

One of the most exciting discoveries made at NEARA is a partnership agreement between two physicians who had an office and apothecary shop in Lots 4 and 5 in Davidsonville. This was new information because there are no deed records for these lots, and no mention anywhere of two physicians. Another important find is an 1819 contract between two owners of a flat boat and several men who agreed to take the boat to New Orleans loaded with cargo to be sold. This, along with store inventories and personal property lists, provides a much more detailed view of the town's connection to larger commercial markets in the early 1800s.

Mountainburg Schools Safe Room Survey

Tim Mulvihill and Jared Pebworth conducted a survey with shovel testing to clear an area selected for construction of a safe room for the Mountainburg school district. Kathleen Cande and Teka McGlothlin produced the final report submitted to the Arkansas Historic Preservation Program and the Mountainburg school superintendent.

Cemetery Research

Kathleen Cande is coordinator of all ARAS activities under the Historic Cemetery Preservation Initiative. During 2016–2017 she processed 45 requests for information and assistance from ARAS station archeologists, AHPP staff, and the general public about cemeteries in 13 counties.

As part of Arkansas Archeology Month, Cande participated in Celebrate Archeology Day on March 25 at the ARAS coordinating office in Fayetteville. She had a poster with photographs from a cemetery preservation project in southwest Arkansas on display, and distributed brochures and information on cemetery preservation to the general public.

Grants, Contracts & Cost-Share Agreements in FY 2016–2017

ARAS-SRP Project No. & Name	Firm or Agency	Budget
Extensions (no new funding)		
15-05 NAGPRA documentation Grant	National Park Service	\$63,964
16-02 Enhancement of AMASDA	ANCRC 16-003	\$20,396
16-03 Preserving and Interpreting Arkansas Bluff Shelters	ANCRC 16-004	\$35,471
16-06 Ruddick's Field, Pea Ridge National Military Park	National Park Service	\$75,215
16-07 Osotouy Unit, Arkansas Post National Memorial	National Park Service	\$32,659
16-08 Search for DeSoto's Cross at Parkin	Elfrieda Frank Foundation	\$19,469
16-09 Wallace's Ferry	Arkansas Humanities Council	\$3,789
16-12 Gathering, Gardening & Agriculture Curriculum	Public Outreach Program, SEAC	\$1,990
16-14 Gathering, Gardening & Agriculture Curriculum	Bill Jordan Fund, AAS	\$3,290
16-15 Gathering, Gardening & Agriculture Curriculum	Arkansas Humanities Council	\$4,996
New		
16-06 Leetown, Pea Ridge National Military Park	National Park Service	\$46,992
17-01 Preserving the Prehistoric Heritage of South Arkansas	ANCRC 17-015	\$37,480
17-02 Preserving and Interpreting Saltpeter Cave	ANCRC 17-016	\$7,520
17-03 Taylor House	ANCRC (through UAM)	\$24,427
17-04 Willhaf House	ANCRC (through UAFS)	\$3,278
Total (new funds only)		\$119,697

ANCRC = Arkansas Natural and Cultural Resources Council

AAS = Arkansas Archeological Society

SEAC = Southeastern Archaeological Conference

SRP — Academic & Service Activities

Teaching & Higher Ed

- Michael Evans and Jared Pebworth assisted with the Department of Anthropology Archeological Field School during June 2017. This included GPS work, robotic total station data gathering, and student training and support. (10 students)
- Demonstrations of artifact replicas and technology for archeology students and anthropology clubs at UAF and ATU.

Professional Service

- **Peer Review.** Kathleen Cande reviewed a chapter for a revised edition of a book.
- **Consultations.** Open Range Archaeology, LLC; St. Paul's Episcopal Church in Fayetteville (parking lot cistern); Prairie Grove Battlefield State Park; Benton County Schools; Mountainburg Schools; The Archaeological Conservancy (Cavanaugh Mound in Fort Smith); University of Arkansas Museum Collections; Arkansas State Parks.
- **Organizations.** Cande serves as Gulf States current research editor for Society for Historical Archaeology. She created a new email contact list with updated information and solicited contributions from all members in the Gulf States. Other current research editors are following suit to determine if this feature will continue in the newsletter. Cande attended the Arkansas Historical Association's annual meeting where she gave two tours of the Davidsonville town site for conference goers (attendance about 40). Cande joined the Society of Southwest Archivists and attended a seminar called "Archives 101" at the annual meeting to learn more about archival practices.
- **Committees.** Kathleen Cande is a member of the ARAS Web Steering Committee.

Public Service & Outreach

- **Programs & Presentations.** Jared Pebworth and Michael Evans gave demonstrations on ancient hunting technology during the ARAS "Celebrate Archeology Day" in Fayetteville (attendance about 150) and the Anthropology Club's Archeology Day at ATU (attendance about 300) during Archeology Month; at Hobbs State Park Fall Festival; at 4H Day of Archeology in Fayetteville (25); and for visiting school groups throughout the year. Kathleen Cande also had a table at "Celebrate Archeology Day" featuring a poster about the Survey's cemetery preservation research and service efforts; updated brochures were offered along with instructions for filling out site forms and other information about cemetery preservation. Lydia Rees co-presented numerous talks about Ozark bluff shelters to audiences numbering over 300 throughout the year and helped lead guided archeology-themed tours at Buffalo National River.
- **Organizations.** Kathleen Cande was asked to join the Board of Directors of the Washington County Historical Society.
- **Arkansas Archeological Society.** Michael Evans and Jared Pebworth set up the geophysical grid, and contributed mapping and other work at the 2017 summer Training Program on the Mulberry River near Cass, Arkansas.
- **Cemetery Preservation Initiative.** Cande serves as coordinator of the Survey's historic cemetery research and outreach to individuals and local organizations involved with cemetery preservation. She helped Jodi Barnes (ARAS-UAM) prepare a nomination to add cemeteries, burial grounds, and graveyards statewide to Preserve Arkansas's annual list of "Most Endangered Places" and researched grants available for cemetery preservation. She wrote an article, by request, for the Arkansas Genealogical Society's publication *The Arkansas Family Historian* on problems surrounding abandoned family or community cemeteries (May) and presented information about cemetery preservation to the public at "Celebrate Archeology Day" in March. Michael Evans and Jared Pebworth mapped Robbins Cemetery and Woods Cemetery in Benton County.
- **Other Outreach.** Cande authored or coauthored three web articles for the 50 Moments series on the ARAS website: "Cemetery Preservation: Working with the Arkansas Humanities Council and Descendant Communities" archeology.uark.edu/who-we-are/50moments/cemeterypreservation/ (with Mary Beth Trubitt, ARAS-HSU); "Collaborative Research with the Ozark-St. Francis and Ouachita National Forests" <http://archeology.uark.edu/who-we-are/50moments/nationalforests/> (with Jerry Hilliard and Mary Beth Trubitt); "National Park Service Collections Curation at ARAS, 1988 to Now" <http://archeology.uark.edu/who-we-are/50moments/npscurator/>. Evans and Pebworth assisted walk-in visitors to the Survey with artifact identifications and site recording at landowner request.

JAMI LOCKHART WITH GRADIOMETER AT SPINACH PATCH SITE



Computer Services Program

Deborah Weddle

Deborah Weddle's time is committed to website development and Information Technology support for the organization. She oversees IT life cycle management and assists with routine personal computer operations. Responsibilities include computer workstation procurement, inventory, and administration; computer repairs and upgrades; site license management and deployment; and end user support for all staff (hardware and software). She also manages the CSP Computer Lab, which houses a GIS workstation, PC and iMac general computing workstations, two flatbed scanners, a high-capacity automated slide scanner, networked color laser printer, and microfilm scanner.

The majority of her work is now dedicated to the design and maintenance of the Survey's flagship website. This year we added the Gathering, Gardening, and Agriculture 5th Grade Curriculum website (created by Jodi Barnes, Emily Beahm, and Elizabeth Horton), a web-based artifact image catalog to supplement the reprinted *Sloan: A Paleoindian Dalton Cemetery*, forthcoming from UA Press, and various other web projects. Weddle also administers the Survey's Twitter presence and is the initial point-of-contact for public inquiries through the website.

Arkansas Archeological Survey website

(archeology.uark.edu or arkansasarcheology.org)

Redesigned in July 2015, the Survey's main website showcases the wide array of work we do in support of our core missions of research, preservation, and education. Information about educational and outreach activities, new discoveries, current research, publications, and teacher resources are updated regularly, and operational guidelines and forms necessary to public officials, developers, and professional archeologists working in our state are accessible through quick links on the home page. Links to television, radio, web, and print media coverage of the Survey's activities are highlighted on the website throughout the year. Visitor traffic has been high, with total pageviews reaching 91,175 during FY17, a greater than a 28% increase over last year and a 1090% increase since the new version of the website was launched.

A Web Steering Committee works with Weddle as she continues to improve the website's organization and menus, advising on new features and content. Members of the committee are Deborah Weddle, John Samuelsen, George Sabo, Deborah Sabo, Jamie Brandon, Kathleen Cande, Jami Lockhart, and Ann Early.

The Survey's Computer Services Program (CSP) is responsible for all aspects of electronic information management, including systems administration, computer operations, equipment purchasing, research, instruction, and user support, throughout the organization. Our pioneering computer database for archeological site information (AMASDA) is one of the most comprehensive such applications in the country. The Survey has worked toward an approach that integrates the different data structures and digital tools being used in archeological research and cultural resource management today. Key components of this integrated approach include geographic information systems (GIS), relational database management systems, and exploratory data analysis. CSP provides online access to AMASDA for qualified subscribers and is working to provide web-enabled database access (with some information categories password-protected) for agencies and firms involved with cultural resource management in Arkansas. Our educational websites are maintained in response to public interest as well as agency and research needs. Our archeogeophysical applications program maintains a full complement of remote sensing technologies for near-surface geophysical prospection on prehistoric and historic archeological sites.

Jami J. Lockhart (Ph.D., Environmental Dynamics, University of Arkansas, 2007) joined the Survey in 1988. His research specializations include integrated data management, GIS, archeogeophysics, and human-environmental interrelationships through time. He is CSP Coordinator and Director of Archeogeophysical and GIS Applications for ARAS, Research Professor of Anthropology for the Department of Anthropology, and a member of Cooperating Faculty of the Environmental Dynamics Program at the University of Arkansas Fayetteville.

Deborah Weddle (B.A., Anthropology, University of Arkansas, 1993) began working for the Survey as a student archeological laboratory and field technician before moving permanently to the CSP. Her specializations include web application development, Information Technologies, and the use of multimedia technologies for education. She is the Survey's Information Technology support and Internet applications specialist. Her title is Survey Research Assistant.

John Samuelsen (M.A., University of Arkansas, 2009) is currently a Ph.D. candidate in Anthropology at UAF and is a Survey Research Assistant. His specializations include Caddo archeology, stable isotope analysis, geophysics, databases, GIS, digital storage, web application development, and computer applications in archeology. He is the Survey's server administrator, administers Survey databases, and assists with web application development.

