

ARKANSAS ARCHEOLOGICAL SURVEY

ANNUAL REPORT 2011–2012



A DIVISION OF THE UNIVERSITY OF ARKANSAS SYSTEM

Arkansas Archeological Survey

Annual Report for fiscal year 2011–2012



A Division of the University of Arkansas System



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The 2012 Annual Report was compiled and edited by Deborah Sabo. Layout, design, and cover by Deborah Sabo.
Cover photo by Jamie Brandon: Carved bone chess piece recovered at Historic Washington.

Frontispiece photo by Jamie Brandon: Bob Campbell, Arkansas Archeological Society volunteer at Historic Washington.

University of Arkansas System

Arkansas Archeological Survey

I N T R O D U C T I O N

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

Our coordinating office in Fayetteville is the Survey's administrative body. The Director, the State Archeologist, the Survey registrar, the fiscal officer, administrative assistant, 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 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 and contracts with local, state, and federal agencies, and with the business community. The CSP maintains several websites with educational information on Arkansas archeology and frequent updates about ongoing research projects. Our archaeogeophysical applications program is the newest addition to research capabilities centered at the coordinating office.

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. They, along with scholars at the coordinating office, are a living resource for the people of Arkansas, serving the needs of cultural heritage education and preservation in many ways. Local, state, and federal governmental agencies, American Indian tribes, college students, school teachers and K-12 students, tourists, fellow scholars, landowners, amateur archeologists, and all Arkansas residents interested in the archeology, prehistory, and early history of the state are beneficiaries of the Survey's programs and expertise.

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

Thomas J. Green, Ph. D.
DIRECTOR



HIGHLIGHTS for 2011–2012

Since its inception in 1967, the Arkansas Archeological Survey has earned national and international recognition as a model organization for research, information management, and public education about archeology. The scientific reputation of our staff is excellent, yet our accessibility and close cooperation with amateur archeologists, teachers, landowners, American Indian Tribes, the business community, and various governmental departments and agencies have prevented us from becoming an ivory tower institution.

The Survey provides considerable educational, economic, and quality-of-life benefits to Arkansas citizens. Survey faculty teach at seven state university campuses. Our field and laboratory projects provide research opportunities for both undergraduate and graduate students. We distribute free curriculum enrichment materials and offer dozens of speaker programs to public schools and other groups across the state each year.

The Survey contributes to economic development in Arkansas by assisting federal and state agencies, municipalities, and developers in complying with environmental laws that protect heritage resources. We also assist State Parks and other agencies and institutions with exhibits and interpretive programs that help the tourism industry.

Finally, the quality of life of all Arkansas citizens is enhanced by our outreach mission to disseminate what we learn about the heritage of our state to the general public via talks and demonstrations, print media, and the Internet.

The Survey's unique contribution and enduring success are products of our balanced science and service design, the expertise and integrity of our personnel, and the dedication and energy of our supporters. The following pages highlight some of our accomplishments in 2011–2012.

Above: building foundation excavated in the early to mid nineteenth century commercial district (Block 6) at Historic Washington, Hempstead County, Arkansas, June 2012, during the Arkansas Archeological Survey / Arkansas Archeological Society Training Program. Photo by Jamie Brandon.

Scientific Achievements & Archeological Mission

- Survey professional staff authored or coauthored **38 publications and reports**, and presented **48 papers at professional meetings** in 2011–2012.
- **944 new archeological sites** were recorded, bringing the total number of sites in Arkansas site files to **46,436**.
- **191 new archeological projects** were entered in the database, bringing the projects total to **6331**.
- The Survey registrar facilitated **161 requests for information** from the Arkansas site files by students, researchers, and project managers.
- Our sponsored research program administered **new grants and contracts with budgets totaling \$194,858**.
- The Survey logged over **11,725 hours of volunteer help** from students and citizens of Arkansas on various field and laboratory projects around the state.
- The Survey's **AMASDA database (Automated Management of Archeological Site Data in Arkansas)** is one of the first 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 and to add new databases. This work is currently proceeding in part with the assistance of a major grant from the Arkansas Highway and Transportation Department.
- Survey archeologists Ann Early, Mary Beth Trubitt, Jami Lockhart, and George Sabo III all have chapters in *The Archaeology of the Caddo* (2012), a new University of Nebraska Press volume edited by Timothy K. Perttula and Chester P. Walker.
- During Year 3 of the Survey's **NEH-funded project "American Indian Art, Ritual, and Social Interaction in the Central Arkansas River Valley,"** directed by George Sabo III and Jami Lockhart, excavations continued at 3YE25. Analysis of data collected so far yielded preliminary conclusions about the site, which was occupied in the first half of the 17th century—a critical but poorly understood period of history in the American South. Project team members shared results by organizing a symposium at the annual meeting of the Society for American Archaeology.
- The Survey completed a major project of **archeological landscape investigation at Prairie Grove Battlefield State Park** that incorporated geophysical remote sensing, archival research, aerial remote sensing, GIS, and archeological excavations to pinpoint the locations of several features (the William Rogers house and cellar, the Ada Post Office, the Hugh Rogers House, Borden House, Thompson House, Morton House, and Fayetteville Road) that were important in the battlefield landscape.
- During her first full year at the **Toltec Mounds Archeological State Park research station**, Elizabeth Horton directed volunteers from several organizations in a successful erosion stabilization project on Mound P, and continued to develop the Survey's new Ethnobotany Lab with research on rivercane use and basketry from the world-famous Spiro site.
- New **fieldwork at Parkin Archeological State Park**, directed by station archeologist Jeff Mitchem, was part of a larger project to develop on-site exhibits including a reconstructed Parkin phase house and part of the site's original defensive palisade.
- Marvin Jeter, archeologist at the UAM research station, was interviewed on camera at the Lake Enterprise Mound site for an **AETN documentary about Bayou Bartholomew**, produced by Chuck Dovish. Jeter, station assistant Jessica Howe, and Dr. Curtis Merrell of Monticello led Dovish and his crew to important archeological sites along the Bayou as part of this project.
- UAPB station archeologist John House continued to lead the Survey's efforts investigating sites on **Fourche Island in the Arkansas River floodplain south of Little Rock**. The area incorporates Native American occupations dating from about 1400–1600, and a 19th century plantation site. The work has been an excellent example of cooperative efforts with landowners to retrieve archeological data in advance of potential land development.
- UAFS station archeologist Tim Mulvihill worked with colleagues, students, and volunteers to continue exploratory **excavations on the Drennen-Scott House property** in the City of Van Buren. The 1838 home is owned by the University and used as a museum and training center for the Historical Interpretation degree program.
- At the WRI research station, archeologist Skip Stewart-Abernathy led efforts to develop the **"Suite 270" Exhibit** commemorating Winthrop P. Rockefeller's 10-year service as Lieutenant Governor of Arkansas. The exhibit includes glass case displays and a reconstruction of Rockefeller's office as it existed at the State Capitol.

- Mary Beth Trubitt and Vanessa Hanvey of the HSU research station, with assistance of volunteers, worked to complete analysis of stone artifacts collected during two seasons of Training Program excavations at the **Jones Mill site** (3HS28) near Malvern. The results were presented in a poster at the Southeastern Archaeological Conference.
- The SAU research station archeologist Jamie Brandon again directed the annual **Training Program at Historic Washington State Park**. Excavations within Block 6, the heart of the town's commercial district from the 1830s through the 1880s, revealed structures, cellars, and thousands of artifacts that will aid the Park in interpreting the kinds of mercantile activity that made Washington a booming cotton town on the Southwestern frontier.
- One of many projects by ASU archeologists this year was at the **protohistoric Grigsby site** (3RA262). Juliet Morrow led Survey staff, ASU and Black River Technical College students, and Arkansas Archeological Society volunteers in new test excavations to supplement earlier work from the 1980s. Results confirm a late 17th–early 18th century occupation. Careful analysis of the trade goods may help to pin down the ethnic identity of the Native American community that inhabited the site.
- At the Blytheville research station, Claudine Payne worked with Survey colleagues and her new assistant Michelle Rathgaber to explore **the possible presence of a plaza area at the Eaker site** (3MS105). Geophysical survey hinted at a large open area, so a research design of shovel testing was proposed to follow up. The research aligns with Payne's overall interest in pre-Columbian community organization, but further work is needed at the site.

Contributions to Higher Education in Arkansas

- UAF station archeologist George Sabo III serves as Co-Director of the interdisciplinary **Environmental Dynamics** Ph.D. Program in the Fulbright College of Arts and Sciences, University of Arkansas.
- Survey Director Thomas Green and UAF station archeologist George Sabo III participated in the **UA System Distance Learning Symposium – *Getting To Know You*** on April 20, 2012 at UALR. They contributed a poster on “Distance Learning at the Arkansas Archeological Survey” describing our two educational websites, in which site content is linked with interactive learning exercises. Visitation tracking indicates that the two websites—*Indians of Arkansas* and *Rock Art in Arkansas*—enjoy significant usage by the Arkansas educational community (students and teachers). The poster was illustrated with examples of content and activities from each website.
- Survey archeologists taught **22 college classes and 3 internships to 460 undergraduate and graduate students** at seven university campuses in Arkansas (UAF, UAPB, UAM, UAFS, UALR, ASU, HSU, SAU) during the 2011–12 academic year.
- Courses taught by Survey archeologists fulfilled **basic education requirements** and contributed to **several undergraduate majors and graduate degree programs** at six Arkansas universities, including (for example) Anthropology, History, Geosciences, and Environmental Dynamics at UAF, Heritage Studies at ASU, and African Studies at UAPB.
- Survey archeologists contributed **guest lectures, demonstrations of geophysical technologies, and tours of facilities** to students attending several colleges and universities in Arkansas.
- Survey archeologists filled **32 thesis or dissertation committee positions** for UAF graduate students in Anthropology and Environmental Dynamics; plus one MLA committee at HSU, one Heritage Studies Ph.D. committee at ASU, one anthropology Ph.D. committee at Southern Illinois University, and one anthropology Ph.D. committee at the College of William & Mary.
- 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 three UAF anthropology students**.
- **Additional service** to Arkansas college and university campuses included:
 - participation in course and program development for host departments
 - membership on campus and departmental committees, and curatorial functions for campus museums
 - assistance with historic properties and collections owned by the universities – e.g., the Hodges Collection (HSU); Lakeport Plantation (ASU); Drennen-Scott House (UAFS); development of SAU Museum; ongoing UA Museum collections research at UAF; and more

Contributions to Public Schools and K-12 Education

- Among the unique and creative educational activities that Survey archeologists were involved with this year:
 - Coordinating Office staff, headed by John Samuelsen, provided a summer **tour of the Survey and University of Arkansas Museum Collection facility in Fayetteville** for 3rd, 4th, and 5th grade classes and their teachers from the Lincoln School District. This activity included presentations on Arkansas archeology, artifacts, and Arkansas Indians. The teachers were provided with materials about the Survey's educational websites.
 - Our archeologists provided junior and senior high school students with the opportunity to gain **first-hand experience of scientific archeological excavations** at Historic Washington State Park during the Arkansas Archeological Society Training Program.
 - WRI staff participated in **Project Dig** with Gifted and Talented students from Dardanelle Elementary and Morrilton Intermediary Schools. This program uses archeological concepts and active learning to teach critical thinking and the scientific method.
 - Blytheville station staff continued their collaboration with the new **Blytheville KIPP School** to bring archeology into the curriculum.
 - The Survey updated its complete roster of **Educational Handouts and Flyers** containing information, activities, and lesson ideas for classroom use by Arkansas school teachers, now available as downloadable PDF files on our website.
 - Survey staff member Kathleen Cande was **job-shadowed** by an 8th grader from Kirksey Middle School in Rogers.
- The Survey continues to develop **educational Internet resources**, including two interactive websites (*Rock Art in Arkansas* and *Indians of Arkansas*), plus our main website with information about the Survey and our programs. New web pages highlighting the Central Arkansas River Valley Project and other current research have been added to *Indians of Arkansas*.
- Two student activities from the *Rock Art* website are included in a package of electronic resources distributed to Arkansas public schools by **The Learning Institute** in Little Rock.
- Survey archeologists gave talks and demonstrations on archeology, American Indians, and early Arkansas, including **Career Day** presentations, to hundreds of K–12 students and their teachers at schools across the state.
- Juliet Morrow served as a judge in the Earth & Atmospheric Sciences category of the **Northeast Arkansas Science Fair** on the ASU campus.
- Jamie Brandon served as judge of exhibits for **National History Day** on the SAU campus. He and Carl Carlson-Drexler assisted with setting up an exhibit of dinosaur casts (curated at the research station) during the **Southwest Regional Science Fair** on the SAU campus.
- Survey archeologists assisted with **Scouting archaeology merit badges**.
- Our Field and Lab Support archeologists Jared Pebworth, Michael Evans, and Aden Jenkins presented **demonstrations of replica Native American hunting technology** at Old High Middle School in Bentonville and the Janet Huckabee Nature Center in Fort Smith.