50 Moments in Survey History web featurettes

To celebrate the Survey's 50th anniversary in 2017, a series of 50 "Historic Moments" that highlight significant contributions our organization has made to Arkansas's rich past and to the field of archeology was planned. New web featurettes will be published each week throughout the year.

John Samuelsen

John continued to maintain the Survey's servers, databases, backup system, and other digital resources. This includes maintaining the arkarcheology server, the arasbackup server, the arasremote server, the backup system, the AMASDA database, some other smaller databases, the AMASDA Online website, the Indians of Arkansas website, the Arkansas Novaculite website, the Rock Art in Arkansas website, and the large format printer and scanner. He also worked with Deborah Weddle, Lydia Rees, Jamie Brandon, and Jodi Barnes in launching the Arkansas Archeological Survey's new websites (Bluff Shelters of the Arkansas Ozarks and Gathering, Gardening, and Agriculture). He upgraded the backup server to greatly increase its data capacity.

AMASDA database & backup systems

AMASDA and the arkarcheology server are backed up nightly. The arasbackup server continues to be backed up daily. The use of the backup system by ARAS personnel increased again in 2016–17. This system is a centralized and redundant backup system for the digital information created by the organization. The File Share folder, backed up bi-nightly, now has 9.56 TB of data, 1,990,613 files, and 102,994 folders currently backed up. In addition, 2 TB of data are currently in use for system backups. This is a 23% increase in the size of the file sharing portion of the data over the previous year. John upgraded the arasbackup server from about 12 TB of data storage to about 35 TB of data storage this year to account for current and future data needs. The arasremote server is housed at the University data center, which allows for a total system backup in a remote location. This is to protect our data in a worst case scenario. Maintenance and upgrades included fixing failed hard drives.

AMASDA Online

John Samuelsen continued to provide support for the ARAS registrar's office and anyone else needing help with the

AMASDA Online website and AMASDA database. Individuals logged in over 6400 times this year (9% increase over last year) to retrieve 576,531 records related to archeological sites and projects in Arkansas. The web traffic on AMASDA Online increased 18% this year to 80,995 page views. John updated and fixed various issues with AMASDA as they occurred. Occasionally, he performed custom queries of the database upon request. He also performed GIS analysis of archeological site data for contractors. These activities brought in additional funds to the Survey.

Educational Websites

The Survey has several educational websites linked onto our main flagship website. John Samuelsen and Deborah Weddle assist the writers and content developers of these websites.

Indians of Arkansas <http://arkarcheology.uark.edu/indians-of-arkansas/index.html> is designed for the public and for students and educators, and contains both academic and indigenous perspectives on American Indian history. It received 100,000 pageviews and 39,000 sessions. **Rock Art in Arkansas** <http://arkarcheology.uark.edu/rockart/index.html> is designed for public education on the prehistoric rock art of Arkansas with articles, picture gallery, classroom ideas, and a searchable database of images and information. The site had 24,000 pageviews and 6700 sessions.

These sites have their greatest popularity during the school year, indicating use by students and teachers for learning and classroom preparation about Arkansas history and Arkansas Indians. The content of the websites is a group effort, but is mostly created and updated by George Sabo (ARAS Director). These websites have garnered more than one million hits since their creation.

Arkansas Novaculite: A Virtual Comparative Collection <http://arkarcheology.uark.edu/novaculite/index.html> developed by Dr. Mary Beth Trubitt (ARAS-HSU) was launched in May 2014 with a grant from the Arkansas Humanities Council. It had 12,000 pageviews and 6000 sessions this year. Trubitt continuously updates this site, which presents resources for researchers and students interested in Ouachita Novaculite, a stone that was used over millennia for toolmaking and trade, and related quarry and workshop sites.

New this year is the grant-supported **Gathering, Gardening, and Agriculture** website which contains our 5th grade social studies curriculum developed by a team of archeologists within ARAS. Jodi Barnes, Emily Beahm, and Elizabeth Horton were the main authors with assistance from George Sabo. This website (<https://archeology.uark.edu/gga/>) contains a guide for teachers to use the curriculum plus all the lesson plans in downloadable form as PDFs and PowerPoints, ready to use. It is also updated with information about Teacher Workshops related to the curriculum. Educators can contact the Survey for a hard copy of the GGA workbook and other materials including seed packets from the Survey's experimental gardens (see pp. 4, 20–21, 47, 59–60). Though the GGA website went live late in this fiscal year, it garnered 1000 page views and 250 sessions.

Also new in 2016 was **Bluff Shelters of the Arkansas Ozarks**, <https://archeology.uark.edu/ozarkbluffshelters/> written by Lydia Rees (ARAS-SRP) in cooperation with Jamie Brandon (ARAS-UAF). Development of this website, presented primarily for general interest audiences and students, was supported by a grant from Arkansas Natural and Cultural Resources Council. It also launched late in this reporting period, but had accrued 8900 page views and 2900 sessions.

Archeogeophysical & GIS Research Projects

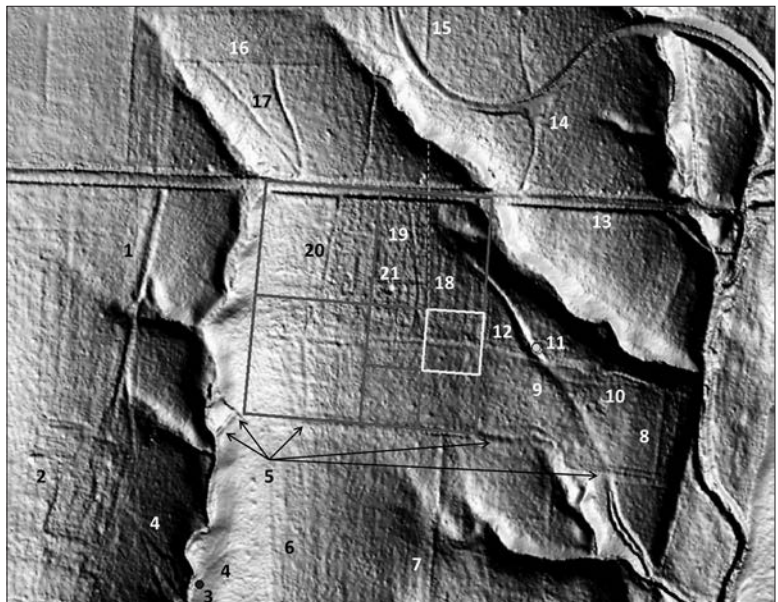
Archeogeophysical remote sensing has revolutionized archeological methodology and has become an integral part of cultural resource management. These technologies offer nondestructive reconnaissance that can save time and expense by focusing excavation efforts for the most beneficial result. The Survey endeavors to remain at the forefront of this development.

Dr. Jami Lockhart coordinates and directs all of the Survey's GIS and archeogeophysical research across the state, both ARAS projects originating at the various research stations and projects funded by grants or cost-share agreements with other agencies. In this capacity, he contributes original research as principal investigator, and collaborates with colleagues on research design and project reports. He also provides support for students and serves on University of Arkansas thesis and dissertation committees.

Pea Ridge National Military Park

The Survey has pursued a four-year project to conduct an archeological inventory within Pea Ridge National Military Park. The areas to be studied are associated with the March 1862 Civil War battle at Pea Ridge, Arkansas, which was one of the most significant actions of the war in this region. The project is a collaboration between the Arkansas Archeological Survey and the Midwest Archeological Center of the National Park Service, organized under the federal Cooperative Ecosystem Studies Units (CESU) program. Lockhart serves as co-PI for the project (along with Dr. Jamie Brandon, ARAS-UAF, and Dr. George Sabo III, ARAS Director). Other contributors are Dr. Carl Drexler (ARAS-SAU), Michael Evans and Jared Pebworth (ARAS-SRP), Jerry Hilliard (ARAS-UAF), John Samuelsen (ARAS-CSP), and Lydia Rees (ARAS-SRP).

- Lockhart used a GIS-enabled methodology at the Civil War-era Leetown hamlet to compile, georeference, integrate, overlay, and interpret multiple information formats. The data include archival sources, historic maps, historic and modern aerial photographs, conventional photos, and LiDAR. The resulting integrated data are fundamental to locating specific archeological features and interpreting the Leetown hamlet, and are being used to guide archeological excavations.
- Lockhart directed a comprehensive high-resolution gradiometry survey of all open areas at Leetown hamlet to locate archeological features, which include former structures and associated artifacts contemporaneous to the 1862 battle. Georeferenced mapping and interpretation of magnetometer data have also provided precise locations for pinpointed multisensor remote sensing surveys using electromagnetic conductivity, magnetic susceptibility, electrical resistance, and ground-penetrating radar.
- Lockhart began background research associated with year three of the four-year project, which will include other key Civil War battlefield elements such as Clemmens House and Foster's Field.



LiDAR data processed for high-resolution "bare ground" elevation and imagery showing vestiges of the Civil War era landscape (roads, fields, former house locations, etc.).

Protohistoric Landscape of Northeast Arkansas

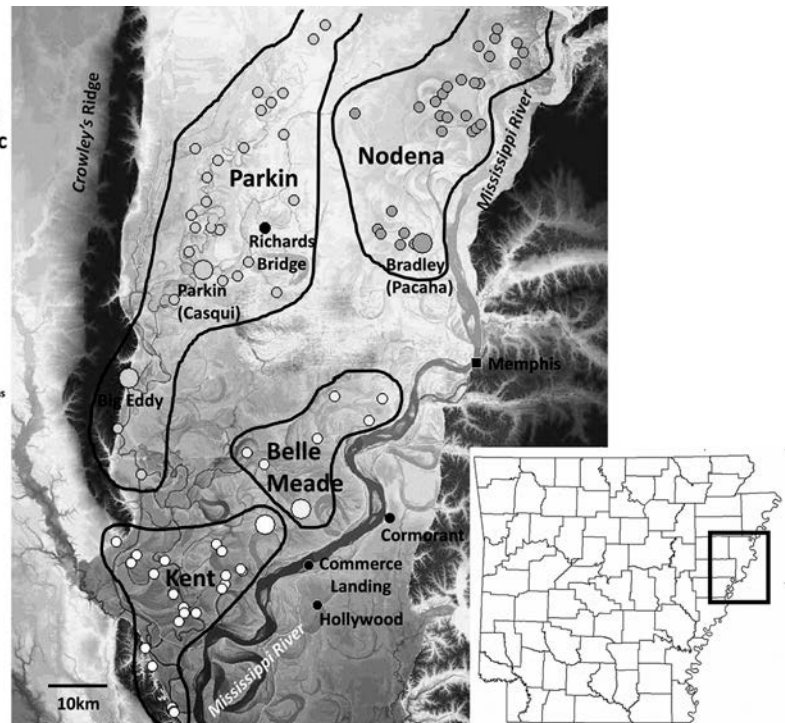
- Lockhart (with Tim Mulvihill, ARAS-UAFS) is examining settlement patterns that distinguish a late prehistoric/protohistoric landscape in the Central Mississippi Valley. At the cultural landscape scale, a statewide archeological site database is being used within a GIS framework to examine contemporaneous site distributions as they relate to the physical geography of the study area. Historic maps, aerial photography, digital elevation modeling, geomorphology, and GIS-driven data integration are being employed to interpret a dynamic cultural landscape located at the epicenter of initial Native American/European contact west of the Mississippi River.

Late Prehistoric and Protohistoric Cultural Phases in the Study Area

Darkest green = lowest elevations
Purple = highest elevations

Lockhart is using contemporaneous sites, digital elevation models, eye-witness accounts, and other data to model potential travel routes of the sixteenth century Soto entrada in northeast Arkansas.

Source: AMASDA

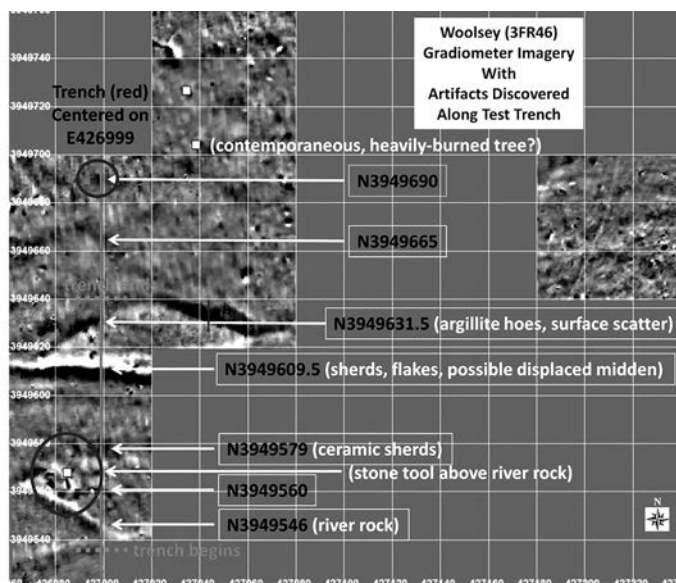


Mulberry River Project

- Lockhart (with Mulvihill, Brennan, and Sabo) directed gradiometry and GIS data development, and recommended initial excavation locations that unearthed Woodland period (and possible Archaic) artifacts at the Woolsey site 3FR46. The data were used to locate excavations for the 2017 Training Program. Data collected from excavations guided by the georeferenced gradiometry may provide evidence for the earliest known agricultural activities in Arkansas.

- Lockhart (with Mulvihill, Brennan, and Sabo) directed gradiometry and GIS data development at the Mayo site 3FR58. The data were used to locate excavations for the 2017 Training Program.

Gradiometry, test trench, and discovered artifact locations at the Woolsey site (3FR46) that guided excavations during the 2017 Training Program.



Osotouy Unit, Arkansas Post

- Lockhart (with co-PIs Dr. Dawn Bringelson, Dr. John House, and Tim Mulvihill) continues research associated with a comprehensive archeological investigation of the Osotouy Unit of Arkansas Post National Memorial as part of collaborative research by The National Park Service Midwest Archeological Center and Arkansas Archeological Survey. Lockhart has directed multisensor remote sensing and interpretation, high-resolution topography from LiDAR, as well as the development of a comprehensive GIS database he is using for landscape-scale analysis.

Spiro Landscape Archeology Project

- Lockhart again collaborated with Oklahoma's Scott Hammerstedt, Amanda Regnier, and Patrick Livingood, as well as Sabo, Samuelsen, and Mulvihill at ARAS, to develop ground-penetrating radar imagery of Brown Mound at the Spiro site in eastern Oklahoma. The work provides detail relating to the original mound extent, interpreted ramps, and mound-building stages at this preeminently important Mississippi period ceremonial and habitation site.

Prairie Grove Civil War Battlefield

- Lockhart (with Brandon, Sabo, ARAS-UAF Research Station, and ARAS-SRP) developed plans for archeological remote sensing and reconnaissance of the orchard/Borden House battlefield vicinity to be carried out in 2017.

Spinach Patch (3FR1)

- Lockhart (with Mulvihill, Sabo, and Evans) directed gradiometry and GIS data development for an entire Woodland period village and associated archeological features. The data include a ceremonial mound, and rare, precisely located Woodland houses for future excavation.



Mike Evans, Tim Mulvihill, and Dr. Jami Lockhart set up gradiometers at the Spinach Patch site, 3FR1.

At left: Woodland period mounds (circular shapes), houses, and other archeological features as imaged by the gradiometer survey.

Computer Services Program – Academic & Service Activities

Grants, Honors & Awards

- \$47,000 from National Park Service for archeological inventory at Pea Ridge National Military Park: geophysical survey, GIS, and excavation at Leetown Civil War era hamlet (2017).
- \$32,000 from National Park Service for archeological inventory at Pea Ridge National Military Park: geophysical survey, GIS, and artifact collection at Ruddick's Field Civil War Battlefield (2016).

Teaching & Higher Ed

- **UAF Department of Anthropology.** The CSP staff and program engage on a regular basis with undergraduate and graduate students at UAF and other campuses, giving demonstrations and tours of equipment and facilities, assisting with research projects, and providing training.
- Lockhart serves as Research Faculty in the UA Department of Anthropology and Cooperating Faculty in the UA Environmental Dynamics Ph.D. Program. He is currently on graduate committees at UAF for John Samuelsen (Ph.D., Anthropology), Michelle Rathgaber (Ph.D., Environmental Dynamics), Jeremy Menzer (Ph.D., Environmental Dynamics), and Amber Nelson Mitchum (M.A., Anthropology).
- Lockhart instructed students in the UA Anthropology Department's Archeological Field School at Pea Ridge in the use of archeogeophysics.
- Lockhart is collaborating with UA Landscape Architecture Associate Professor Kimball Douglas Erdman in development of a senior level studio class on interpreting past cultural landscapes for the public.
- Samuelsen helped set up the ICP mass spectrometer at the UA Stable Isotope Lab (UASIL), helped upgrade the 100 Class Clean Lab, and helped students and Dr. Adriana Potra run samples for geological research.

Professional Service

- Lockhart consulted with personnel at National Park Service (Arkansas Post National Memorial, Pea Ridge National Military Park, Midwest Archeological Center); U.S. Forest Service (Ozark National Forest); Arkansas State Parks (Historic Washington, Toltec Mounds State Park, Parkin Archeological State Park); UA Center for Advanced Spatial Technologies (CAST); the Center of Excellence in Paleontology, East Tennessee State University; NASA; Oklahoma Archeological Survey; and the Caddo Nation on various matters related to archeogeophysics and other research.
- Lockhart participated in offering an NPS-sponsored workshop "Current Archeological Prospection Advances for Non-Destructive Investigations in the 21st Century," which was held in association with the archeological field school at Pea Ridge.
- Lockhart is President of the Caddo Conference Organization.
- Lockhart chairs the ARAS Personnel Committee.
- Samuelsen serves as student representative for the Caddo Conference Organization.
- Samuelsen reviewed a contribution for the journal *Historical Archaeology*.
- Samuelsen consulted with the Caddo and Wichita Tribal Historic Preservation Officers about cultural affiliation issues, and created a map for an exhibit at Shiloh Museum of Ozark History.
- Weddle, Lockhart, and Samuelsen are members of the ARAS Web Steering Committee. Samuelsen is part of the ARAS Digital Data Collection Initiative (DDCI) working group.

Research Station Projects

- Lockhart is working with Tim Mulvihill to develop a methodology for scanning, indexing, and archiving historic aerial photographs in Arkansas.
- Lockhart, with Michael Evans, assembled and tested components of a cart-mounted method for collecting large-area gradiometry that will enhance speed and coverage for remote sensing data collection on open sites.
- Lockhart developed a methodology for reestablishing the lost site grid for the Old Town Ridge site 3CG41 in ARAS-ASU station territory. He previously provided gradiometry and published data for the entire fortified Middle Mississippian village that shows the location of a surrounding fortification ditch, palisade, possible entrances, numerous houses, mound extents, plaza, and hundreds of other features.
- As a co-PI (with George Sabo and John House), Lockhart is developing plans to direct archeogeophysical surveys at the important protohistoric Thibault site near Little Rock. The work is being funded by the Quapaw Tribe of Oklahoma.

- Lockhart used georeferenced historic aerial photography and geophysical remote sensing data in consultations with Dr. Elizabeth Horton and Dr. George Sabo relating intrasite landscape alterations and planned geomarkers.

Service to Arkansas Archeological Society

- **Training Program.** Lockhart provided remote sensing, GIS, interpretation, planning, and precise excavation recommendations for the 2017 Arkansas Archeological Society Training Program at the Woolsey (3FR46) and Mayo (3FR58) sites in northwest Arkansas. He also worked with National Forest Service employees and volunteers supporting the use of archeogeophysics for the projects. Samuelsen taught a guest lecture for the Basic Lab class at the Training Program.
- **Annual Meeting.** Samuelsen operated the meeting room technology.

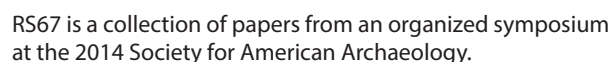
Other Public Service & Outreach

- **Programs & Presentations.** Lockhart provided demonstrations of archeogeophysical remote sensing equipment and resulting data for the ARAS “Celebrate Archeology Day” in Fayetteville during Arkansas Archeology Month (audience about 150). Samuelsen gave a public talk to the Ko-ko-ci Chapter in Fayetteville (audience about 25).
- **NWA Open Space Plan.** By invitation, Lockhart serves on the Northwest Arkansas Open Space Plan Steering Committee. As GIS and archeological consultant, he assists in land-planning activities aimed at preserving and conserving hundreds of the most significant archeological sites in the fastest growing area of the state and nation.
- **ARAS Website.** Lockhart contributed three entries to the 50 Moments web series celebrating the Arkansas Archeological Survey’s 50-year anniversary: “The Osotouy Project” <http://archeology.uark.edu/who-we-are/50moments/osotouy/>, “Aerial & Near-Surface Remote Sensing at the Prehistoric Old Town Ridge (3CG41) Site in Northeastern Arkansas” (with Juliet Morrow) <http://archeology.uark.edu/who-we-are/50moments/oldtownridge/>, and “Archeogeophysical Remote Sensing” <http://archeology.uark.edu/who-we-are/50moments/remotesensing/>.

The reorganized Publications Program continued with Dr. Jamie Brandon (ARAS-UAF) as committee Chair for one more year. The Committee manages the submission and review process. Deborah Sabo is Publications Editor. She works with authors to prepare accepted manuscripts for publication, doing all final editing, book design, layout, and file preparation for the printer.

Research, Preservation, Communication: Honoring Thomas J. Green on His Retirement from the Arkansas Archeological Survey, edited by Mary Beth Trubitt was published as Research Series No. 67 at the end of the 2016 fiscal year and available in July 2016. This volume presents collected papers springing from a symposium organized by Mary Beth Trubitt at the 2014 annual meeting of the Society for American Archaeology to honor the career of Dr. Thomas J. Green, who served as ARAS Director for 21 years. The contents reflect the Arkansas Archeological Survey's tripartite mission of science, preservation, and public education about archeology.