Public Service and Outreach

- The Survey works closely with several **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
- 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.
- Approximately **110 public lectures** and other presentations by Survey staff reached audiences of more than **3700**.
- Survey staff have contributed over **40 articles** to the Butler Center's *Encyclopedia of Arkansas History and Culture*.
- About 90 members of the Arkansas Archeological Society attended the annual **Training Program for amateur archeologists**. The 2012 program at the Historic Washington State Park site was directed by Dr. Jamie Brandon, and hosted by Historic Washington State Park and the Pioneer Washington Restoration Foundation.
- Our main website received, on average, 690 visits per month, with a **year-end total of 8276**.
- We maintain **two educational interactive websites**: *Indians of Arkansas* received 66,371 unique visits and *Rock Art in Arkansas* received 12,099.
- Claudine Payne (Blytheville) serves as Vice-Chair on the **Delta Gateway Museum Commission**. Station staff have worked closely to assist the Museum develop programs and exhibits.
- **Science blogging** has become a significant medium for practicing academics to engage with colleagues and public audiences. Both Jamie Brandon and Carl Carlson-Drexler of the SAU research station write blogs about archeology. Each contributed a post to the **Archaeological Institute of America's 2012 National Day of Archaeology**, an educational Internet event on the theme of a "day in the life of archaeologists."
- Ann Early (State Archeologist) serves on the Department of Arkansas Heritage **State Review Board for Historic Preservation**, an appointment by the Governor of Arkansas.
- Dr. Jamie Brandon (SAU) serves on the **Arkansas Civil War Sesquicentennial Commission**, an appointment by the Governor of Arkansas.
- Survey archeologists provided consultation and advice, including acting as **Humanities Scholars for Arkansas Humanities Council grant proposals**, to numerous groups and individuals working on projects to document and protect historic **African-American cemeteries**.
- Survey staff members respond to 1000s of **requests for information** from members of the public every year, by telephone, email, in writing, and in person.
- This year the Survey placed digital versions of many of our **publications on our website** as free downloadable PDFs. Forty-four of our books are now available online and more will be added.

Professional Service

- Survey staff provided **consultation, advice, or other assistance** to over 125 agencies, firms, museums, schools, parks, civic groups, and other bodies, in addition to service rendered to research station host institutions.
- Survey staff served as officers, members of various committees, or in other service capacities for these **professional organizations**
 - Society for American Archaeology
 - Southeastern Archaeological Conference
 - Society for Historical Archaeology

- South Central Historical Archeology Conference
- Society for Bead Researchers
- Caddo Conference / Caddo Conference Organization
- Register of Professional Archeologists
- National Association of State Archeologists
- Florida Anthropological Society
- Arkansas Historical Association
- Mary Beth Trubitt is **President of the new Caddo Conference Organization.**
- 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.
- Several staff members organized symposia, and served as Program or Local Arrangements chairpersons for **professional conferences** this year: Carl Carlson-Drexler and Jamie Brandon (Arkansas Historical Association); George Sabo and Claudine Payne (Society for American Archaeology); Mary Beth Trubitt (East Texas Archaeological Conference).

Grants, Honors & Awards

- Leslie C. “Skip” Stewart-Abernathy, research archeologist stationed at the Winthrop Rockefeller Institute, received a **National Endowment for the Humanities 2012 Chairman’s Commendation** for his lifetime of dedication to promoting knowledge of Arkansas history.
- \$100,000 from Arkansas Natural and Cultural Resources Council to UAM for **the Taylor House Site (3DR26) Project.** Marvin Jeter is on the UAM Taylor House Committee. The grant includes **\$8000 for geophysical remote sensing** to be performed by the Arkansas Archeological Survey.
- **\$240,000 from the National Endowment for the Humanities** for “American Indian Art, Ritual, and Social Interaction in the Central Arkansas River Valley,” co-principal investigators: George Sabo III (UAF), Jami Lockhart (CSP), and Andrea Hunter (Osage Nation). Designated a “We the People” project by NEH. Year 3.
- **Archeological Research Fund Awards** from the Arkansas Archeological Society to Robert Scott (\$595) for an AMS radio-carbon date and to Carl Carlson-Drexler (\$416) for an archival research trip. Duncan McKinnon (UAF Ph.D. candidate and Survey graduate assistant) also received a grant (\$595) for an AMS radiocarbon date.
- The Delta Gateway Museum Commission (Claudine Payne, Vice-Chair) received a **Delta Byways 2012 Bootstrap Award.**

Challenges—and Some Solutions

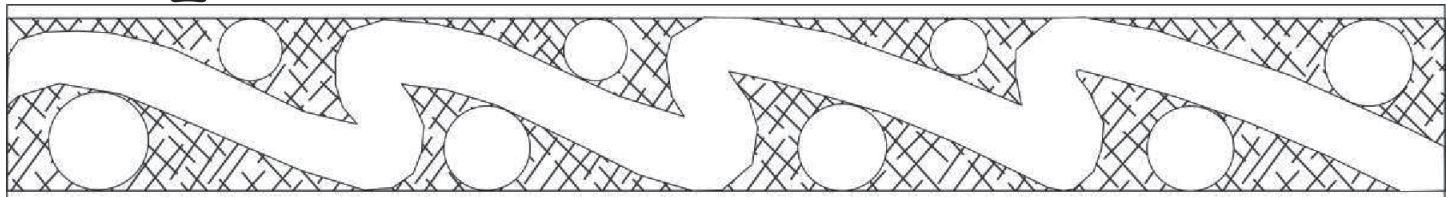
The Survey recognizes a number of consistent and ongoing challenges in fulfilling our mission of research, service, and education. We are committed to evaluating our programs from within and seeking ever more creative and more efficient ways to meet our goals.

- **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 has worked successfully with landowners and tenants to salvage 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 has worked with various law enforcement agencies to assist investigations and prosecutions.**
 - The Station Archeologists and the Arkansas Archeological Society have worked to train more site stewards in the **Site Steward Program**; this program assigns a trained individual 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** recently purchased the Sloan site (3GE94) in northeast Arkansas and the Cavanaugh Mound (3SB3) in Fort Smith, ensuring the preservation of these important sites. Sloan, ca. 8500 BC, is recognized as the oldest organized cemetery in North America.
- **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. We need to find ways to support the “lab and desk work” necessary to bring our research to full fruition.
 - **Grants from the Arkansas Natural and Cultural Resources Council** are helping with this effort.
- **Public Education and Heritage Tourism Opportunities.** Even after 40+ 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 need to improve how we tell the stories of Arkansas history and prehistory through the “voice” of archeology.
 - **We need to write more Popular Series books** for the general public and continue to develop the educational content of our website. Funding to hire more assistants is an ongoing barrier.
 - Our ***Indians of Arkansas* website** is a significant educational resource for learning and teaching about archeology and anthropology in Arkansas and the South.
 - Arkansas has only a few archeology-themed parks where the public can visit interpreted archeological sites. **We would like to work with State Parks, the Forest Service, and the National Park Service to develop archeological heritage tourism.**
 - We continued to provide archeological support for development at Davidsonville and Historic Washington State Parks, in addition to the regular programs of research at Toltec and Parkin. **This year, the annual Training Program sponsored jointly by the Survey and the Arkansas Archeological Society was held at Historic Washington State Park; 94 people attended the Dig from all over Arkansas and across the country.**
 - There is presently no national park devoted to American Indian history in the Mississippi Valley—an outrageous situation considering the glorious cultures that flourished here. **The Survey supports the efforts of the community of Blytheville to lobby for development of an archeology-themed national park in our state.**
- **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 difficult to recruit new station archeologists and to keep good station assistants.



Research Station Reports





Toltec Mounds Archeological State Park Research Station

New Station Archeologist Settles In

Elizabeth Horton accepted the position of archeologist at Toltec Mounds Research Station in July of 2011, after a one-year postdoctoral research appointment at the Survey's coordinating office in Fayetteville. While her studies of fabric structures and perishables will continue (see below), Dr. Horton also turned to developing a long-term research program focusing on the Late Woodland Plum Bayou occupation in the central Arkansas River valley.

As station archeologist, Horton provides assistance to the state park and assumes the vital role that all Survey archeologists have in cultural resource management. But her specialized skills also bring a unique contribution to the organization—Horton has established the Arkansas Archeological Survey's first formal paleoethnobotanical laboratory and comparative collection at the station, and acts as paleoethnobotanical consultant for the Survey. Among other activities during the year, she assisted Dr. Mary Beth Trubitt (AAS-HSU) in selecting radiocarbon samples, and selected samples from Ozark bluff shelter assemblages for specialized DNA analysis by researchers at the University of Pennsylvania. She also continued to study subtle variations in *Eryngium yuccifolium* cell morphology identified in her dissertation as it relates to a broader documented use of this plant throughout the southeastern United States.

Mound P Erosion Stabilization Project

As consulting archeologist for Toltec Mounds Archeological State Park, Horton undertook several significant management projects this year in cooperation with the park staff. Late in August of 2011, volunteers from the Arkansas Game and Fish

Stream Team, Arkansas Archeological Society, and the Arkansas Master Naturalists, as well as Toltec Mounds Archeological State Park staff and Survey station assistants Carl Carlson-Drexler (AAS-SAU) and Jessica Howe (AAS-UAM) joined Horton in a project to stabilize lake-side erosion at the edge of Mound P, which had been explored by field school excavations in 2010. Arkansas Game and Fish Stream Team donated the materials used in the project and provided expert advice on effective, low-impact erosion control. In all a crew of thirteen people initiated and completed this project in two days. The initial phase included mapping the surface collection from the eroding surface and base of the mound. Individual artifacts and artifact clusters were marked with pin flags by volunteers and their positions recorded using a total station. On the second day the crew created an "artificial surface" for the mound to slow erosion and encourage regrowth of a vegetative cover. Once all the artifacts visible on the surface had been collected, a heavy layer of natural coconut fiber was laid over the exposed and eroding lake-side surface of the mound and pinned down using wooden stakes. Then, six large logs were hand carried by volunteers down to the lake edge at what we understand to be the high water mark. The logs were permanently affixed to the ground surface using metal cables sunk two to three feet into the ground, and will work as a wave break, minimizing the impact of boat, storm, and day-to-day wave action on the mound when water levels exceed the norm. The logs also act as a catch wall, retaining eroding soil at the base of the mound when the lake does experience higher than normal water levels. This project was a low-impact, low-cost, and localized response to erosion problems that has already proven successful. Erosion

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 A.D. 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 to-day, 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, 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 research focused on Pre-Columbian fabric technology and plant fiber use in the Southeast, and Arkansas in particular, using assemblages from the University of Arkansas Museum Collections. Her specialization in paleoethnobotany brings much-needed skills to the Toltec station and to the entire Survey organization.

Marilyn Whitlow has been the 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), and outreach. During 2010–2011 while the station was without a research archeologist, she kept the station running, continued processing and cataloging artifacts, and hosted lab days for volunteers.



The hot but happy Mound P Erosion Stabilization crew, August 2011.

has slowed, soil is building up behind the log wave-break, and new vegetative growth is occurring on the once scoured and bare dirt surface of the mound. A secondary stage of work will be carried out in the fall of 2012 and spring of 2013 with transplanting of native wetland plant species, *Iris fulva* and *Arundinaria sp.*, to help establish a permanent native species ground cover that also enhances the interpretative qualities of the park landscape. *Arundinaria sp.*, or rivercane, in particular, was a vital economic resource for native peoples, providing raw materials for basketry, architecture, and tools.

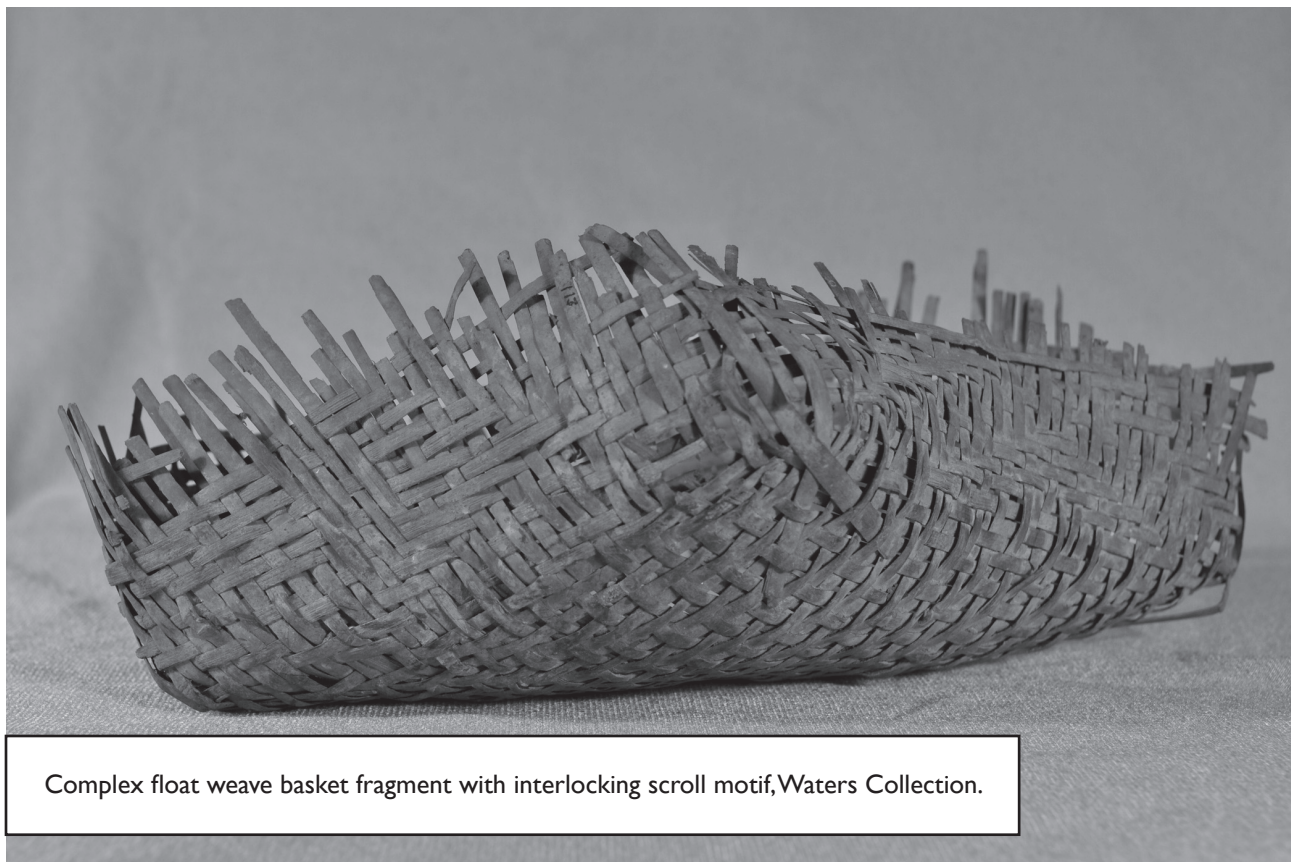
Last Modern Building Removed

In the fall of 2011, the Park removed the last of the modern buildings from the Toltec Mounds site. Horton developed a set of “Contractors Guidelines” for Arkansas State Parks regarding the use of heavy equipment on a protected archeological site and then monitored the removal of the old superintendent’s quarters from an area on and around Mound D. The house demolition and removal of debris went smoothly with minimal to no impact on buried archeological deposits. The footprint of the house was filled and compacted by the contractors and over-seeded with hardy grasses. With the removal of this house, and several now unnecessary utility poles, the entire site, from the outer embankment to the lake shore, is free of modern buildings, with the exception of shaded seating areas along the Plum Bayou Trail.