Throughout the year, Deborah Sabo worked on preparing the next Research Series volume for publication. *The Battle Mound Landscape* by Duncan McKinnon, of the University of Central Arkansas, was scheduled for publication in 2017 as Research Series No. 68. Based upon his doctoral dissertation from University of Arkansas, the book explores the uses of the landscape at the Battle Mound site in southwestern Arkansas by



The Survey's Publications Program consists of three series: the Research Series, Technical Papers, and Popular Series present the results of Survey research projects and submissions from other qualified authors to a wide range of audiences, from professional scholars and students to public school teachers, government officials, and the general public. A Publications Committee reviews submissions internally and mediates an external review process. Program staff all have additional responsibilities in other capacities at the Survey. The Publications Program generates its own revenue for printing and equipment. <http://archeology.uark.edu/learn-discover/publications/>

Publications Committee for 2016–2017: Jamie Brandon (Chair), Jodi Barnes, Jerry Hilliard, Elizabeth Horton, Juliet Morrow, and Deborah Sabo (ex officio). This will be the final year of the interim five-member “stabilizing” committee with Dr. Brandon serving continually as Chair. Discussions among the Committee and the ARAS Director determined a new rotating three-member Committee structure going forward, with the senior member each year serving as Chair.

Deborah Sabo, Editor (M.A., Michigan State University, 1978) compiled, edited, and designed the Annual Report of the Survey for FY 2015–2016. Sabo oversees the archive of publication masters and responds to queries about our catalog. She is (*ex officio*) a permanent member of the ARAS Publications Committee. For the Research Series, she completed work on RS68 (published in Fall 2017). As a member of the ARAS Web Steering Committee she participated in meetings to continue planning improvements to the Survey's website, contributed content, and copyedited articles submitted to the website by other ARAS staff. She copyedited all entries submitted for the 50 Moments series, assisted with corrections to the Gathering, Gardening, and Agriculture website, and proofread the Bluff Shelters of the Arkansas Ozarks website as it was in development. For outreach, she edits and updates the Survey's educational flyers, which are available on the website as downloadable PDFs, helps to create new flyers as needed, and designs and produces the Program for the Arkansas Archeological Society's Annual Meeting. She also edits and produces reports for the SRP program (three reports this year, Elkins' Ferry, Wallace's Ferry, Wild Violet), and contributes to other ARAS projects where editorial assistance is needed (including this year the Gathering, Gardening, and Agriculture 5th grade curriculum workbook). She is the editor of the Arkansas Archeological Society Newsletter, *Field Notes*, published six times per year, and serves on the Society's Executive Committee.

Lisa Davison, Accountant managed publication sales, distribution, inventory, and accounting. She prepares monthly sales and inventory reports, and works tirelessly to clear the books of outstanding invoices. Ms. Davison handles all communications with our college bookstore customers, the major market for our bestselling RS44.

ancestral Caddo Indians as revealed by records from past excavations and McKinnon's archeogeophysical research at the site. Editorial work and layout, along with final corrections from the author, were completed by the end of the 2016–2017 fiscal year. Request for CIP data was submitted to Library of Congress in June 2017.

Responses from external reviewers were received for book submissions by Jodi Barnes (an educational “workbook” that uses preservation-oriented archeological investigations at Taylor House/Hollywood Plantation to teach the process of research from start to finish) and Elizabeth Horton (her Ph.D. dissertation from Washington University St. Louis on plant fiber use and technology in the Ozarks), and sent to the authors.

The Survey was contacted by Dr. Ian Brown (University of Alabama) about a manuscript that had been slated for publication by Mississippi Department of Archives and History (MDAH). “The Mazique Site” by Brown's student Daniel LaDu is the report of excavations at a Coles Creek culture mound site near Natchez, Mississippi. MDAH was unable to publish the report due to funding constraints. The site has important implications for Arkansas and regional prehistory, so ARAS Publications were happy to take on this project.

5th Grade Curriculum

Distribution of free *Gathering, Gardening and Agriculture* workbooks (see pp. 4, 20–21, 47, 59–60 for more information) is under the auspices of the Publications Program. These are available on request to Arkansas educators. Twelve hard copies of the curriculum, which is also available online, were distributed since the workbooks became available in 2017.

Popular Series Books

Two Popular Series books for general audiences are still in development. *Ways of Our Ancestors: Prehistoric Indians of Arkansas*, written by ARAS Director George Sabo III, is a summary of cultural development in Arkansas from about 13,000 years ago till the arrival of Europeans. Sabo is working on another round of revisions to the text, with some updated details about recent discoveries, and gathering appropriate illustrations.

A brief discussion of riverine boat wreck sites in Arkansas, written by retired ARAS-WRI Research Station archeologist Skip Stewart-Abernathy, is based in part on popular public lectures he has delivered around the state. Not much progress has been made on this volume since last year, because permission sources for some illustrations have been difficult to track down.

Sales & Distribution

Publication sales and distribution numbered 1103 volumes in all series, up slightly from last year. This includes 145 volumes given away as complimentary copies, including books distributed to colleagues, teachers, reviewers, libraries and archives, and students, and books contributed to the Student Paper Prize at the Southeastern Archaeological Conference. Our bestselling book continues to be RS44 (*Standards for Data Collection from Human Skeletal Remains*) with 618 units distributed this year (16 complimentary, 602 sold). Sales of our Popular Series books (*Paths of Our Children: Historic Indians of Arkansas* and *Rock Art in Arkansas*) are stable and we continued to distribute free copies, including 34 copies of PS05 *Rock Art in Arkansas* at the UA Anthropology Department's Open House.

Staff members sold books this year at the annual meetings of the Arkansas Archeological Society (\$272.18 in sales), the Caddo Conference (\$205 in sales), and the Arkansas Historical Association (\$24.97 in sales). We distributed about 70 complimentary copies of the new Research Series No. 67 to authors and reviewers and to various offices and libraries around the state.

Books On the Web

Out-of-print volumes in the SWDO (Southwest Division Overview) and CNPO (Central & Northern Plains Overview) series produced under contract for the U.S. Army Corps of Engineers in the 1980s and 1990s are still in demand by agency land managers, contractors, and graduate students. These books were placed on the ARAS website as free PDFs.

Publication Sales and Distribution for 2016–2017

	Research Series ¹	Research Reports ¹	Popular Series ²	Technical Papers ²	Total
No. of Titles	67	32	3	2	104
Sold	743	—	115	100	962
Free	94	—	40	11	145
Total	837	—	155	111	1103

1 reflects the total number of titles, but not all are currently available

2 reflects the number of titles currently in print

JANE KELLETT RECEIVES 40-YEAR SERVICE AWARD FROM CHANCELLOR STEINMETZ



Photographic and Graphic Arts Support

Photographic and graphic arts support at the Survey include a darkroom and desktop computer graphic arts facilities. Visual documentation is an essential part of archeology for research, publication, archives, and records management. The research stations, the registrar's office, SRP, the publications program, and the various outreach activities all benefit from the productions of this office.

M. Jane Kellett joined the Survey in 1977 while still working on a graduate degree in Art at UAF. She began a full-time position in 1979, drafting maps and other graphics, and added photographic duties in 1982. This year she attained 40 years of service to the University of Arkansas.

Jane Kellett develops and prints black and white film for all the stations and coordinating office staff, duplicates slides for outreach and professional meeting presentations, and maintains a digitized archive of 35 mm black and white negatives and digital camera images. She prepares maps, figures, illustrations, and photographic plates for Survey publications, museum collections, and staff publications in professional journals and books. She does layout and graphics for a variety of outreach materials produced by the Survey.

2016–2017 Activities

- 10 rolls of black and white film processed and catalogued.
- 155 images scanned from black and white negatives, color slides and film, digital images, and prints for research, teaching aids, reprints, journal and newsletter articles, poster/public presentations, station archives, and academic publications.
- 260 graphic and design works, maps, graphs, posters, and illustrations.
- 250 photo plates consisting of approximately 300 artifacts photographed: prehistoric and historic pottery and artifacts for grants, publications, research, presentations, museum collections, and public and professional meetings.
- 90 photos of conferences, classes, volunteers, and lab work.

Partners in Preservation: Survey & Society



Many of the Survey's activities are in cooperation with the Arkansas Archeological Society, a nonprofit educational organization for interested people of all ages and vocations. The Survey and the Society have a unique and productive relationship based upon common interests of professional and amateur archeologists to protect the archeological heritage of the state, to learn about Arkansas's past, and to present that knowledge to the public. The Society elects a Board of Advisors who conduct yearly reviews of the Survey's goals, accomplishments, and needs. Society members provide proactive support for the Survey's mission of education, research, and service, and constitute a pool of skilled volunteers without whose help this mission would be much less efficiently carried out. To make the most of this energetic volunteer support, the Survey and Society jointly manage a Training Program for amateur archeologists. It was the first such program in the country and has served as a model for archeological organizations in other states and around the world.

The Arkansas Archeological Society

Arkansas River Valley Chapter, Russellville
Ark-Homa Chapter, Fort Smith
Central Mississippi Valley Chapter, Jonesboro
Kadohadacho (now Red River) Chapter, Magnolia
Ouachita Chapter, Hot Springs

Tunican Chapter, Monticello
Ko-ko-qi Chapter, Fayetteville
Central Arkansas Chapter, Little Rock – NEW
Three Rivers Chapter, Mountain Home – NEW

Survey Liaison to Arkansas Archeological Society

Marilyn Knapp became the Survey's research assistant in the role of liaison with the Arkansas Archeological Society beginning in July 2013. She has a B.A. degree in Anthropology from the University of Arkansas and previously worked in the office of the Vice Chancellor for Business Affairs on the UAF campus. She is a long time member and past president of the Arkansas Archeological Society. Located at the coordinating office in Fayetteville, Knapp is responsible for keeping the Society membership database up to date, assisting the Society's officers, working on logistical arrangements for the summer Training Program, and acting as Field Secretary. Knapp also assists with preparations and logistics for the Society's Annual Meeting and manages the Certification Program's database. She coordinates many other programs and activities jointly operated by the Survey and Society, such as Archeology Month and other outreach events. She also maintains and manages Society records and archives, coordinates communications among Board members and arranges meetings, helps with social media and other public education technology, attends public events, manages distribution of the Society's newsletter, coordinates communications about field and lab projects with volunteers, and many other activities.

Activities at the UAF

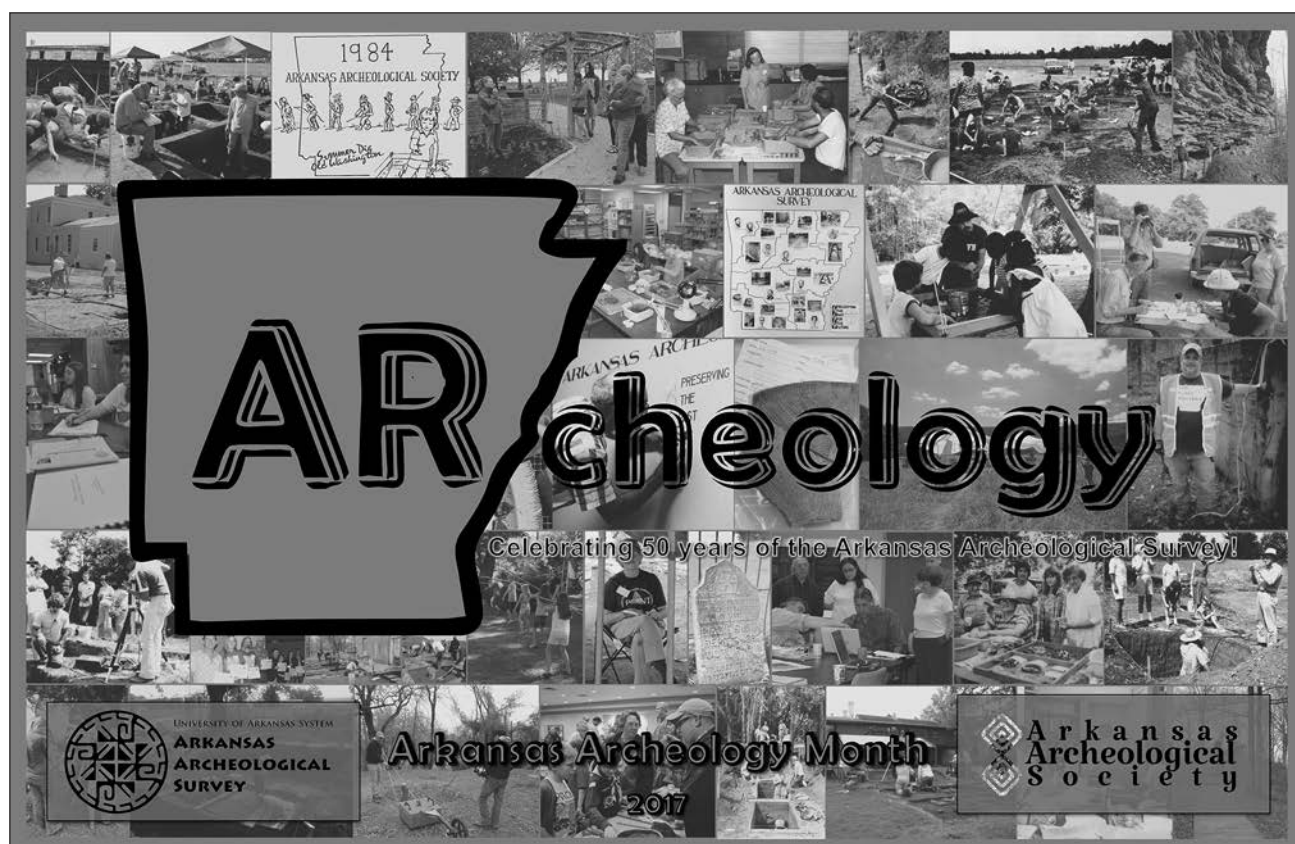
- Knapp disseminates information about archeological learning opportunities and events to the general campus population and helps keep the ARAS coordinating office in touch with the Anthropology Department.

Public Service & Outreach

- Knapp presented talks to the Ozark Society in Fayetteville (25), the Three Rivers Chapter of AAS in Mountain Home (25), and staff at the Cass Job Corps facility in preparation for the Training Program (12).
- Knapp assists the Fayetteville Ko-ko-ci Chapter of the Arkansas Archeological Society on a regular basis: planning and set up for monthly meetings, publicity and media contacts, flyers and posters, moderating the Facebook group; this year she arranged an interview on KUAF's Ozarks at Large program for the Survey's 50th anniversary.
- Knapp planned and coordinated three local events for Archeology Month:
 - Ko-ko-ci Chapter special meeting at the Fayetteville Public Library, "Get Involved and Dig Archeology: The Arkansas Archeological Society's 2017 Training Program in Archeology" was co-presented by Marilyn Knapp and Mary Brennan with over 50 in attendance. Mayor Lioneld Jordan proclaimed Archeology Month in Fayetteville and was presented with a framed poster.
 - Celebrate Archeology Day sponsored by the ARAS coordinating office had booths and demonstrations about archeological methods, artifacts, and interpretations, and was attended by about 150 people.
 - Museum Collections Open House welcomed 170 visitors as well as television coverage.
 - Knapp and Dr. Jamie Brandon (ARAS-UAF) recorded seven "Archeology Minutes" for KUAF, and Knapp recorded three "Short Takes," one for each of the three Fayetteville area Archeology Month events, that were aired on Fayetteville Public Television. Knapp also did an on-air interview with KXNA about Archeology Month.

Arkansas Archeological Society

- **General Duties.** Knapp maintains the membership records, deposits funds, manages mailing of the newsletter and bulletin, keeps brochures updated and stocked, and acts as general liaison between Society members, officers, and Survey staff.
- This year Knapp worked with a local graphic design business to create a "wrap" for the Society's new equipment trailer, and helped with development of the new website.
- **Chapters.** Knapp conducted annual Chapter compliance updates, facilitated Ko-ko-ci Chapter meetings, and assisted two new chapters set up their by-laws and achieve official status.
- **Executive Committee.** Knapp attends all meetings of the Society's Executive Committee as Liaison and as Past President, assists the President in developing agenda items, maintains contact information, helps disseminate information to Committee members, and sets up the A/V equipment for Blackboard Collaborate. (2017 is her last year as a member of the board as Past President.)
- **Training Program.** Knapp did much of the logistical planning and administered the Training Program, including registration of participants, assisting with scheduling, working with the Cass Job Corps staff and students, making arrangements for seminars, labs, and campground needs, evening talks and social activities, set up and break down, and all other activities as needed. She also worked to promote the program via social media.



Archeology Month 2017 poster, designed by Jodi Barnes, celebrating the Survey's 50th anniversary. The full color poster can be seen on the cover of this Report and on the ARAS website at <http://archeology.uark.edu/learn-discover/archeologymonth2017/>.

Society Board of Advisors

A Board of Advisors consisting of three members for each Survey research station is elected by the Society membership at large. BOA members meet yearly with their respective station archeologists, discuss the functions and needs of the research stations, and help ensure that the cooperative relationship between Survey and Society moves forward productively. Gary Knudsen was appointed Chair of the BOA Committee this year.

AAS Chapters

The Arkansas Archeological Society's total membership now averages around 550. Chapters across the state work closely with the Survey archeologists in their areas. Chapters have monthly meetings with a guest speaker or other program that is open to the public. Survey archeologists are frequent presenters and often also serve as newsletter editors and program organizers. Survey research stations host volunteer work sessions in the laboratories, and Society members participate in Survey field and lab projects throughout the year. The two newest Chapters are the Three Rivers Chapter in Mountain Home and the Central Arkansas Chapter in Little Rock. The creation of these new chapters at the grassroots level reflects citizen interest in archeology.

Society Volunteers

Many Survey research projects in the field and laboratory depend on volunteers, mostly Society members. Altogether, volunteers contributed over 11,970 hours to archeological projects across Arkansas in 2016–2017, including 6712 hours at the annual Training Program. This citizen participation demonstrates the level of interest and support for archeology.

The Site Stewardship Program

Another role for Society volunteers is the Site Stewardship Program, which enlists individuals to monitor the condition of important archeological sites. The Survey provides training and guidance for site stewards via a workshop (State Archeologist Ann Early taught two workshops this year) plus mentoring for individual stewards. Meeks Etchieson assumed the chair of the Stewardship Committee during 2016–2017.

Archeological Research Fund

The Society began awarding grants from its Archeological Research Fund in 1989. The fund is composed of donations and money obtained in fund-raising raffles. Interest in the account is distributed as grants to projects in which Society members have participated.

Grant recipients announced at the 2016 annual meeting in El Dorado were Robert Scott (ARAS-UAPB), \$595 for an AMS date on a Tillar phase site; Jamie Brandon, Lydia Rees, and Jared Pebworth (ARAS-UAF and ARAS-SRP), \$595 for an AMS date from Saltpeter Cave 3NW29; Michelle Rathgaber (UA), \$595 for an AMS date from Manley-Usrey 3MS106; Marvin Jeter (ARAS-UAM, retired), \$595 for an AMS date from Taylor Mound 3DR2; and Jeffrey Mitchem (ARAS-Parkin), \$595 for an AMS date from Richards Bridge 3CT11/22.

Annual Meeting

The 2016 meeting was held September 30–October 2 in El Dorado. There were 79 registrants. Marilyn Knapp (ARAS; Society Past President) and Jodi Barnes (ARAS-UAM) were Program Chairs. The Tunican Chapter of the Society made local arrangements. Of the 16 scheduled papers, 11 were by Survey staff. There was also a panel discussion, moderated by Jodi Barnes, on “Working with Descendant and Local Communities.” Jamie Brandon and George Sabo of the Survey took part in this. The keynote speaker, Dr. Stephen Silliman (Professor, Department of Anthropology, University of Massachusetts, Boston), spoke on “Culture, Colonialism, and Collaboration in the Archeology of Native America.” Deborah Sabo (ARAS) designed and managed printing of the meeting Program.

Society Publications

The Society has two publications, a bimonthly newsletter, *Field Notes*, and an annual Bulletin, *The Arkansas Archeologist*. Articles for the Bulletin are subject to external peer review. Deborah Sabo (ARAS Research Assistant and Publications Editor) is Editor of *Field Notes*. The newsletter prints short articles about archeological research in Arkansas, information about the Society’s statewide activities and business matters, announcements, obituaries, and occasional book reviews.

Several Society Chapters distribute their own newsletters (primarily electronic) with regional news and announcements, plus there is a statewide email list to notify members when volunteers are needed for projects.

Society member (and a past President) Glen Akridge of Fayetteville is editor of *The Arkansas Archeologist*. Volume 55 was distributed to members during 2016. This issue contained articles by Society members Don C. Bragg and Hope A. Bragg, H. Terry Childs (with Charles H. McNutt and James K. Feathers), and John H. House (ARAS-UAPB). *The Arkansas Archeologist* is abstracted and indexed by ANTHROPOLOGICAL LITERATURE and EBSCO PUBLISHING, INC.

The ever-popular ArcheOlympics atlatl competition during Archeology Month (photo by Krista Lewis).

Archeology Month – March 2017

Archeology Month is a multifaceted public education concept to promote awareness and appreciation of Arkansas archeology. The theme each year is *Celebrate Archeology!* which allows for flexibility in programming and a focus on research projects or other celebrations that are in progress. Marilyn Knapp takes care of ARAS contributions to Archeology Month and works with the Society. She sends out a Call for Programs, creates a printed events brochure, and works with the poster volunteer(s) on design and printing. This year there were also three FPTV Short Takes for three local events and “The Archeology Minutes” on local NPR affiliate stations. Marilyn manages a mailing list of the free Archeology Month materials and supplies updated information for the web page.