Paleoethnobotany Lab: The Gene Waters Collection

Horton previously arranged for the long-term loan of this private collection of perishable artifacts, recovered in the 1950s and 1960s, to the Arkansas Archeological Survey for inclusion in her broader study of fabric structures, textile production, and fiber use. The work continues at the Paleoethnobotany Lab newly established within the Toltec Mounds Research Station. The Waters Collection is critical to Horton’s ongoing research, which looks at changes in plant use by Native Americans in the late Pre-Columbian period (post AD 1000) through shifts and elaborations in rivercane basket technologies and styles. Changes in fabric technology and fiber use in turn can be related to broader social changes that occurred during this period, such as the shift to intensive farming. And, as part of this changing pattern of land and resource use, there is the question of whether Pre-Columbian societies managed rivercane, and the possible human role in canebrake development and decline in the Southeastern United States.

The Waters Collection also contains among other items, several examples of relatively rare structurally decorated baskets, with intricate interlocking scrollwork or geometric designs across their surfaces. These items add to a small but critical body of data on basket design being used to understand the distribution and possible point of origin of decorative styles documented at sites like Spiro Mounds and elsewhere.



Complex float weave basket fragment with interlocking scroll motif, Waters Collection.

Paleoethnobotany Lab: The Spiro Perishable Project

The Spiro Perishable Project is a collaboration with Dr. George Sabo (AAS-UAF), with the support of the Caddo Nation of Oklahoma. It is focused on basketry and fabrics from the world-famous Spiro Mounds Ceremonial Center that are curated in the University of Arkansas Museum Collection—in particular, a specific class of double-woven lidded baskets that were removed from Craig Mound at Spiro, along with their contents and other associated materials. These materials were acquired in the 1930s by Museum Director Samuel C. Delinger, when members of the so-called Pocola Mining Company were looting the contents of the Craig Mound.

Horton has determined that there are fragments of 14 double-woven lidded baskets in the UA Museum Collection. Prior to this project, only one of these baskets had been carefully examined and reported in the literature. This ongoing study has already produced significant new insights, published in a *Field Notes* article and in a chapter of a forthcoming University of Texas Press edited volume (see Appendix 1), though much work remains to be completed. This year two substantial chapters were produced for publication. In the coming year, the study will be expanded to include perishable materials from Spiro Mounds curated at other institutions across the country, and comparative analysis of decorative designs on the basketry with designs in other media (rock art, ceramics), as well as between the Spiro assemblage and other extant basketry assemblages in the southeastern United States.

Working with Local Landowners: The Hoskyns 1 Site (3LN666)

This recently discovered Late Archaic/Woodland site is less than a mile east of Toltec Mounds Archeological State Park and is named for the landowner, Mr. Dusty Hoskyns. The site was uncovered during scheduled dirt work to level a field near the park for rice agriculture. Farm foreman Chris Hughes contacted Horton on May 30th with news that the land leveling had exposed a dark black stained area of soil and workers were finding significant numbers of intact projectile points. Horton contacted Mr. Hoskyns, who had previously assisted the Toltec Mounds Research Station by providing a wooded area for the UALR Experimental Archaeology class to work. Mr. Hoskyns generously gave permission to allow documentation, testing, collection of artifacts, and monitoring of the remainder of the dirt work.

Over the course of the next ten days, Horton, with assistance from Survey archeologists Dr. John House (AAS-UAPB) and Jessica Howe (AAS-UAM), and Arkansas Archeological Society member John Riggs, carried out extensive documentation of the site, including soil probe transects, shovel test units, surface collections, and mapping. Mr. Hoskyns and the land leveler were extremely helpful to our effort to learn as much as we could about the site while it was exposed, even going so far as to slow down the dirt work to give the archeologists additional time to map and test the area. The soil samples and artifacts collected make up a substantial assemblage for such a short period



AAS-UAPB station archeologist Dr. John House helps lay out soil probe transects at 3LN666.

of work and are still being processed and analyzed at the Toltec Mounds research station. This site has become the most recent addition to a body of data on pre-Plum Bayou (pre-AD 700) occupation of the region.

2010 Training Program Assemblage

In 2010, the Arkansas Archeological Society with the support of the Arkansas Archeological Survey, carried out their annual Training Program at Toltec Mounds Archeological State Park. One of the first tasks Horton undertook upon arrival at the station in the summer of 2011 was to finalize the initial processing of artifacts recovered during the 2010 excavation (washing, sorting, and labeling) and to begin the process of a detailed analysis of these materials and field notes. Analyses of flotation samples and ceramics from Mound P are under way and a sample of lithic materials has been sent to Aden Jenkins at the Survey's coordinating office for study.

In addition, Horton offered an Independent Study course in ceramic analysis through the University of Arkansas - Little Rock, in which students used a selection of the 2010 Mound P excavation assemblage as their study sample. By the end of the semester, two students had cataloged and described 182 rim sherds from Mound P, a substantial amount of work. Data from these analyses—lithic, ceramic, and macrobotanical—will become part of a broader Plum Bayou Research Project.

A Possible New Mound at the Toltec Site?

In the fall of 2011, Horton, with assistance from Toltec Mounds Archeological State Park interpreters and Survey archeologists Carl Carlson-Drexler (AAS-SAU) and Jessica Howe (AAS-UAM), tested a possible “new” mound located just outside the earthen embankment at the Toltec Mounds site. It has long been understood that the mound-and-plaza complex is limited in extent to the area inside the D-shaped earthen embankment that encloses the site. However, in the fall of 2010, park interpreter Rabin Gabe noticed a small but distinctive rise in the heavily wooded area between the embankment and the county road. This feature was tentatively identified as Mound T, but testing had to wait due to the lack of a resident archeologist at that time.

Once established in the station, Horton made it a priority to test this potential mound, scheduling the work for fall,

when there would be less undergrowth. During two weeks in November 2011, the crew made a controlled surface collection from the mound itself and to a surrounding distance of 4 meters on all sides, and dug a 1 x 2 meter test unit on the north side. All the material collected is consistent with a Plum Bayou occupation in general, and with the Toltec Mounds site. Unfortunately, the heavily wooded nature of the area the mound is in, and the fact that it is seasonally inundated, made soil profiles extraordinarily difficult to read. While there is nothing to indicate that this small rise in the woods was not man made, there was no discernible basket loading or layering of soil deposits normally associated with mound construction. This enigmatic feature remains designated for the time being as Mound T, but further work is needed to find out if it is really a mound, and how this locality fits into the structure of the site.

Geophysics Assists a Possible Cold Case Investigation

In August of 2011, the Arkansas State Police contacted Survey Director Tom Green to ask for assistance in searching for a possible murder victim in Lonoke Co., near England, AR. A possible suspect had given details concerning the disposal of a body in a field outside England in a clandestinely dug backhoe trench. In what became a highly publicized search (with TV coverage by reporter Lauren Trager, KARK 4, and additional coverage at arkansasmatters.com and todaysthv.com), Survey archeologists Dr. Jami Lockhart (archeogeophysics specialist), Dr. Tom Green (Director), Horton, Carl Carlson-Drexler (AAS-SAU), and Jessica Howe (AAS-UAM) assisted the Little Rock Homicide Division's Cold Case Squad and Arkansas State Police Criminal Investigation Division in the search.

Horton helped Lockhart with the remote sensing on two occasions (an initial search in late August 2011 and a more expanded search in January 2012) and excavated test units and mechanically dug test trenches. Despite the suspect's insistence that he had dug a backhoe trench in a specific field, remote sensing and test excavations provided law enforcement and the Pulaski Co. Prosecuting Attorney's office with substantial evidence that this was not the case. Despite an unsatisfactory conclusion for the family of the missing man, the Arkansas Archeological Survey was able to provide law enforcement with a considerable weight of evidence bearing on the veracity of a suspect's claims.

Toltec Mounds Research Station — Academic & Service Activities

Teaching & Higher Ed

- Horton taught two courses for UALR in the Spring 2012 semester: ANTH 4180 Independent Study, Ceramic Analysis (2 students) and ANTH 4398 Special Topics, Experimental Archaeology (9 students).
- During Fall 2011, Horton participated in revising the UALR Anthropology mission statement and curricula guidelines.
- Horton organized a flint-knapping workshop for the UALR Anthropology Club.

Service to State Parks & Toltec Mounds Archeological State Park

- **Training & Workshops for Park Interpreters.** Horton conducted mini workshop sessions for Toltec Mounds State Park interpreters on ceramic analysis and ceramic technologies; plant use technologies and food pathways; fabric production and fiber use; and basic archeological field methods (mapping, survey, and excavation).
- **Exhibitory.** Horton assisted in repair of paleoethnobotany and seeds on display at the Toltec Mounds State Park Visitor's Center; and helped develop small exhibits for the temporary exhibit space.
- **Maintenance Projects.** Organized and carried out a "clean shore" trash pick-up along Mound Pond lake shore within the Park during spring 2012; Mound P Erosion Control Project; developed a "contractor protocol" for bids on structure removal and oversaw removal of the old superintendent's residence from Mound D; ongoing monthly assessment of natural and cultural processes impacting the integrity of archeological deposits; ongoing collections management; ongoing digitization of the research station's photographic archives.

Professional Service

- **Peer Review.** Horton reviewed works for *The Arkansas Archeologist*, and an edited volume by a colleague.

Public Service & Outreach

- **Programs & Presentations.** Horton gave talks at a meeting of the Central Arkansas Chapter of the Arkansas Master Naturalists (audience, 40).
- **Historic Cemetery Preservation Initiative.** Consultation and damage assessment on several historic cemeteries in North Little Rock, Mount Nebo, College Station, and Little Rock.
- **Other Consultations.** Consultation to the City of North Little Rock Community Planning Department.
- **Media Outreach.** Horton created and administers a Facebook Page for the Toltec Mounds research station.

Service to Arkansas Archeological Society

- **Programs & Presentations.** Horton gave public talks at Chapter meetings of the Central Mississippi Valley Chapter (Jonesboro), the Tunican Chapter (Monticello), the Kadohadacho Chapter (Magnolia), and the Toltec Chapter (Little Rock) (combined audiences, 65).
- **Training Program.** Horton taught the Basic Excavation seminar during the 2012 Training Program at Historic Washington State Park.
- **Toltec Chapter.** Horton and the Toltec station worked to reestablish the Toltec Chapter of the Society; Horton serves as Chapter treasurer; the station organizes the monthly meetings and hosts volunteer activities.

Volunteer Hours

- Volunteers contributed 504 hours in the field and lab to station projects.



Parkin Archeological State Park Research Station

The Southeast Palisade of the Parkin Site

To help park visitors better visualize how the village of Casqui looked in the 1500s and earlier, park staff and Survey station personnel want to create on site exhibits of a rebuilt Parkin phase house and a portion of the defensive palisade (or stockade) that once surrounded the site. A structure floor at the north end of the village site that was completely excavated in the 1990s will be the location of the house, but the only previously excavated evidence of the palisade is in a place where rebuilding it would obstruct visitors' view of the platform mound from the Visitor Information Center. After some consideration, the decision was made to locate the palisade at the southeast corner of the site and place the reconstruction on the exact location of the original stockade in that corner.

To accomplish this, a two-stage approach was used. First, extensive geophysical surveying was employed under the direction of Dr. Jami Lockhart, coordinator of the Survey's Computer Services and Archeogeophysical Research Program. These methods narrowed down the probable location of postholes associated with the palisade. Using this information, Dr. Jeff Mitchem, the Survey's research archeologist at Parkin, began carrying out excavations to locate and dig the postholes.

The excavations revealed that most of the geophysical anomalies identified were actually deposits of metal and other modern debris buried in the area by people who lived there in the late twentieth century. These modern disturbances slowed progress of the project, but several postholes associated with the palisade eventually were located and excavated. Others had been completely destroyed by the modern activity, but the general location of the wall was successfully identified.