The poster, supported by the Bill Jordan Public Education Fund of the Society, was designed and created this year by Jodi Barnes and featured a collage of photos celebrating the 50th anniversary of the Arkansas Archeological Survey.

Some 1400 people attended the 40 scheduled programs at 27 venues across the state, including 7 museums, 7 state parks, 7 schools and colleges, and other locations such as libraries and nature centers. Events included illustrated talks, exhibits, tours, artifact identification programs, and hands-on activities. Some highlights were a continuation of last year’s successful “Archeology Minute” radio spots broadcast on KUAF and KAGH; “Archeology Day” in Fayetteville featuring flintknapping, basketry/weaving, spear throwing, prehistoric musical instruments, and other tool demonstrations; and the third annual ArcheOlympics event at Toltec Mounds State Park featuring archeology related competitions for teams from institutions of higher education. Just a few examples of other activities led by ARAS staff included a coordinated youth mapping project involving Desha County 4H at Rohwer, Arkansas, an Open House at WRI, and a variety of talks, demonstrations, and outreach events.



“Society Dig”: The Training Program

This program is co-managed with the Arkansas Archeological Survey. Every year in June a two-week field school is conducted at an archeological site. The site is chosen according to criteria of ongoing research interests within ARAS, educational potential, and logistical needs. The program requires extensive preparation by Survey staff along with a committee of Society members beginning months in advance. Field and laboratory work are supervised by Survey staff, other professionals, and experienced Society members. Survey archeologists and other qualified individuals also teach a series of five-day seminars on various archeological topics during the Training Program. The Survey stations devote years to analyzing the material collected during the summer “Digs,” usually with help from Society volunteers. Training Program participants must be members of the Arkansas Archeological Society. Ages eight and up are welcome, but children under 18 must be accompanied by a registered adult participant. The Training Program is our most visible outreach activity and has been widely imitated throughout the United States.

The 2017 Training Program on the Mulberry River, Franklin County, Arkansas

Fieldwork at 3FR46

The 2017 Training Program was a collaboration among the Arkansas Archeological Survey, the U.S. Forest Service (Ozark National Forest), and the Arkansas Archeological Society, with additional cooperation of the Cass Job Corps. Information recovered during the Program at 3FR46 provides insight into indigenous landscape management by early-to-middle Woodland period inhabitants of the Mulberry River Valley in northern Franklin County. This summary is based on a paper presented at the 2017 annual meeting of the Arkansas Archeological Society, and kindly provided by authors Tim Mulvihill, Mary Brennan, George Sabo, Jami Lockhart, and Elizabeth Horton.

110 Society members took part in the June Training Program, along with 20 ARAS staff (Jodi Barnes, Emily Beahm, Chelsea Cinotto, Jessica Cogburn, Brandy Dacus, Ann Early, Katy Gregory, Elizabeth Horton, John House, Marilyn Knapp, Jami Lockhart, Tim Mulvihill, Larry Porter, Michelle Rathgaber, Lydia Rees, George Sabo, Robert Scott, Sarah Shepard, Sarah Stuckey, Fiona Taylor) and a variety of Forest Service and other professionals. Students from Job Corps also visited and took part in some activities. 3FR46 was chosen because of its potential to contribute to major research questions about cultural affiliations, the Woodland and Mississippian landscapes, and the possibility of indigeneous plant remains that might contribute to native vegetation restoration by the Forest Service.

Preparations for the Training Program were extensive. Background knowledge of sites in the area goes back to the 1960s and 70s and includes reconnaissance surveys, surface investigations, testing, and excavations at a few sites by various teams of researchers. Prior to the 2017 Training Program, Dr. Jami Lockhart conducted a gradiometry survey, assisted by Tim Mulvihill and other staff of the Survey and the Forest Service. This was followed by backhoe trenching to understand the geomorphology of the site area, and test excavations to investigate some of the magnetic anomalies shown by the remote sensing.

Training Program excavations then were organized into

three areas on the site. Area A produced argillite hoes and hoe fragments, argillite and chert flakes, and a few projectile points and point fragments. Area B was similar but had more unmodified rock concentrations, at least one grinding stone, and some ceramic sherds. Both Areas A and B had flecks of charcoal but no sign of hearth features. Area B also uncovered some pit features. Area C was placed as a trench across a buried midden-like anomaly revealed in the gradiometry and backhoe trenching. This linear anomaly turned out to be a probable natural feature, like a slough or old channel, that had become filled in over time with midden soils and artifacts during flood episodes.

The Training Program provided important results for archeology and for landscape restoration. Initially the project directors had hypothesized that 3FR46 was a Late Woodland site, potentially a hamlet or camp. They now think the site was occupied throughout the Woodland period (ca. 600 BC–AD 900) and was most likely a crop field complex for cultivating and processing locally domesticated plants. Parts of the site were also used for manufacturing argillite hoe blades, the stone being obtained from an argillite outcrop not far away. Further testing is needed to verify and positively date these activities. The site provides data not previously documented in an open terrace site in the Arkansas Ozarks, adding much to our understanding of Woodland period lifeways for this region.

Additionally, this data may be used by our Forest Service partners in their efforts to learn about past plant communities for the native grass restoration projects on Forest Service-owned tracts along the Mulberry River.

Seminars & Certification Program

The Certification Program is an optional offering for Society members who wish to pursue study and training in more depth, for enrichment and recognition in the form of achievement certificates. Participants work under supervision of professionals to gain additional experience by volunteering for lab and field projects and completing seminars.



Training Program participants Steve Jacober, Doug Strubel, Staci Darden, and Fiona Taylor (ARAS-SAU) discuss procedures.

Seminars taught at the Dig this year were Basic Excavation (two sessions, taught by Jodi Barnes and John House), Basic Lab (taught by Michelle Rathgaber), Site Survey (taught by Robert Scott), Mapping (taught by Jessica Cogburn), Establishing Time in Prehistory (taught by George Sabo), Mammalian Osteology (taught by Michelle Rathgaber), and Paleoethnobotany/Native American Foodways (taught by Elizabeth Horton).

The program was created in the early 1970s and is now somewhat dated. This year the ARAS Director and State Archeologist, in consultation with the Society Executive Committee, decided to reorganize it as a more flexible “life-long learning” enrichment program on a model of volunteerism and citizen science. While this is in development, those currently enrolled

may retain the recognitions they have earned in the legacy program, but new participants will not be added. Note that the Certification Program is separate from the annual summer Training Program; classes associated with the latter will continue to be offered and will be absorbed into the new Program.

Certificates earned by members are presented each year at the Annual Meeting. During the 2016 meeting at El Dorado, the following Certificates under the legacy program were presented: **Provisional Crew Member**—Ellie Karvoski, Cheyenne Lewis, Megan Reid, Autumn Wilbanks, Jaxon Cummings, Patti Cummings, Thomas Purdin, Roger Smith, and Gene Sparling. **Provisional Lab Technician**—Cheyenne Lewis and Randall Morgan. **Provisional Site Surveyor**—Jamaal Harvey.

Accounting & Administrative Staff

Assistant Director for Fiscal Affairs

Rachel Whitman

Rachel Whitman has been with the Survey since 2015 as Assistant Director for Fiscal Affairs. In this role, she works with the Director on annual budget preparation and is responsible for day-to-day management of all fiscal matters. As the chief fiscal officer, she is responsible for all financial reports submitted to the UA System Office, Arkansas Department of Higher Education, and University of Arkansas-Fayetteville Division of Finance and Administration. She administers the financial portions of Survey grants, travel, and purchasing. She also serves as the Arkansas Archeological Survey building executive. Rachel provides fiscal affairs training to the employees of the Survey at the annual staff meeting, such as how to properly fill out required forms, and information about changing university policies and procedures. At the meeting this year, she also reviewed results from internal audits of all FTEs and travel claims submitted to identify areas that needed improvement across the Survey. She received her Master's in Business Administration from Southern Arkansas University in December 2016. Rachel serves as a board member of the Arkansas Association of College and University Business Officers (AACUBO) and regularly attends conferences and meetings of the organization.

Survey Research Assistant/Accountant/Publications Accountant

Lisa Davison

Lisa Davison is responsible for performing a variety of fiscal related tasks within the Arkansas Archeological Survey. She is the departmental representative for leave reporting, vehicle fleet management, capital property accounting, travel processing, and procurement. For the Survey, she processes accounts payable, from initial request to the reconciliation of invoices, including travel, purchase orders, and purchase card transactions. She processes accounts receivable, from initiation of invoice to the receipt of payment for all incoming funds for the Publications program, AMASDA database access, and Curation. She maintains capital property accounting records, ensuring property is tagged as required by the university and can be located as recorded in the system. She is responsible for ensuring records of over \$920,000 worth of capital equipment are accurate. Lisa reports motor pool use to the university and state as well as maintaining vehicle use records for all sixteen assigned motorpool vehicles.

Administrative Assistant I

Nancy Smith

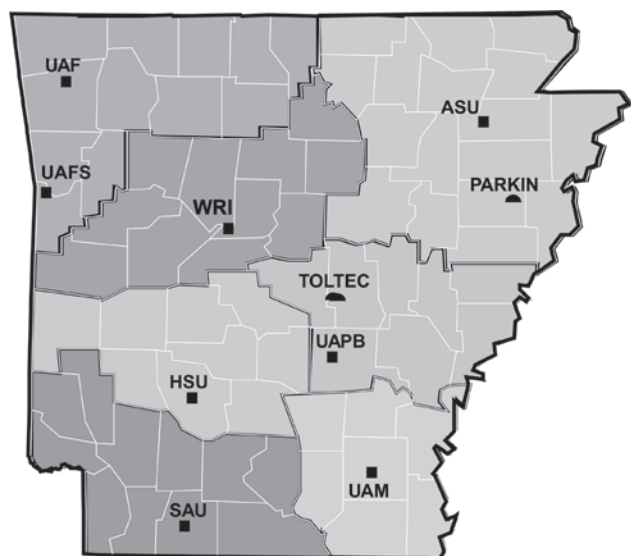
Nancy Smith was hired as Administrative Assistant in November 2014. Besides general office management duties such as greeting visitors, answering the phone, distributing the mail, and keeping up with supplies, Nancy also helps the Registrar by scanning reports for AMASDA, scanning SHPO letters to station archeologists, and scanning and filing site reports. She helps all her coworkers with printing projects, scanning and filing, and also shipping letters and packages. She also performs specific duties for the Publications Program, including proofreading, and other functions as assigned by the Director.

Institutional Service Assistant

Kathryn Alsobrook

Kathryn Alsobrook has worked with the Coordinating Office of the Arkansas Archeological Survey for 20 years. She is responsible for the general upkeep of the Survey building, ordering cleaning supplies, and restocking the restrooms. When she retires later this year, she will be greatly missed.