Next we will put together a planning committee to design the exhibits for the palisade and house, then apply for grant funding to implement the actual construction and installation. In both exhibits, most of the construction material will be state-of-the-art reproductions that can withstand weather and other outside threats better than natural products. This will increase their longevity and reduce maintenance costs.

Research on Chauncey W. Riggs

Parkin station assistant Faye Futch conducted historical research this year on C. W. Riggs, an early collector and dealer of pottery who dug in archeological sites in the central U.S. in the late 1800s. Futch did the research at the request of Mary Kwas, the Survey's education specialist, who is working on a broader

The Parkin research station was established in 1990 at Parkin Archeological State Park in Cross County. The station's 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 period 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 A.D. 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, 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.

Jeffrey M. Mitchem using the resistivity machine at the Parkin site to locate the palisade. Claudine Payne (Survey Archeologist at Blytheville) lends a hand.





Coordinating Office Field & Lab Support Archeologists Jared Pebworth (l) and Michael Evans (r) excavating at the Parkin site.

study of Riggs and his collections. One of the sites where he dug was the Parkin site, from which he excavated a head effigy vessel with elaborate incising on the face. The vessel is currently at the Field Museum of Natural History in Chicago.

Although Riggs died in Florida in 1917, his will was probated in Cross County, Arkansas. Futch's research revealed that he owned property north of Parkin and to the east in Crittenden County, which he called Delta Plantation. Riggs was a colorful and eccentric character. He married three times and had six daughters and five sons, some of whom were given bizarre names. By the end of the nineteenth century, he had stopped collecting Mississippian pottery and moved on to other interests. In 1907–1909, he had a wild west show that filled two rail cars, and Futch's research revealed that he and the show's performers wintered in Parkin those years. Her research is ongoing.

The Smith Mound Beads from Florida

One of Mitchem's specialties is the analysis of beads from Spanish contact sites. Colleagues at the Florida Museum of Natural History recently asked him to catalog and analyze a collection from a mound on Pine Island, southwest Florida. Consisting of 697 beads of glass, silver, and gold, the collection

was assembled over several years of uncontrolled digging by two boys who lived in the local area in the 1960s. They inadvertently found artifacts that were diagnostic of several episodes of European contact from the time of the earliest Spanish explorers until Seminole Indians were trading with fishermen in the early 1700s.

The items were in a private collection for many years, but were recently donated to the Florida Museum of Natural History, which now owns the property where the mound is located. The mound is part of a larger site complex known as Pineland, and Dr. William H. Marquardt, who directs research at Pineland, recognized that analysis of the beads could yield much information about the sources and duration of European contact at the site. Mitchem was able to identify the beads and note several important characteristics that only an experienced bead specialist would know. These data added to the archaeological evidence of European contact at the site, and will be integrated into the public interpretation there.

Station Operation

Interaction with the general public is a major aim of the Parkin research station. Survey personnel interact with Park

visitors on a daily basis. Visitors bring artifacts or collections to be examined, and local residents often call with questions or arrange to bring in artifacts for identification. These informal contacts give us the chance to highlight the value of archeology, and to explain why uncontrolled digging is not good. Many of these visitors express interest in joining the Arkansas Archeological Society. Station personnel also conduct tours of the site and laboratory for specialized groups.

In addition to keeping up with the Parkin site research and park visitors, Mitchem continues to pursue his other research specializations in the analysis of Spanish trade beads and archeological bead assemblages from Florida and other New World areas. Writers, fellow archeologists, television producers, and artifact collectors contact him for advice on the De Soto

expedition or identifications of Spanish artifacts associated with the de Soto entrada. Mitchem is also collaborating with colleagues in the Southwest who are investigating sites associated with the Vázquez de Coronado expedition of 1540–1542. This expedition was contemporary with the De Soto expedition, and many of the Spanish artifacts are similar. In addition, he continues a long-term interest in the history of archeology (especially of Florida and the southeastern U.S.), working with archival materials from the National Anthropological Archives and other repositories.

As part of her ASU studies, Futch conducts historical research on the Parkin area and Cross County. She is also carrying out ongoing research on local blues musicians, juke joints, schools, and businesses.



Early sixteenth-century glass beads from the Smith Mound in Florida. Top (l to r): Nueva Cadiz Plain, 4 faceted chevron beads. Bottom (l to r): 3 faceted chevron beads, 3 olive-shaped beads with white stripes.

Parkin Research Station — Academic & Service Activities

Service to State Parks & Parkin Archeological State Park

- **Exhibitory & Installations.** Mitchem collaborated with park interpreter MaryAnne Parker on a Pacaha/Bradley site exhibit in the Parkin Visitor Center, and monitored installation of new interpretive signs on the site.
- **New Research for Park Development.** Mitchem contributed to development of the research design and directed excavations in the Parkin palisade project, supporting plans for reconstruction of a Parkin phase house and section of the palisade at the Park.

Professional Service

- **Peer Review.** Mitchem reviewed works for *The Florida Anthropologist*, *American Antiquity*, and *The Arkansas Archeologist*. He serves on the Editorial Review Board of *The Florida Anthropologist*.

Public Service & Outreach

- **Programs & Presentations.** Mitchem gave two public talks at the Citrus County Courthouse in Inverness, FL for Florida Archaeology Month (combined audiences, 131). He joined other Survey personnel to participate in three “Artifact Identification Days” at Parkin and at Blytheville (participants, 40)
- **Archaeological Conservancy.** Mitchem presented an introductory lecture in Memphis and led tours of the Parkin and McClellan/Ritter sites and Hampson Archeological Museum State Park for participants in the Conservancy’s “Peoples of the Mississippi Valley” tour (35 participants). He wrote copy and provided illustrations for a brochure on an upcoming “Anasazi Circle Tour” at Parkin and vicinity.
- **Historic Cemetery Preservation Initiative.** Mitchem served as Humanities Scholar on an Arkansas Humanities Council grant for Weaver Cemetery in Palestine, and as a consultant on AHC grants to Reneau Cemetery in McCrory and Barnes Cemetery in Wynne.
- **Media Outreach.** Mitchem provided information and quotes for items in *National Geographic News*, *Arkansas Living* magazine, and *The Wynne Progress*. He revised content for two educational flyers to be posted to the Survey’s website. Mitchem also administers a Facebook page for the Parkin Archeological Site.

Service to the Arkansas Archeological Society

- **Programs & Presentations.** Mitchem gave a public talk to the Central Mississippi Valley Chapter in Jonesboro (audience, 55).
- **Training Program.** Mitchem helped supervise 2012 Training Program excavations at Historic Washington State Park, and taught the seminar on Establishing Time.

Volunteer Hours

- Volunteers contributed 198 hours to station research projects in the field and laboratory during 2011–2012.

Toltec Mounds

Martha Ann Rolingson, Ph.D.



Toltec Mounds is one of the largest and most impressive archeological sites in the Mississippi River valley. The immense man-made mounds, surrounded by an embankment similar to a modern levee, fascinated the first modern owners of the land in the 1850s. The site is large both in area—covering 160 acres—and in the size and number of mounds. The two tallest mounds are 49 feet (14 meters) and 39 feet (11.5 meters) high. There are sixteen smaller mounds, though some have not survived to modern times. The site is beside a lake. A ditch and embankment made of earth form an enclosure on the other three sides. The embankment was once eight to ten feet (2.5 meters) high and more than one mile (1.6 kilometers) long.

Learning about the people who lived in the area and built the mounds is a long process. Archeologists are still busy studying the artifacts and other data uncovered over the last 30 or so years. Excavations will begin again once these results are made available to the public and to the scientific community.

Who Were the People Who Built the Mounds?

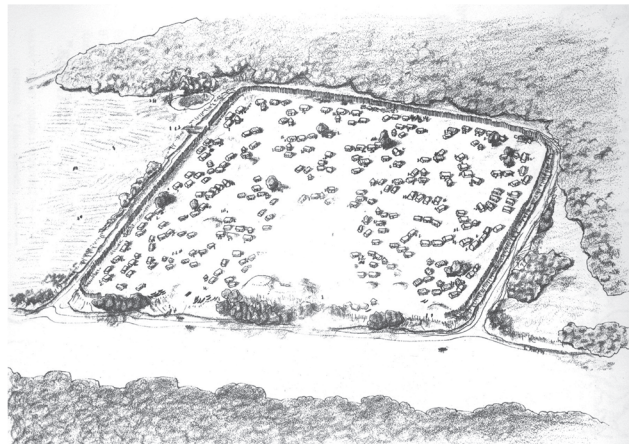
People started living at this place sometime before A.D. 700. Distinctive aspects of their culture are the arrangement and construction of the mounds,

style of decoration on the pottery, and the kinds of stone tools. Archeologists named this culture Plum Bayou, after the name of a local stream. We do not know what the Indians who built the mounds called

The Parkin Site

Hernando de Soto in Cross County, Arkansas

Jeffrey M. Mitchem, Ph. D. (Arkansas Archeological Survey)



Artist's reconstruction of how the Parkin site may have looked, ca. A.D. 1500. Drawing by Linda Murphy.

Archeologists and historians have long been interested in the route of the Spanish explorer Hernando de Soto, who traveled through the southern United States for four years in the middle 1500s. After landing in Florida with a force of around 600 soldiers, the expedition traveled over a large area in the southern states, eventually reaching Arkansas in 1541.

Four chronicles of the expedition survive, and they include interesting details about the Native American groups encountered by the Spaniards. These accounts are incomplete, and researchers disagree about the exact route of the expedition. We do know

that the expedition crossed the Mississippi River in June of 1541. The crossing place has long been debated, and several possible locations have been proposed.

Archeology: A Tool for Learning about Arkansas's Past

Archeology can be used to fill in some of the gaps in the chronicles. Research in other southern states, especially Florida, has demonstrated that archeology can locate clues that help us understand where the expedition traveled and what effects the Spanish presence had on the Native American inhabitants.



Arkansas Archeological Survey | Fayetteville
www.arkansasarcheology.org

The Arkansas Archeological Survey offers free downloadable educational flyers about the Parkin site and the Toltec Mounds site (and many other topics) on our website. <<http://www.uark.edu/campus-resources/archinfo/flyers.html>>

Arkansas Archeological Survey | Fayetteville AR | 479.575.3556
www.arkansasarcheology.org



University of Arkansas at Fayetteville Research Station

Art, Ritual, and Social Interaction in the Central Arkansas River Valley

In 2009 the Arkansas Archeological Survey received a \$240,000 grant from the Collaborative Research Program of the National Endowment for the Humanities (NEH) to support a three-year study of protohistoric American Indian art, ritual, and social interaction in the Carden Bottoms locality of the central Arkansas River valley. The project is a collaborative effort between the Arkansas Archeological Survey and the Caddo, Osage, and Quapaw Indian nations of Oklahoma. Directed by UAF station archaeologist Dr. George Sabo III, Dr. Jami J. Lockhart (AAS), and Dr. Andrea Hunter (Osage Nation), the CARV study has been designated an NEH “We the People” project—a special initiative to encourage and strengthen the teaching, study, and understanding of the American people through support of projects that explore significant events and themes in our nation’s history and culture, and that advance knowledge of the principles that define America.

Other Survey staff involved in the project are Dr. Ann Early (State Archeologist), Michael Evans (CO), David Jeane (emeritus, AAS-SAU), Aden Jenkins (CO), Jerry Hilliard (AAS-UAF), Timothy Mulvihill (AAS-UAFS), Jared Pebworth (CO), Larry Porter (AAS-WRI), Deborah Sabo (CO), John Samuelsen (CO), Dr. Leslie C. Stewart-Abernathy (AAS-WRI), Dr. Jami Lockhart (CO), and Deborah Weddle (CO). University of Arkansas graduate students Duncan McKinnon, Leslie Walker, and Adam and Rebecca Wiewel are also involved, along with Grinnell College (Iowa) undergraduate student David Halperin. This year, we also welcomed the participation of Marion Haynes and Michelle Rathgaber from the Survey’s Blytheville research station.

NEH program staff graciously approved a one-year project extension (Year 4, to June 2013) to permit additional field and lab activities. Year 3 activities included 1) final documentation of House 2 excavations at the Carden Bottoms site (3YE25); 2) laboratory processing and preliminary analysis of excavated ma-

The 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; only the extreme southwestern portion dips down into the Arkansas River Valley. 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. Rock art, both painted and carved, is also found in some shelters. Station research in the last 30 years has broadened the archeological picture 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. The station's latest initiatives are a comprehensive study of prehistoric rock art, analysis of museum curated archeological collections from the Ozarks and central Arkansas River valley, and new studies exploring how artistic expression on decorated artifacts, such as the world-class ceramic collections from Carden Bottoms in central Arkansas, reflect social boundaries and social interaction.

George Sabo III (Ph.D., Michigan State University, 1981) is the Survey's Research Station Archeologist for UAF, and Professor of Anthropology, University of Arkansas–Fayetteville, where he teaches one to two graduate level courses per year, serves on numerous graduate student committees, and is Co-Assistant Director of the interdisciplinary Environmental Dynamics Program in the Fulbright College of Arts and Sciences. He joined the Survey in 1979 after nine years of archeological research in the Upper Great Lakes and the Canadian Arctic, and a position as assistant to the State Archeologist of Michigan. His work in northwest Arkansas has ranged from mound excavations in the western Ozarks, to studies of historic pioneer farmsteads, the ethnohistory of Arkansas Indians, and development of New Media educational resources. He is the author of a popular history of Arkansas Indians (*Paths of Our Children*) and coauthor of *Arkansas: A Narrative History*.

Jerry E. Hilliard (M.A., University of Arkansas, 1980) moved to the position of UAF station research associate 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.

Leslie C. Walker (M.A., University of Arkansas, 2008) has been affiliated with the Survey's UAF station and Registrar's Office for several years as a graduate assistant and hourly employee. She contributed to the Rock Art project and is currently part of the team working on the NEH-funded "Art, Ritual, and Social Interaction in the Central Arkansas River Valley." Her Ph.D. research is focused on the interrelationship between social and cultural change and its representation in art objects during the protohistoric period.

terials from Carden Bottoms (3YE25) and Opello (3CN213); 3) radiocarbon dating of special samples from excavated house structures and associated refuse pit features; 4) analysis of house architecture and the distribution of artifacts within excavated houses; and 5) analysis of Carden Bottoms ceramic collections.

Two other activities conducted in collaboration with the Caddos, Osages, and Quapaws were 1) interviews with community elders on relationships between traditional cultural knowledge and archeological and documentary information sources about the past, and 2) development of museum exhibits on the protohistoric Carden Bottoms phase community.

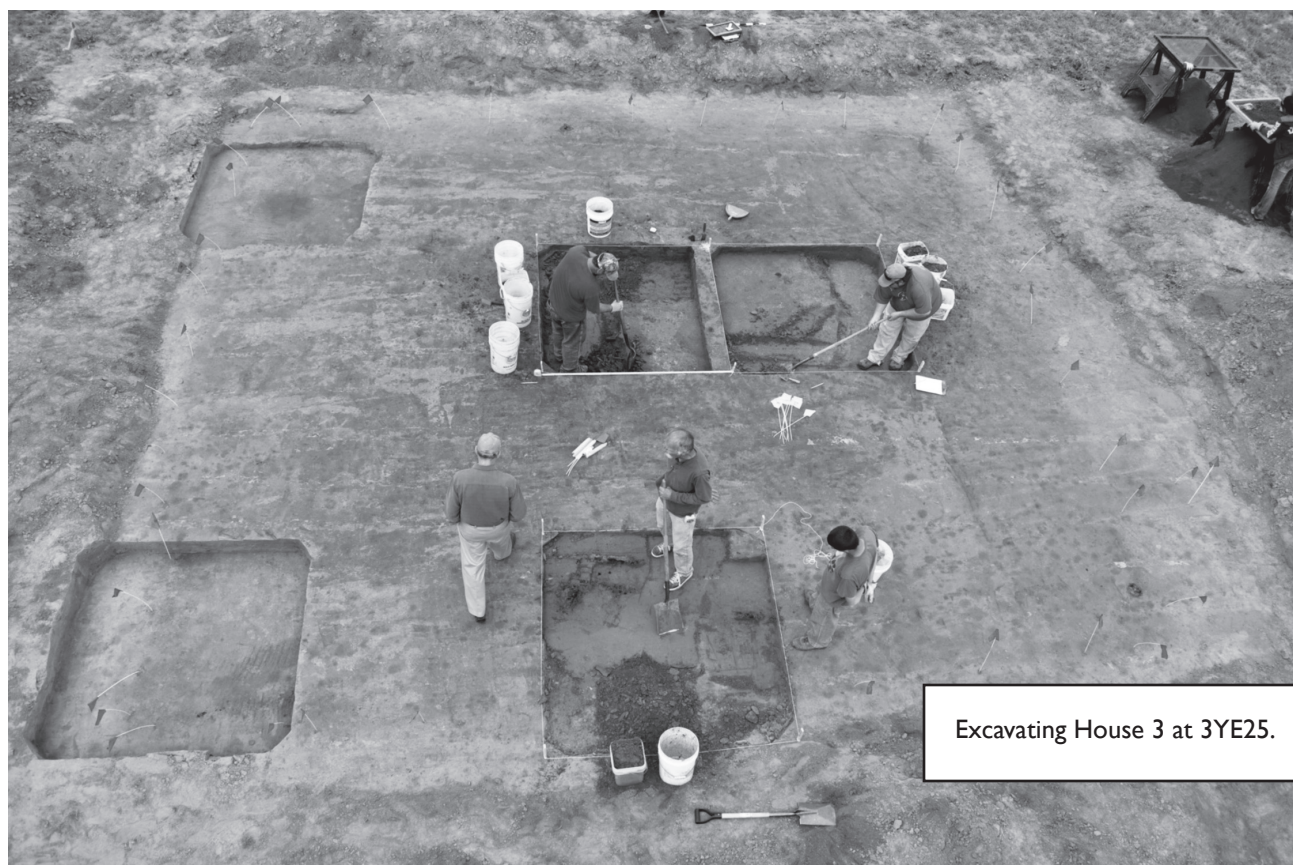
Brief field trips to the Carden Bottoms site in December 2011 and January 2012 accomplished final documentation (total station mapping, aerial photography, and collection of special samples for radiometric dating) of House 2 excavations at the site. Osage Nation volunteer Kat Avant, Arkansas Archeological Society volunteers Don Higgins, Dr. Susan Posner, Jim Rees, and Alan Smith, and U.S. Forest Service archeologists Dr. Mary Brennan and Robert Waldron assisted.

Jerry Hilliard, Leslie Walker, Mike Evans, Aden Jenkins, and Jared Pebworth, along with David Halperin (Grinnell College), worked hard to process artifacts and special samples (includ-

ing flotation samples) obtained from the Carden Bottoms and Opello site excavations. Collections data are entered into the dedicated project databases created and maintained by John Samuelsen on Survey computer servers. Artifacts and other material samples have all been cleaned, cataloged, and inventoried, and much material has undergone more extensive analysis, as described below.

Radiometric Dates. Four samples from excavated houses and trash pits were sent to Beta Analytic, Inc. for radiometric analysis. A full report will be published elsewhere, but results indicate that the three houses we excavated at Carden Bottoms were occupied during the first half of the seventeenth century. This places the occupation and its associated material assemblage in the period following Hernando de Soto's 1541–1543 exploration of Arkansas, but before direct contact with French explorers beginning with Marquette and Jolliet (1673) and LaSalle and Tonty (1682). Our understandings of this very important era of American Indian cultural development must be framed within the first encounters with Europeans, and the ecological impacts of Little Ice Age climate change. This was a time when indigenous economic, social, and political institutions were undergoing tremendous changes. The radiocarbon assays we received confirm that the Carden Bottoms excavations provide a window onto events of this critical but poorly understood period in the history of the American South.

Architecture. Hilliard's ongoing analysis of house architecture is producing fascinating insights about the Carden Bottoms phase community at 3YE25. Lockhart's archeogeophysical work (reported last year) identified the buried remains of several houses at the site, organized into discrete neighborhoods. Last year we excavated two houses in one neighborhood and a third house in another. According to Hilliard's analysis, house construction began by digging shallow pits into the compact and very fine-grained subsoil to provide a smooth, hard-surfaced floor. Four stout (25 cm diameter) roof support posts were then sunk into holes dug a meter below the floor surface, forming a 4-meter square around a central, meter-wide hearth pit. Narrower wall posts were embedded at short (30–40 cm) intervals along the outer edges of the house pit to form walls oriented to the cardinal directions. Gaps in wall post alignments suggest entry ways opening to the east or west. Earthen berms extended part way up the exterior walls. The walls were not plastered with clay (our excavations encountered practically no hardened clay daub), and so must have been covered with thinner tree branch wattles, bark, or—most likely—woven cane mats. Bits of burned grass thatch retrieved in sediments above the house floors indicate that material was used to cover the roofs. The enclosed floor space of each house ranged from 7.5–8.5 meters on a side, and internal post mold patterns suggest that benches or platforms were built along the



Excavating House 3 at 3YE25.

interior walls. A remarkable finding is that all three excavated houses were nearly identical architecturally, as if they were built according to a common but detailed plan. Hilliard believes the houses were occupied year-round for one or two generations.

Artifact distributions within the houses are equally interesting. Artifacts found directly on the compacted floor surfaces include finished tools and fragments of broken pottery in the central areas surrounding the hearths, along with broken tools and discarded debris (including detritus from stone tool production and tool resharpening) clustered just inside the walls on floor areas that would have been beneath the interior benches. But Hilliard also identified artifacts only along interior walls in the sediments above the floors, added during the destruction of the houses. These materials represent items that most likely fell from interior storage lofts and benches when the house was being dismantled. The stout, deeply embedded interior support posts were certainly capable of carrying the weight of interior lofts. Hilliard suggests that these lofts may have been similar to those observed by members of De Soto's army among the Tula Indians who lived south of modern Fort Smith.

Ceramics. Ann Early has been analyzing manufacture and design characteristics on Carden Bottoms whole vessels in museum collections (University of Arkansas Museum Collections, National Museum of the American Indian in New York, and Thomas Gilcrease Museum in Tulsa) to determine where those vessels were produced. Early found that 191 (23%) of the 841 vessels examined so far represent Caddo types. These include the type Keno Trailed, which is commonly but not exclusively a product of Caddo pottery making traditions. Analysis of the mineralogical compositions of pottery clays may help resolve the cultural affiliation of the Keno vessels.

Early's analysis yields some interesting findings. Most of the unquestionably Caddo vessels were made in southwest Arkansas at sites along the Ouachita and Red rivers, with the majority coming from communities along a small stretch of the Ouachita River between Malvern and Arkadelphia. Most are finewares, with comparatively few utilitarian pots. Examples of the earliest Caddo wares are absent in Carden Bottoms assemblages and while there are a few Middle Caddo finewares (possibly representing heirlooms) the majority of vessels are protohistoric

Artist's reconstruction of a Carden Bottoms house (without interior bench and loft details). By Larry Porter, Arkansas Archeological Survey.



(16th–17th century) bottles and bowls. This predominance of finewares suggests at least some measure of ritual activity at Carden Bottoms.

Using Art & Science to Reveal Ancient Community. Leslie Walker's research looks at community organization and ritual through an analysis of Carden Bottoms ceramics. Going beyond ceramic types and varieties, Walker is focusing on the art motifs that decorate the ceramics, as well as other objects. She divides her observations according to "production genres" such as painted pottery, engraved pottery, basketry, rock art, etc. Using this system, Walker has been able to identify common artistic treatments applied to different material genres, such as painted pottery and rock art. She has also found that people living at Carden Bottoms, working in independent pottery-making traditions (e.g., Mississippian and Caddo) and in a variety of media (pottery and rock art), were participating in the production of a common style that symbolically reflected social relationships within a multiethnic community. It is likely that these relationships were maintained at least in part by ritual activities involving the production of rock art at specially selected places on the local landscape.

Critical to both Early's and Walker's interpretations is knowing where the vessels found at Carden Bottoms sites were actually made. This is where the hard science comes in. UAF anthropology graduate student Rebecca Wiewel acquired support this year from the University of Missouri Research Reactor for training and access to their facility for instrumental neutron activation analysis (INAA) of ceramic clay composition. Wiewel and Sabo submitted an application to the National Science Foundation for a doctoral dissertation improvement grant to provide funding for this analysis, which they hope to undertake during the coming year.

Sharing the Results. These findings were reported at a special symposium titled "The Carden Bottoms Project: Indians and Archeologists Studying the Protohistoric Past" that Sabo organized at the 77th Annual Meeting of the Society for American Archaeology held in April 2012 at Memphis, TN. The symposium was introduced by Survey Director Dr. Thomas Green and National Resources Conservation Service archeologist John Riggs, and included presentations by Ann Early, Jerry Hilliard, Jami Lockhart, and Leslie Walker of the Survey, along with Jean Ann Lambert and Ardina Moore of the Quapaw Tribe of Oklahoma.

A final activity undertaken this year involved interviews with Caddo, Osage, and Quapaw elders concerning the comparative importance of community traditions, archeology, and historical documents as sources of information about indigenous cultural heritage. Most of the interviewees stated that while they rely most on their own cultural traditions for knowledge about the past, all available sources of information are important and must be considered. As one Caddo put it, "elders have a responsibility to share what they have been taught with the younger generations" and "these lessons from the past have to go into the future." We will be using the results of these interviews,



Ceramic vessel sherds from the house floor at 3YE25.

conducted in the local communities by other community members, as a basis for constructing museum exhibits on the Carden Bottoms project.

Arkansas Rock Art Book

Sabo continued work with project editor Deborah Sabo to complete the book manuscript based on the 2003–2006 "Rock Art and the Southeastern Ceremonial Complex" project funded by grants from the Arkansas Humanities Council and the National Endowment for the Humanities. The book, which examines Arkansas rock art within the larger context of late pre-Columbian ritual and the cultural modification of natural landscapes, will be submitted to the University of Alabama Press.

Spiro Shell Art Book

In May Sabo once again participated in the annual Mississippian Art and Iconography Workshop at Texas State University in San Marcos. Organized by F. Kent Reilly III, Professor of Anthropology and Director of the Center for the Arts and Symbolism in Ancient America, the conference brings together scholars from across the country who are interested in the study of late pre-Columbian art and symbolic expression among Mississippian communities in the Eastern Woodlands of North America. This year Sabo continued work with Professors James A. Brown (Northwestern University) and Alex Barker (University of Missouri) on two projects involving the iconography of shell engravings from the Spiro site in eastern Oklahoma. First, the group produced drafts of chapters for a book interpreting mythic scenes engraved on large marine shell cups and circular pendants in the context of events associated with the early 15th



Excavations at the William Rogers House site, Prairie Grove Battlefield State Park; left to right, Carol Martindale, Devin Pettigrew, and Vivian Cherry.

century construction of a “cosmogram” in the Great Mortuary chamber within the Craig Mound at Spiro. Sabo authored three of the chapters for this volume and coauthored another with Elizabeth Horton (AAS-TOL). The team is working to finalize the manuscript. The second project involved a reexamination and redefinition of Braden style artifacts from Spiro, now thought to originate from the Cahokia site near East St. Louis, Illinois. The goal of this project is to assess cultural processes involved in the Spiroan adoption of artistic styles developed in the American Bottoms region of eastern North America during the 11th and 12th centuries.