How to Contact the Arkansas Archeological Survey



For the Director, State Archeologist, and all Coordinating Office units (Registrar, CSP, SRP, Publications):

Arkansas Archeological Survey (ARAS)
Coordinating Office
2475 N. Hatch Ave.
Fayetteville, AR 72704
479.575.3556

Research Stations:

Arkansas Archeological Survey (ARAS-PAR)
Parkin Archeological State Park
P.O. Box 241
Parkin, AR 72373-0241
870.755.2119

Arkansas Archeological Survey (ARAS-TMRS)
Toltec Mounds Research Station
490 Toltec Mounds Road
Scott, AR 72142-9212
501.961.2420

Arkansas Archeological Survey (ARAS-ASU)
ASU-Jonesboro
P.O. Box 820, ASU
State University, AR 72467
870.972.2071

Arkansas Archeological Survey (ARAS-UAPB)
Mail Slot 4814, UAPB
Pine Bluff, AR 71601
870.535.4509

Arkansas Archeological Survey (ARAS-UAM)
P.O. Box 3087, UAM
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870.460.1090

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Appendix 1. Reports & Publications by ARAS Staff during 2016–2017*

Barnes, Jodi

- 2016 2016 Annual Meeting Declared a Success! *Field Notes, Newsletter of the Arkansas Archeological Society* 393:11.
- 2016 Project Archaeology and Archaeological Education in Arkansas. Blog post for Day of Archaeology, July 29. <http://dayofarchaeology.com/archaeological-education-in-arkansas/>
- 2017 Citizen Archaeology in Arkansas. *Journal of Community Archaeology and Heritage*. Online first: <http://dx.doi.org/10.1080/20518196.2017.1308296>
- 2017 Summary of the 2016 Archeological Research at Hollywood Plantation. Report submitted to the University of Arkansas at Monticello.

Barnes, Jodi, and Florie Bugarin

- 2016 In Memoriam: Joan Gero. *The SHA Newsletter* 49(3):9–10.

Barnes, Jodi, Emily Beahm, Elizabeth Horton, and George Sabo III

- 2017 *Gathering, Gardening, and Agriculture: Plant Based Foodways in the Southeastern United States – A 5th Grade Curriculum*. Arkansas Archeological Survey.

Brandon, Jamie C.

- 2017 Review of *A Primer on Modern-World Archaeology* by Charles E. Orser, Jr., Eliot Werner Publications, New York, 2014. *American Antiquity* 82(1):191–192.

Cande, Kathleen, and Mary Beth Trubitt

- 2017 Cemetery Preservation: Working with the Arkansas Humanities Council & Descendant Communities. Electronic document, “50 Moments in Survey History,” <http://archeology.uark.edu/who-we-are/50moments/cemeterypreservation/>.

Cande, Kathleen, Jerry Hilliard, and Mary Beth Trubitt

- 2017 Collaborative Research with the Ozark-St. Francis and Ouachita National Forests. Electronic document, “50 Moments in Survey History,” <http://archeology.uark.edu/who-we-are/50moments/nationalforests/>.

Drexler, Carl G., Katherine W. Gregory, Anthony C. Newton, Scott R. Akridge, and Christopher Null

- 2016 Archeological Research at Wallace’s Ferry: Final Report on 2016 Fieldwork. Report submitted to the Arkansas Historic Preservation Program, Little Rock. Arkansas Archeological Survey, Fayetteville.

Drexler, Carl G., Katherine Gregory, Anthony C. Newton, **Elizabeth T. Horton, Katie Leslie, Robert Scott, and Carol Colaninno**

- 2016 Crossing the Little Missouri: Archeological Perspectives on the Engagement at Elkins’ Ferry, Nevada County, Arkansas (3NE217). Report submitted to the Arkansas Historic Preservation Program, Little Rock. Arkansas Archeological Survey, Fayetteville.

Hammerstedt, Scott W., **Jami J. Lockhart**, Patrick C. Livingood, **Timothy S. Mulvihill**, Amanda L. Regnier, **George Sabo**, and **John Samuelsen**

- 2017 Multisensor Remote Sensing at Spiro: Discovering Intrasite Organization. In *Archaeological Remote Sensing: Applications in North America*, edited by Duncan P. McKinnon and Bryan S. Haley, pp. 11–27. University of Alabama Press, Tuscaloosa.

House, John H.

- 2016 Topographic Mapping and Test Excavations at the Dismal Swamp Mound Arkansas County. *Field Notes, Newsletter of the Arkansas Archeological Society* 393:3–6.

- 2016 Mississippi Period and Later Native American Structures in Eastern Arkansas. *The Arkansas Archeologist* 55:31–62.

Mitchem, Jeffrey M.

- 2015 A Canoe on a Sand Bar: The Guth Canoe in Northeast Arkansas. In *ACUA Underwater Archaeology Proceedings 2015*, edited by Marco Meniketti, pp. 123–127. Advisory Council on Underwater Archaeology, Germantown, MD.
- 2016 Return to Richards Bridge: The 2016 Arkansas Archeological Society Training Program. *Field Notes, Newsletter of the Arkansas Archeological Society* 389:3–9.

* ARAS authors are shown in boldface for works coauthored with non-ARAS colleagues

- 2016 Interim Report on Richards Bridge: The 2015 Arkansas Archeological Survey Training Program and Plans for 2016. Parkin Research Station, Arkansas Archeological Survey. Submitted to the Quapaw Tribe of Oklahoma, Quapaw, OK.
- Morrow, Juliet E.
- 2017 Fluted Projectile Points from the Rummells-Maske Site. In *Prehistoric Artifacts of Iowa*, edited by Jim Roberson, pp. 41–56. Hawkeye State Archeological Society. Hynek Printing, Richland Center, WI.
- 2017 After Anzick: Reconciling New Genomic Data and Models with the Archaeological Evidence for Peopling of the Americas. *Quaternary International* 444 (2017):1–3. <https://doi.org/10.1016/j.quaint.2017.07.002>.
- Mueller, Natalie G., Gayle J. Fritz, Paul Patton, Stephen Carmody, and **Elizabeth T. Horton**
- 2017 Growing the Lost Crops of Eastern North America's Original Agricultural System. *Nature Plants* 3:17092.
- Mulvihill, Timothy, Kathleen Cande, and Jared Pebworth
- 2017 A Phase I Cultural Resources Survey of the Proposed Safe Room, Mountainburg Schools, Mountainburg, Crawford County, Arkansas. Draft Report, Arkansas Archeological Survey, Fayetteville. Submitted to Mr. Dennis Copeland, Superintendent, Mountainburg Schools.
- Rees, Lydia I., and Jamie C. Brandon
- 2016 Preserving and Interpreting Bluff Shelters of the Arkansas Ozarks. Report submitted to the Arkansas Natural and Cultural Resource Council, Little Rock, ANCRC Grant No. 16-004. Arkansas Archeological Survey, Fayetteville, Arkansas.
- 2017 Beyond the Bluff Dweller: Excavating the History of an Ozark Myth. *Arkansas Historical Quarterly* 76(2):95–114.
- Trubitt, Mary Beth
- 2016 The Other “Star” Bottle from Menard. *Field Notes, Newsletter of the Arkansas Archeological Society* 391:6–7.
- 2016 Indian History in the Lake Ouachita Region. Educational flyer. Downloadable electronic document, <http://archeology.uark.edu/learn-discover/classroom-materials/>.
- 2016 Remembering Don Ross (1929–2016). *Field Notes, Newsletter of the Arkansas Archeological Society* 392:10–11.
- 2016 What Other Stones Were Used? Electronic document on “Arkansas Novaculite: A Virtual Comparative Collection,” <http://archeology.uark.edu/novaculite/index.html?pageName=What%20Other%20Stones%20Were%20Used?>
- 2016 Monitoring and Archeological Documentation at 3GA22, Hot Springs National Park, Garland County, Arkansas. Limited distribution report, Arkansas Archeological Survey, Henderson State University Research Station, Arkadelphia.
- 2016 Road Trips: Off the Interstate – Part I, Indian Cave State Park Nebraska, and Part II, Pipestone National Monument, Minnesota. *Field Notes, Newsletter of the Arkansas Archeological Society* 393:7–10.
- 2017 Changing Technology in Archeology. *Field Notes, Newsletter of the Arkansas Archeological Society* 394:5.
- 2017 Effigy Pottery in the Joint Educational Consortium's Hodges Collection. *Caddo Archeology Journal* 27:51–93.
- 2017 Update on Recent Activities at the Arkansas Archeological Survey's Henderson State University Research Station in Arkadelphia. *Caddo Archeology Journal* 27:102–104.
- 2017 Summary of Results from Edwards 1 Site Survey. Limited distribution report, Arkansas Archeological Survey, Henderson State University Research Station, Arkadelphia.
- 2017 Teaching Anthropology in Universities across Arkansas. Electronic document, “50 Moments in Survey History,” <http://archeology.uark.edu/who-we-are/50moments/teachinganthropology/>.
- 2017 Comparing Two Caddo Mound Sites: The Chipped Stone Artifacts. Electronic document, <http://archeology.uark.edu/learn-discover/current-research/2caddomounds/>.
- Trubitt, Mary Beth, and Chelsea Cinotto
- 2017 Mapping and Conditions Survey of 3GA1061, Hot Springs City Cemetery, Garland County, Arkansas. Limited distribution report, Arkansas Archeological Survey, Henderson State University Research Station, Arkadelphia.

Websites

- Rees, Lydia I., Jamie C. Brandon, Elizabeth Horton, Jerry Hilliard, Jared Pebworth, and Michael Evans
- 2016 Bluff Shelters of the Arkansas Ozarks. <http://archeology.uark.edu/ozarkbluffshelters/>

Appendix 2. Papers, Symposia & Workshops by ARAS Staff during 2016–2017*

Barnes, Jodi

- 2016 Public Archaeology as Feminist Archaeology: Remembering Dr. Joan M. Gero. Paper presented at the 73rd Annual Meeting of the Southeastern Archaeological Conference, Athens, GA.
- 2017 Behind the Scenes of Hollywood: The Intersectionality of Gender, Whiteness, and Reproductive Oppression. Paper presented at the 50th Annual Conference on Historical and Underwater Archaeology, Fort Worth, TX.
- 2017 The Archeology of Health and Healing on an Arkansas Plantation. Presentation for the Society of Medicine and Health Professionals, University of Arkansas Medical School, Little Rock, AR.

Barnes, Jodi (moderator)

- 2016 Working with Descendant Communities and Local Communities: A Panel Discussion. Annual Meeting of the Arkansas Archeological Society, El Dorado.

Barnes, Jodi, and Nancy Theiss

- 2016 Two Plantations, Two States: The Taylor Family at Mauvilla and Hollywood. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.

Barnes, Jodi, and Ruth Troccoli (organizers)

- 2016 Shaping the Present by Researching the Past: Celebrating the Life and Influence of Dr. Joan Gero. Symposium at the 73rd Annual Meeting of the Southeastern Archaeological Conference, Athens, GA.

Boyer III, Willet A., Dennis Blanton, Gary Ellis, Rochelle Marrinan, **Jeffrey M. Mitchem**, and John E. Worth

- 2016 De Soto Didn't Sleep Here: Real Archaeology at the "White Ranch Site," 8MR3538, Marion County, Florida. Paper presented at the 73rd Annual Meeting of the Southeastern Archaeological Conference, Athens, GA.

Brandon, Jamie C.

- 2016 Invited panelist (with Stephen Silliman, George Sabo, Rachel Patton, and Tammela Tenpenny-Lewis), "Working with Descendant Communities: A Panel Discussion," presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.

Brandon, Jamie C., and Lydia I. Rees

- 2016 Beyond the "Bluff Dweller": Isolation and Connection in Prehistoric Bluff Shelters of the Arkansas Ozarks. Paper presented at the 10th Annual Ozarks Studies Symposium, West Plains, MO.

Drexler, Carl G.

- 2016 Across the Little Missouri: The First Phase of Archeological Research of the Engagement at Elkins' Ferry, Nevada County, Arkansas. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.
- 2017 We Must Protect Our Heritage: Archaeology, Race, and Thanatourism in the Trans-Mississippi South. Paper presented at the 50th Annual Conference on Historical and Underwater Archaeology, Fort Worth, TX.
- 2017 Laboring on the Plains of Factoria: War, Work, Migration, and Industry at the Little Rock Picric Acid Plant during World War I. Paper presented at the Annual Meeting of the Arkansas Historical Association, Pochontas.

Drexler, Carl G., and Fiona M. Taylor

- 2017 Revisiting the 1984–1986 Arkansas Archeological Society and Survey Excavations at Holman Springs (3SV29), a Caddo Salt-Processing Site in Sevier County, Arkansas. Paper presented at the 59th Caddo Conference, Natchitoches, LA.

Early, Ann

- 2016 Pottery from the Wild Violet Site in the Ouachita Mountains: New Research Sheds Light on Regional Relationships in Arkansas and Beyond in the Woodland Period. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.
- 2017 Invited panelist (with Pete Gregory, Tim Perttula, **George Sabo**, Tom Middlebrook, George Avery, Jeffrey Girard, David Kelley, Joe Frank, and Dayna Lee), "Caddo Contact Sites Panel Discussion," presented at the 59th Caddo Conference, Natchitoches, LA.

* ARAS authors are shown in boldface for works coauthored with non-ARAS colleagues

Hammerstedt, Scott, **Jami Lockhart**, Amanda Regnier, **George Sabo**, **John Samuelson**, **Timothy Mulvihill**, and Patrick Livingston

2017 GPR Survey of the Brown Mound at Spiro. Paper presented at the 82nd Annual Meeting of the Society for American Archaeology, Vancouver BC, Canada.

Hammerstedt, Scott W., **Jami J. Lockhart**, **John Samuelson**, Amanda Regnier, **George Sabo III**, **Tim Mulvihill**, and Patrick Livingston

2017 Preliminary Results of GPR Survey at Spiro's Brown Mound. Paper presented at the 59th Caddo Conference, Natchitoches, LA.

Horton, Elizabeth T., and Stephen B. Carmody

2016 A Tale of Two Gardens: Integrating Paleoethnobotanical Research and Public Archeology. Paper presented at the 73rd Annual Meeting of the Southeastern Archaeological Conference, Athens, GA.

Horton, Elizabeth T., Jodi Barnes, Emily Beahm, and George Sabo III

2017 Gathering, Gardening, and Agriculture Teacher's Workshop. Presented at Winthrop Rockefeller Institute, Morrilton, AR.

Jeter, Marvin D., Robert J. Scott, and John H. House

2016 Artfactual Evidence of Possible Cahokian (or Other Northerly Mississippian) Contacts in Eastern and Southeastern Arkansas. Paper presented at the Mid-South Archaeological Conference, Memphis, TN.

2016 Artfactual Evidence of Possible Cahokian Contacts in Eastern and Southeastern Arkansas. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.

Lockhart, Jami J., Jeffrey M. Mitchem, and Timothy S. Mulvihill

2016 An Examination of Life on a Terminal Mississippian Frontier. Paper presented at the 73rd Annual Meeting of the Southeastern Archaeological Conference, Athens, GA.

2016 Richards Bridge (3CT11/22): An Examination of Life on a Terminal Mississippian Frontier. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.

Lockhart, Jami J., Timothy S. Mulvihill, and Jeffrey M. Mitchem

2017 A Multiscalar Geospatial Analysis of a Protohistoric Mississippian Landscape. Paper presented at the International Computer Applications and Quantitative Methods in Archaeology Conference, Atlanta, GA.

Mitchem, Jeffrey M.

2015 2015 Excavations at the Richards Bridge Site: The AAS Training Program. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Hot Springs.

2016 Invited Discussant. "My Best (and Worst) Day at FPAN: Celebrating 10 Years of Florida Public Archaeology Network Program Highlights and Continuing Challenges," Symposium at the 81st Annual Meeting of the Society for American Archaeology, Orlando, FL.

2017 Invited Discussant. "The Tristan de Luna Shipwrecks and Settlement (1559–1561) in Pensacola, Florida," Symposium at the 50th Annual Conference on Historical and Underwater Archaeology, Ft. Worth, TX.

2017 Spanish Material Culture and Its Use by Native Floridians. Paper presented at the 69th Annual Meeting of the Florida Anthropological Society, Jacksonville.

Mitchem, Jeffrey M., Jami J. Lockhart, and Timothy S. Mulvihill

2016 Hernando de Soto's Cross at Casqui. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.

Mitchem, Jeffrey M., **Timothy S. Mulvihill**, **Jami J. Lockhart**, and David W. Stahle

2016 We Think We Found Hernando de Soto's Cross at Casqui. Paper presented at the 73rd Annual Meeting of the Southeastern Archaeological Conference, Athens, GA.

Mitchem, Jeffrey M., David W. Stahle, Timothy S. Mulvihill, and Jami J. Lockhart

2017 Making the Case for the Parkin Site as Casqui: Hernando de Soto's 1541 Cross. Paper presented at the 50th Annual Conference on Historical and Underwater Archaeology, Ft. Worth, TX.

Rees, Lydia I., and Jamie C. Brandon

2016 Bluff Shelters: Understanding Place Across Time in the Arkansas Ozarks. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.

Sabo, George III

- 2016 Invited panelist (with Stephen Silliman, Jamie Brandon, Rachel Patton, and Tammela Tenpenny-Lewis). "Working with Descendant Communities: A Panel Discussion" presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.
- 2017 Invited panelist (with Pete Gregory, Tim Perttula, Ann Early, Tom Middlebrook, George Avery, Jeffrey Girard, David Kelley, Joe Frank, and Dayna Lee). "Caddo Contact Sites Panel Discussion" presented at the 59th Caddo Conference, Natchitoches, LA.

Samuelson, John R.

- 2016 Using Strontium and Lead Isotopes from Regional Animal Teeth to Assess Community Organization and Origins of a Skull and Mandible Cemetery at the Crenshaw Site. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.

Trubitt, Mary Beth

- 2016 WPA Excavations at the Adair Mound Center. Paper presented at the Annual Meeting of the Arkansas Archeological Society, El Dorado.
- 2016 Stone, Shell, Copper, Clay: Investigating Caddo-Mississippian Interaction and Exchange. Paper presented at the 73rd Annual Meeting of the Southeastern Archaeological Conference, Athens, GA.
- 2017 Caddo Effigy Vessels. Presentation to the Caddo Iconography Workshop, Natchitoches, LA.
- 2017 Pottery Style and Technology in Arkansas's Upper Ouachita River Drainage. Paper presented at the 59th Caddo Conference, Natchitoches, LA.

Photo Identifications & Credit

Most photographs used in this report are ARAS images. Cover and Banner images are as follows:

Cover	The 2017 Archeology Month poster, designed by Jodi Barnes, with a collage of images celebrating the 50th year of the Arkansas Archeological Survey. Poster production was supported by the Bill Jordan Public Education Fund of the Arkansas Archeological Society.
p. i	Jared Pebworth works on Saltpeter Cave (3NW29) lithics. Photo by Jamie Brandon.
p. ii	Ceramic sherd from Historic Washington (ARAS-SAU photo); Caddo pottery from the Arkadelphia area, part of the 1969 Alford donation to ARAS-HSU (photo by Mary Beth Trubitt); Jerry Hilliard and Jared Pebworth looking at 3NW29 artifact photos in the ARAS lab (photo by Jamie Brandon).
p. 1	View of excavations at Carden Bottoms, 2009 Training Program. Photo by Leslie Walker.
p. 2	Tim Mulvihill and Larry Porter carry out test excavations at 3FR46 for the Mulberry River Project. Photo by George Sabo.
p. 18	Entrance to the Plum Bayou Garden at Toltec Mounds State Park. Photo by Elizabeth Horton.
p. 24	View of the Parkin Mound, Parkin Archeological State Park. Photo by Chuck Haralson, Arkansas State Parks. Photo courtesy of Arkansas Department of State Parks & Tourism.
p. 32	Looking out Indian Rock House Cave, Buffalo National River. Photo by Jamie Brandon.
p. 40	Larry Porter and Jared Pebworth excavating at the Willhaf House in Van Buren. Photo by Tim Mulvihill.
p. 46	Corn growing in the Native American Garden at the ARAS-WRI station. Photo by Emily Beahm.
p. 52	Reconstructed pottery vessels from the Isgrig site (3PU15) in the lab at the UAPB research station. Photo by Mary Farmer.
p. 58	Filming a documentary at Camp Monticello. Photo by Sam Givhan.
p. 64	Mary Beth Trubitt and Ouachita Chapter members at the 2016 Arkansas Archeological Society meeting. Photo by Marilyn Knapp.
p. 72	Small arms munitions discovered at Elkins' Ferry battlefield. Photo by Carl Drexler.
p. 76	Julie Morrow holds a cast of a Dalton point from the Sloan site during a media interview. Photo by Sherry Pruitt, courtesy of the <i>Jonesboro Sun</i> .
p. 82	ARAS Director George Sabo with Jodi Barnes, Elizabeth Horton, and Emily Beahm during a site tour for teachers. ARAS-UAM digital photo.
p. 84	State Archeologist Ann Early works with a student volunteer in the lab. ARAS photo.
p. 88	ARAS Registrar Lela Donat. Photo by Jane Kellett.
p. 93	Michael Evans and Jared Pebworth (ARAS-SRP) show their replicas of ancient hunting implements to visiting students. Photo by Jamie Brandon.
p. 100	Jami Lockhart doing geophysical survey at Pea Ridge National Military Park. Photo by Jamie Brandon.
p. 108	Tools of the editor's trade. Photo by Deborah Sabo.
p. 111	Jane Kellett receives her 40-year service award from Chancellor Steinmetz. University of Arkansas photo.
p. 112	Participants in the 2017 Training Program on Mulberry River near Cass, Arkansas. Arkansas Archeological Society photo.
Back Cover	Presentation of Archeology Month poster to Governor Hutchinson. Photo by Randall Lee, staff photographer for the Office of the Governor.