Spiro Geophysics Project

Sabo joined Jami Lockhart and John Samuelsen (AAS-CSP) and Oklahoma Archeological Survey archeologists Scott Hammerstedt, Patrick Livingood, and Amanda Regnier in an archeogeophysical survey of the Spiro site in Oklahoma. Additional project details are provided in a later chapter of this annual report (see Computer Services Program).

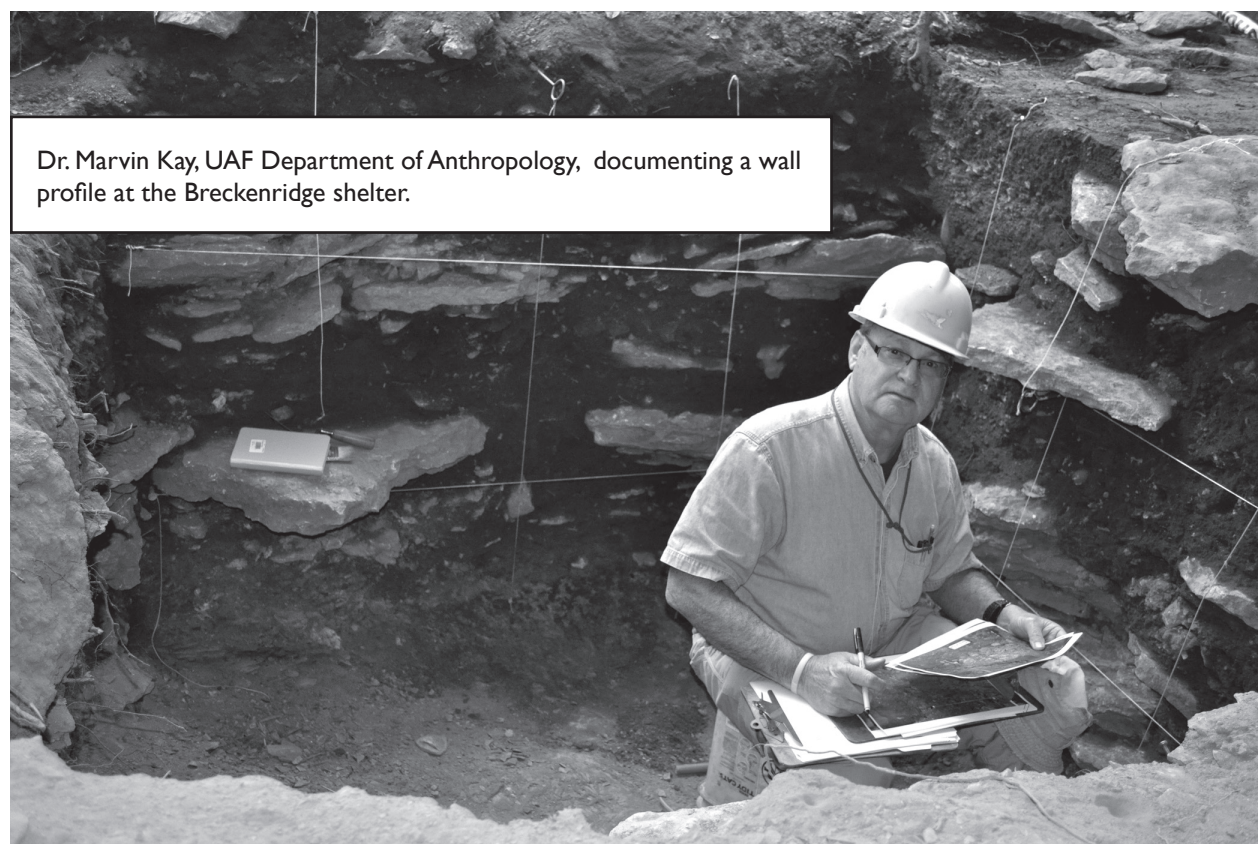
Digital Spiro Project

Sabo and Elizabeth Horton (AAS-TOL) teamed with several members of the Center for Advanced Spatial Technologies (CAST) at the University of Arkansas and outside collaborators (including James A. Brown, Northwestern University and Alex W. Barker, University of Missouri) to develop a project to create

protocols and implementation for 2D and 3D photogrammetric documentation and visualization of Spiro site artifacts that are preserved in the University of Arkansas Museum Collections and at other institutions. The long-range goal is to create a database of 2D and 3D images of all known artifacts from Spiro, suitable for a variety of educational and research applications. This project is undertaken with the support of the Caddo Nation of Oklahoma, who regard Spiro as a heritage resource. The first step in this long-term project was completion of a planning grant proposal submitted to the National Endowment for the Humanities.

Prairie Grove Project—Civil War Archeology

Hilliard continued to work on this project funded by the American Battlefield Protection Program. With assistance and cooperation from the Prairie Grove Battlefield State Park, he directed excavations at the William Rogers House site in the fall of 2011. The house is one of several mentioned in contemporary documents as having played a part in the 1862 Battle of Prairie Grove. Its general location was known, but the exact site needed to be identified, as no sign of the structure remained above ground. Limited investigations conducted previously (in January 2011) resulted in the discovery of an intact house site with artifacts suggesting a 19th century occupation. Only additional archeology could bolster the argument that this was indeed the William Rogers House.



Dr. Marvin Kay, UAF Department of Anthropology, documenting a wall profile at the Breckenridge shelter.

During two weeks in September and October, the field crew excavated eighteen 2 x 2 meter units. Survey staff were assisted by a number of Arkansas Archeological Society volunteers, whose contributions proved essential to the success of the project. Much of the house foundation had been displaced, but in situ foundation stones were discovered at the SW corner, and remnants of intact stone piers were found at the SE and NE corners. This and other evidence indicate an east/west or front/back dimension of 48 feet, with the north/south or side dimension of the house at 20 feet. A cellar was discovered to lie underneath the NW portion of the house, indicated by a preserved cellar floor and signs of an exterior cellar entrance. The house likely faced south toward a community road that linked the William Rogers home to the Fayetteville road and other area residents—the Hugh Rogers, Borden, and Morton families.

A majority of the artifacts were burned, supporting the historical note that the William Rogers House was destroyed by fire on the day after the battle. Diagnostic ceramics are all mid-19th century in age. Fired round balls, rifled bullets, two percussion caps, and a few fragments of artillery shell fragments were found inside the house footprint, around the house, and in and around an outbuilding discovered only 12 meters west of the house. All these details give a clear image of a house in the midst of heavy small arms and artillery fire, consistent with the written accounts of the battle as it raged around the William Rogers House.

Other work was completed in 2011 on the battlefield landscape at the locations of the Ada Post Office, the Hugh Rogers House, Borden House, Thompson House, Morton House, and the Fayetteville Road location. Hilliard and co-principal investigator Jami Lockhart wrote and prepared the final report for the National Park Service. Other Survey personnel who contributed during the project include Jared Pebworth, Mike Evans, Aden Jenkins, Devin Pettigrew, Duncan McKinnon, and Tim Mulvihill.

Breckenridge Shelter (3CR2)

Hilliard was senior archeologist for the Survey's ARPA permit to reexcavate 1961/62 units at the Breckenridge site, where Raymond Wood found deeply buried Early Holocene Packard and Dalton culture material. Wood's stratigraphic profiles were cleaned and re-mapped using modern digital technologies, and samples collected for radiocarbon and other specialized analysis. Removal of a balk separating two previously excavated units revealed an intact Dalton component directly above shale bedrock. This deposit produced diagnostic artifacts, animal bone, and ashy sediments that likely contain preserved plant material. A series of later overlying components was documented, each separated by debris from successive roof-fall events. Ongoing analysis is yielding new insights about early Holocene adaptations to Ozark environments. Dr. Marvin Kay (UAF Department of Anthropology) and his student Trevor Seekamp were project partners.

UAF Research Station — Academic & Service Activities

Teaching & Higher Ed

- **Anthropology Department.** Sabo taught ANTH 4813, *Ethnographic Approaches to the Past* (25 students); ANTH 500V, *Advanced Problems in Anthropology/Individual Study* (1 student); and ANTH 6033, *Society and the Environment* (6 students). He chaired 1 M.A. and 3 Ph.D. committees and was a member of 8 additional Ph.D. committees.
- **Environmental Dynamics.** Sabo represents the Anthropology Department and serves as Co-Director of the Environmental Dynamics interdisciplinary Ph.D. program in the Fulbright College of Arts and Sciences. He served on 1 Ph.D. committee in the ENDY program.
- **CAST & Fulbright College.** Sabo joined members of CAST (Center for Advanced Spatial Technologies) to develop a proposal for internal funding within Fulbright College of Arts and Sciences to produce 3D scanned imagery of select artifacts from the Spiro site housed in the UA Museum Collections, and an online “virtual museum” for improved accessibility to these world-class collections. The group also submitted a planning grant proposal to NEH for a project to develop and implement a database of 2D and 3D images of all accessible Spiro site artifacts.

Professional Service

- **Peer Review.** Sabo reviewed works for *Ethnohistory*, a proposal for National Science Foundation, and provided an external promotion and tenure faculty review for a regional university.
- **Book Reviews.** Sabo wrote a book review for *The Journal of Southern History*.
- **Conferences.** Sabo served as Organizer and Chair of a symposium (“The Carden Bottoms Project: Indians and Archaeologists Studying the Protohistoric Past”) at the 77th annual meeting of the Society for American Archaeology in Memphis.

Public Service & Outreach

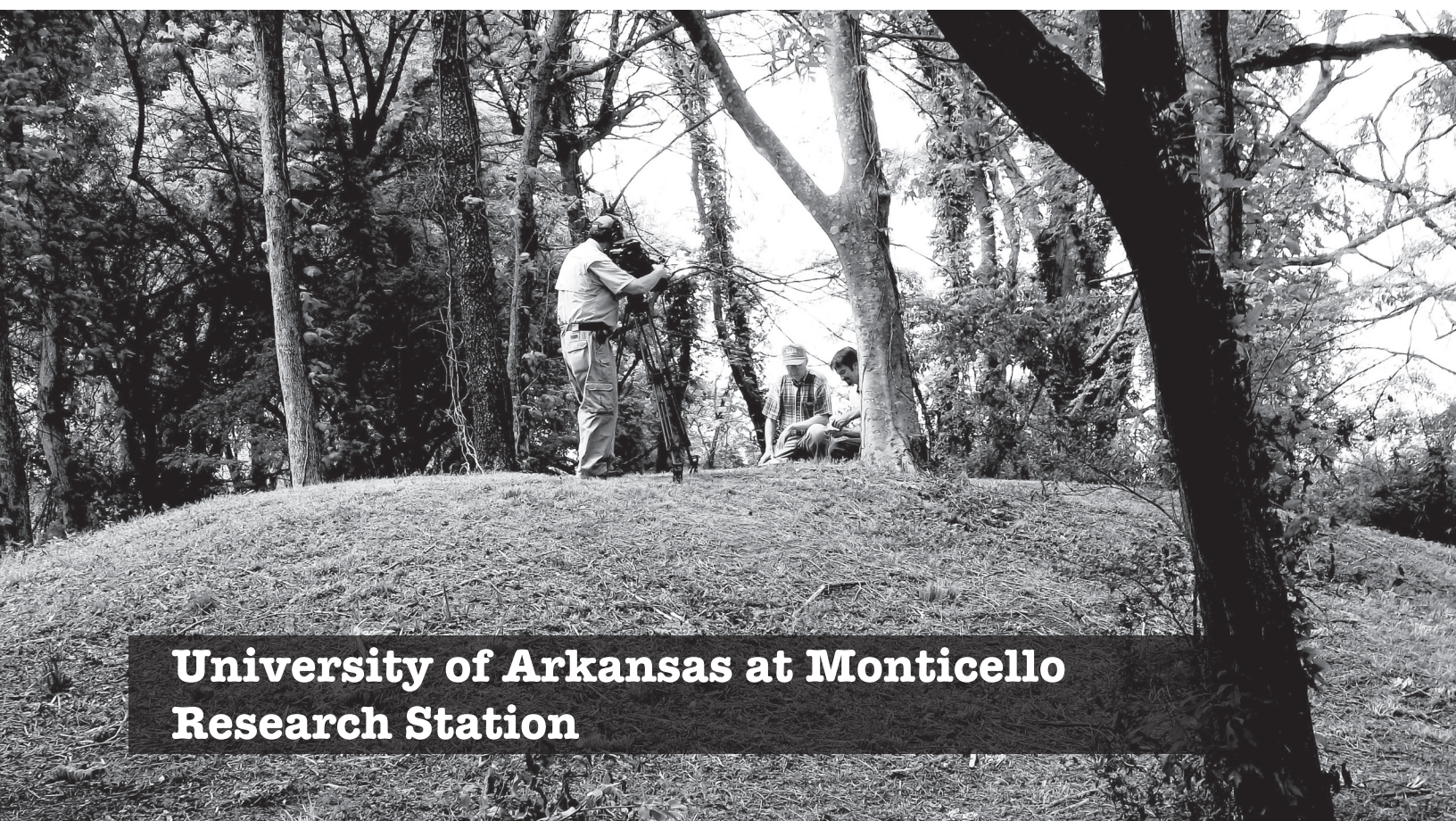
- **Presentations & Programs.** Sabo gave a public talk to the East Texas Archaeological Society (audience, 50), and a half-day training workshop to the Arkansas Master Naturalists (audience, 30). Hilliard and Jared Pebworth co-hosted an “Artifact Identification Day” at the Shiloh Museum in Springdale (attendees, 10). Hilliard gave public lectures at Prairie Grove Battlefield State Park (audience, 12) and the Searcy County Historical Society in Marshall (audience, 15).
- **American Indian Nations.** Sabo provided heritage preservation consultation services to the Caddo and Osage Nations and the Quapaw Tribe of Oklahoma. He continued his long-term service on the Caddo Heritage Museum Board of Trustees.
- **Chamber of Commerce Education Committee.** In January Hilliard led a tour of the Survey and Museum facilities for the Education Committee of the Fayetteville Chamber of Commerce. This had been arranged at the request of the committee Chair. UA Museum Collections staff Mary Suter and Nancy McCartney, and Survey staff Mike Evans and Brian Duncan also participated.
- **Local Law Enforcement.** Hilliard and Walker consulted with the Benton County Sheriff’s Office and met with Detective Kenneth Paul to help investigate a site where human remains had been reported.
- **Other Public Outreach.** Sabo assisted boy scout Sean Darden with development of an Archeology merit badge project on the art of the Carden Bottoms phase community; the resulting exhibit is on display in the UA Museum Collections facility. Sabo also continued maintenance of the *Indians of Arkansas* and *Rock Art in Arkansas* educational websites, updating content and adding new information about ongoing Survey research projects.

Service to the Arkansas Archeological Society

- **Presentations & Programs.** Sabo gave a public talk to the Central Mississippi Valley Chapter in Jonesboro (audience, 60).
- **Training & Certification Program.** Sabo taught an Indians of Arkansas seminar during the 2012 Training Program at Historic Washington State Park.
- **Ko-ko-qi Chapter.** Hilliard and Sabo participate in monthly meetings of the Chapter based in Fayetteville. Hilliard supports Chapter members who volunteer regularly in the lab and field.

Volunteer Hours

- Volunteers (Arkansas Archeological Society members, students, US Forest Service personnel, and members of the Osage Nation) contributed 268 hours to station research projects in the field and laboratory during 2011–2012.



University of Arkansas at Monticello Research Station

Lake Enterprise Mound (3AS379)

The Lake Enterprise Mound, in Arkansas County, is located on an ancient Arkansas River cutoff. It has been radiocarbon dated to about 1200 BC, making it the oldest known Indian mound in Arkansas, though much older mounds have been documented in nearby northeast Louisiana. Excavations at this small mound have produced “Poverty Point Objects” or PPOs and predominantly exotic lithics—both hallmarks of the famous Poverty Point culture centered in Louisiana—plus pit features and intricate microstratigraphy. Preserved plant remains from the mound excavations show no evidence of domestication. Marvin Jeter and a colleague, Katherine R. Mickelson (paleoethnobotanist at the University of Memphis) presented a paper at the 2012 annual meeting of the Society for American Archaeology on the interpretations about this site so far. The overall context and analyses of artifacts and other material remains suggest the site is part of a process of “balkanization” during or after the decline and fall of Poverty Point itself, only 50 km to the southeast.

Also this year filming took place at Lake Enterprise Mound (and at other sites in station territory) for an AETN documentary and DVD about the history, resources, and people of Bayou Bartholomew. Chuck Dovish, producer of AETN’s *Exploring*

Arkansas series, met with Dr. Curtis Merrell, Founding Director of the Bayou Bartholomew Task Force, Jeter, and Jessica Howe in the field in March to visit several archeological sites along the Bayou. Jeter was interviewed on film at the sites. The program was scheduled for broadcast in late 2012 or 2013.

The Mangum Site, Mississippi

A site tour led by Sam Brookes in 2005 led to resurrection of old “grey literature” and new information on the archeology and physical anthropology of the Mangum site in southwest Mississippi, a “necropolis” that had produced a Bird-Man repoussé copper plate in the 1930s. Located on the Natchez Trace Parkway, the site was tested in 1951 and intensively excavated in 1963–64, producing skeletal remains from about 100 individuals and another repoussé plate. As the findings had never been fully published, Jeter began a project to assemble, write, and edit a planned special issue of the journal *Mississippi Archaeology* devoted to the site. He and several colleagues have produced eight chapters for the volume, currently undergoing revision. Jeter presented a paper at the Southeastern Archaeological Conference, describing the site as having Coles Creek to Plaquemine cultural affiliation that was marginal to the main Mississippian “Southern Cult” interaction sphere.

The UAM research station is located on the University of Arkansas campus in Monticello, 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. At the opposite end of the time scale are the Taylor/Hollywood Plantation 1840s log house, a National Register site, and Lakeport Plantation in Chicot County, Arkansas's sole remaining pre-Civil War plantation mansion on the Mississippi Delta.

Marvin D. Jeter (Ph.D., Arizona State University, 1977) is the Survey's Research Station Archeologist for UAM, and Research Associate Professor of Anthropology, University of Arkansas–Fayetteville. He was UAM station archeologist from 1978 to 1983 and returned to the post in 1989 after serving as Director of the Center for American Archeology's Kampsville Archeological Center in Illinois for several years. His work in Arkansas has focused on the late prehistoric, protohistoric, and historic/contact periods in the Lower Mississippi Valley, but he has also studied the history of archeological exploration in that area and various aspects of African-American culture in the Southeast. Dr. Jeter plans to retire at the end of December 2012.

Jessica Howe (M.A., Southern Illinois University at Carbondale, 2011) is a native of Little Rock, Arkansas. She joined the Survey in August of 2008. She has been a member of the Arkansas Archeological Society since 2005, when she participated in the summer Training Program in Blytheville. She also had prior experience in Illinois, specifically at the Kincaid Mounds site in southern Illinois. This year she successfully defended her Master's thesis on the "Chicago Method" of excavation as applied at Kincaid and other sites.

A Look Back at Lewis Binford

Lewis Binford's 1962 article "Archaeology as Anthropology," published in *American Antiquity*, is usually cited as marking the beginning of the New Archeology, aka the Processual school and the Explanatory Period in the history of archeology. Almost forgotten is the fact that Binford introduced these concepts in an exchange with leaders of the then dominant Culture History paradigm at the Southeastern Archaeological Conference (SEAC) in Macon, Georgia, 50 years ago in December 1961. The tape-recorded proceedings of that conference were not published for another decade, and then only in an obscure format. Jeter presented a paper at the 2011 SEAC commemorating this historic exchange and offering some of his own afterthoughts. Lewis Binford had died just several months previous, making this an especially timely contribution.

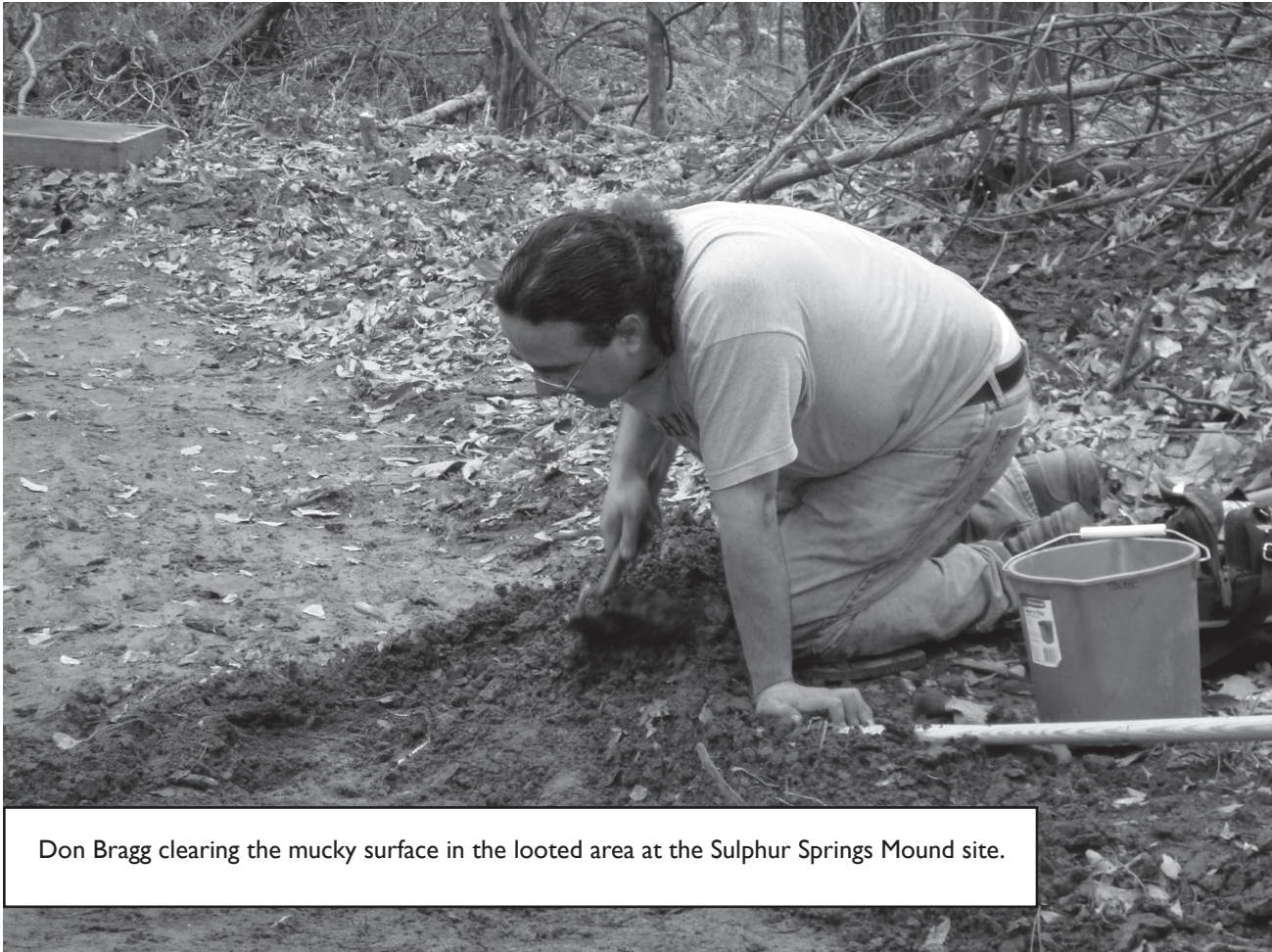
Mound-Builders of Arkansas

Jeter collaborated with Arkansas Archeological Society member Don Higgins on a coauthored article for *The Arkansas Archeologist* about the Rev. W. C. Stout, a nineteenth-century Episcopalian clergyman who wrote a lengthy essay on "The Mound-Builders of Arkansas." Stout's article was published over five days in 1880 in *The Arkansas Gazette*. Using his own

observations and available ethnohistoric literature (two of the Hernando de Soto accounts), Stout correctly attributed the mounds of the Mississippi Valley to the late prehistoric ancestors of historic Indian tribes. In this, he was ahead of Cyrus Thomas, the Smithsonian Institution archeologist who published the same conclusion in 1894, putting to rest speculations about a mysterious race of "mound-builders" who had been wiped out by the supposedly more "barbaric" Indians. Higgins and Jeter's article presents a reprint of Stout's complete essay, with commentary and updates on some of the sites mentioned. It appears in Volume 50 of the journal, published in late August 2012.

Bayou Bartholomew/Taylor House

Jeter has worked for years with Dr. Curtis Merrell, a Monticello citizen who founded the Bayou Bartholomew Alliance to pursue and promote local preservation issues. Most recently, the Alliance and other parties have cooperated with AETN and producer Chuck Dovish on a television documentary and DVD about the history, resources, cultures, and peoples of the Bayou. Jeter's contribution has included information, interviews, and leading the film crew to the significant archeological sites along the Bayou, including Lake Enterprise Mound (3AS379),



Don Bragg clearing the mucky surface in the looted area at the Sulphur Springs Mound site.

Henderson Mound (3AS100), Boydel Mound (3AS58), and Taylor Mounds (3DR2). The group also pursued fund raising for the film, and for renovation of the Taylor Log House (c. 1844), meeting with an architect who specializes in historic building projects.

Jeter was a member of UAM's Taylor House Committee, which developed a major grant proposal that was submitted by UAM Chancellor Jack Lassiter to the Arkansas Natural and Cultural Resources Council (ANCRC) for the Taylor House Site (3DR26) Project. The grant was approved (though at a reduced amount due to funding shortages) and will include funds for geophysical remote sensing at the property to be performed by Arkansas Archeological Survey personnel.

Borderlands Project

Several years ago Survey archeologists from the UAM, UAPB, and HSU research stations got together and discussed the possibility of cooperating to focus more attention on the parts of their station territories that bordered each other. These areas seemed to have received relatively less attention over the years, as fewer archeological sites were recorded. Some work was done, but due to other commitments a long term design for the project never came about.

This year, Jessica Howe worked with Vanessa Hanvey, assistant for the HSU station, to develop a coordinated research plan for the "Borderlands" region between the two stations. The first phase calls for research on existing records and revisiting the known sites in the area. In May, Howe, Hanvey and Mary Beth Trubitt (AAS-HSU) conducted test excavations at the Moccasin Creek site (3SA19).

Salvaging a Looted Site (3AS1)

In September 2011, Jessica Howe and Arkansas Archeological Society member Don Bragg visited the Sulphur Springs Mound site, on property now managed by RMK Timberland, Atlanta, Georgia, due to reports of looting activity. This most recent episode of looting had been going on for about a year and included systematic clearing of brush over a large area of midden and extensive digging, leaving large piles of backdirt full of artifacts. The site incorporates a mound that is about two meters high. Another site (3AS5) and smaller mound are nearby. After recording the extent of the damage, Howe contacted authorities and the Survey sought permission through the timber company, the Tunica-Biloxi Tribe, and an ARPA burial permit (there was evidence that looters might have disturbed a human burial) to conduct salvage excavations and clean up the mess.

Howe led excavations at the site in February and March, with assistance from other Survey archaeologists and Arkansas Archeological Society volunteers. Society members and students from Jeter's anthropology classes later helped wash and catalog artifacts in the lab. Results of this project were summarized in a paper for the fall meeting of the Arkansas Archeological Society.

Other Projects

Howe assisted at several projects in other station territories throughout the year. At the Toltec Mounds research station, she helped with an Arkansas State Police investigation, and was part of the Mound P erosion stabilization crew, investigations of the possible "new" Mound T outside the embankment, and assisted with testing at 3LN666.

Howe also worked with AAS-SAU archaeologists Jamie Brandon and Carl Carlson-Drexler at Wallace's Ferry near Helena, a Civil War battlefield project, and accompanied AAS-WRI archaeologist Leslie "Skip" Stewart-Abernathy in a revisit to the Sibley Chute Wreck, a riverboat site in an old channel of the White River in Desha County, within UAM station territory.

In addition to these and other projects, Howe was invited by David Dye (University of Memphis) to write a chapter about University of Chicago field school contributions to the Tennessee Valley Authority and WPA archaeology in Tennessee for a planned edited volume.



Volunteers washing artifacts from the Sulphur Springs Mound site.

UAM Research Station — Academic & Service Activities

Grants, Honors & Awards

- \$100,000 from Arkansas Natural and Cultural Resources Council to UAM for the Taylor House Site (3DR26) Project. Jeter is a member of the UAM Taylor House Committee. The grant includes \$8000 for geophysical remote sensing to be performed by the Arkansas Archeological Survey.

Teaching & Higher Ed

- Jeter taught ANTH 2203 Cultural Anthropology (12 students) and ANTH 2223 World Prehistory (3 students) during the Spring 2012 semester at UAM.
- Jeter provided comments on a dissertation proposal for a Survey employee pursuing a degree from SIU.

Professional Service

- Jeter served as Chair of the Survey's Promotion Committee.
- Jeter was an invited discussant at the Symposium on Colonial and Post-Colonial Ceramics, Natchez, MS, November 2011.

Public Service & Outreach

- **Presentations & Programs.** Jeter and Dr. Curtis Merrell were bus tour guides for members of the Arkansas Master Gardeners during their annual meeting (participants, 50). Jessica Howe arranged a program on archeology for a regional Cub Scout Twilight Camp.
- **Bayou Bartholomew Task Force.** Jeter was named a member of the Task Force, along with co-chairs Dr. Curtis Merrell (Founding Director of the Bayou Bartholomew Alliance) and Mr. Zach McClendon (CEO, Union Bank, Monticello). The Task Force held meetings with UAM Chancellor Jack Lassiter and other community leaders, resulting in a successful grant application for work at the Taylor House Site.

Service to the Arkansas Archeological Society

- **Presentations & Programs.** Jeter, Howe, and Melissa Zabecki co-presented a public talk to the Tunican Chapter.
- **Training & Certification Program.** Howe served as excavation area supervisor during the Training Program at Historic Washington State Park. She also assisted Society member Don Bragg with excavations at 3AS385 in the Crossett Experimental Forest, as part of Bragg's Certification Program project.
- **Tunican Chapter.** The station advises and supports the activities of the Southeast Arkansas Tunican Chapter. Jeter served as corresponding secretary and program chair, making arrangements for guest speakers at monthly meetings. Howe served as Chapter treasurer and made some speaker and logistical arrangements. Jeter and Howe provided information for the Chapter newsletter, edited by Chapter member Hope Bragg.

Volunteer Hours

- Volunteers contributed 181 hours to station research projects in the field and laboratory during 2011–2012.

UAM, UAPB, and HSU stations cooperated, with volunteer help from Arkansas Archeological Society members, in excavations at 3SA19 as part of the “Borderlands Project,” an effort to learn more about the archeological resources in the area where these station territories border each other. Left to right, Don Bragg (volunteer), Jessica Howe (AAS-UAM), Vanessa Hanvey (AAS-HSU), and Chester Shaw (volunteer).





University of Arkansas at Pine Bluff Research Station

Wallace Bottom

Wallace Bottom in Arkansas County dates to the Colonial period of Arkansas history, 1673–1804. Following the site's discovery in 1998, the UAPB station carried out field studies over several years from 2001 to 2006. These projects included geophysical mapping, systematic surface collection in the cultivated field, systematic bucket auger sampling on the wooded lake bank, and small-scale excavations. The Quapaw Tribe of Oklahoma sponsored the 2003–2004 work as part of the “Cooperation Then and Now” project funded by a National Park Service tribal historic preservation grant. Research results at Wallace Bottom support identifying the site with the late 1600s Quapaw village of Osotouy and the 1719–1749 French Arkansas Post.

Since 2006, the emphasis in Wallace Bottom research has turned to analysis and writing. Through the 2011–2012 fiscal year, House completed the draft of an article, “Native American Material Culture at the Wallace Bottom Site, Southeast Arkansas,” which has been submitted to a regional journal. The article reports the Native American assemblage from the Wallace Bottom site and places the artifacts in the context of protohistoric and colonial era archeology in the Midcontinent, addressing Deghia Siouan migration narratives that derive the Quapaws from the Ohio Valley. In November, Mary Farmer

presented House's paper, “Native American Ceramics at the Wallace Bottom Site, Southeastern Arkansas” at the Colonial and Post-Colonial Ceramics of the Mississippi Delta conference held in Natchez, Mississippi.

Fourche Island

The Thibault Plantation locality adjacent to the Little Rock Port Industrial Park in Pulaski County continued to be a major research focus in 2011–2012. This activity is part of the Survey's ongoing response to accelerating impacts on cultural resources from residential, commercial, and industrial development in the Little Rock area. In the 1870s and 80s, plantation owner J. K. Thibault excavated pottery vessels from a number of small mounds on his farm. Portions of the collection were donated and loaned to the Smithsonian Institution in 1883 and were among the materials reported by W. H. Holmes in his 1886 article, “Ancient Pottery of the Mississippi Valley,” in the *4th Annual Report of the Bureau of American Ethnology*.

From fall 2007 through spring 2010 the Survey conducted fieldwork on both the Thibault site (3PU1) and the adjacent Isgrig site (3PU15). This work (surface reconnaissance, systematic shovel testing, archeogeophysical remote sensing, and sustained excavations) was carried out under the general direction of House with the assistance of numerous Arkansas

The Pine Bluff research station is located on the UAPB campus. The station archeologist teaches courses in the UAPB Department of Social and Behavioral Sciences. The station is responsible for the archeological resources of 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 archeological heritage of the area includes sites representing the entire temporal sequence, from 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, 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 archeologist 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.

Mary Farmer returned to the Survey in a half-time position as UAPB station assistant in 1999 after a five-year hiatus. She had retired from her previous position as UAPB station secretary in 1994 after 17 years of service. She is a life member of the Arkansas Archeological Society and veteran of the Training Program. She has studied historic and prehistoric sites in Arkansas over many years, with special interests in historic domestic artifacts and prehistoric ceramics.

Archeological Society members and other volunteers. Fall 2008 work on the north end of the Isgrig site, owned by Welspun Tubular, LLC, resulted in identification and excavation of prehistoric Native American graves and cultural features dating between AD 1400 and 1600. Work on the portion of the Isgrig site lying south of Thibault Road ("Isgrig South") ensued in spring 2009, with extensive plowzone stripping and removal of additional Native American graves. In September 2009, the Survey resumed excavations on the north end of the Isgrig site with the goal of locating and removing any remaining burials in the event that the company might need the location for industrial facilities. Nine graves containing remains of ten human individuals were excavated along with grave goods including pottery vessels and, in one grave, a cluster of 15 arrow points that may represent a quiver of arrows.

Laboratory work and specialized studies of human remains, and botanical specimens ensued in 2010 and 2011. Five samples from the north end of the site, on the Welspun tract, were sent to Beta Analytic, Inc., Coral Gables, Florida for radiocarbon assay, with resulting dates falling between the mid-1400s and early 1600s. Pottery styles and the absence of any European trade goods at the site support a date toward the earlier end of this time range.

Isgrig fieldwork, laboratory work, and special analyses were supported by grants from Arkansas Natural and Cultural Resources Council, administered by Arkansas Department of Natural and Cultural Heritage. Excavation of graves and

removal of human remains were authorized by permit issued by Arkansas Historic Preservation Program and carried out in consultation with the Quapaw Tribe of Oklahoma.

Work at the Thibault site in 2008–2009 included test excavation in two mounds plus identification of a historic grave in a wooded tract that was suspected to be an abandoned African American cemetery mentioned in family oral history and in a 1942 *Arkansas Gazette* feature article.

In a meeting with the owners of the Thibault site in fall 2011, the Survey agreed to conduct further investigations in the suspected cemetery area to determine whether additional graves are present. In February, House joined Survey Director Thomas J. Green, Mike Evans, and others in creating a grid system in the wooded tract. Concurrently with the gridding, probing revealed the presence of 27 below-surface "soft spots" consistent in size and orientation with historic graves. House returned in March to conduct intensive, systematic probing in two sample blocks within the area. This revealed an additional 11 probable graves. Taken together, these archeological results confirm the presence of an extensive cemetery as opposed to simply an isolated grave.

House met with the current owners of the Thibault site and Jessica Crawford and George Lowry of the Archaeological Conservancy in April to discuss prospects for the Conservancy acquiring two small tracts within the site to create a permanent archeological preserve. The owners of one of the tracts are still considering the Conservancy's proposal but, on the last day of



Elizabeth Horton (left), Jessica Howe (with meter stick), and students profiling Mound A at the Baytown site, 3MOI.

the fiscal year, the owner of the other tract informed the Survey of the imminent sale of the tract and recommended that salvage excavation on the tract, including a prehistoric mound, be carried out as soon as possible. House began gridding and shovel testing on the tract in July.

Meanwhile, during spring 2012, Mary Farmer updated curation on the Isgrig specimens collected from 2007–2010.

Mississippian Effigy Pottery

In January, House resumed study of prehistoric Mississippian effigy pottery vessels. An earlier phase of this project involved research visits to the Peabody Museum, Harvard University and resulted in the publication of House's 2003 book, *Gifts of the Great River: Arkansas Effigy Pottery from the Edwin Curtiss Collection, 1879–1880*. In January, House made two visits to the Hampson Museum State Park in Wilson, Arkansas to photograph and record effigy vessels there. The Hampson Museum vessels, which are primarily from archeological sites along the Mississippi River, add to the geographic scope of House's effigy investigations. The Peabody Museum specimens

studied previously are from the St. Francis River region. House presented results from the current effigy research at the Society for American Archaeology annual meeting in Memphis.

Prairie County Reconnaissance

The White River lowland is one of the least explored portions of the UAPB station territory in terms of archeology. In November and December, House made two visits to Des Arc in Prairie County accompanied by Bob Weatherly of Des Arc and Gale Stewart of Little Rock, formerly of Des Arc.

The purpose of the first visit was to follow a lead to a prehistoric Indian site on Lost Hill, an insular Pleistocene terrace remnant in the White River floodplain. Lost Hill corresponds generally to the location and description given by C. B. Moore for "Mounds Near Chandler Landing" where he excavated in 1910, recovering remarkable objects such as stone pipes and a crystal boatstone. Following a lead from a local resident, House, Weatherly, and Stewart examined an overgrown pasture on the north side of Lost Hill. Here they recovered a small number of artifacts, including a grog-tempered pottery sherd, from a small

unvegetated area. At this time they also visited the adjacent and abandoned Lost Hill Cemetery.

Returning to Des Arc in December, House went to the Clerk's Office in the Prairie County Courthouse in Des Arc to examine the tax records for 1910, the year of Moore's explorations on White River. It was determined that E. W. Grove of St. Louis, the owner of Chandler Landing Mounds identified by Moore, owned land on Lost Hill, including the site recorded in November. Grove, however, owned many hundreds of additional acres in the vicinity, including the Riedhar site (3PR68), another possible candidate for Moore's Chandler Landing.

On the December visit, Weatherly and House made an intensive surface collection from the Sanner-Ferguson site (3PR22), which had been originally recorded in 1972. This collection indicated the presence of Woodland and Mississippian components and the presence of human remains.

The Baytown Site, 3MO1

The Baytown site on Indian Bay in Monroe County consists of at least nine prehistoric mounds. Mound A, the largest, is located on the bank of Indian Bay and is more than 4 m in height. The Baytown site was investigated by Edward Palmer of the Smithsonian in 1881 and again by the Central Mississippi Valley Archaeological Survey in 1940. In the CMVAS report volume published by Harvard University's Peabody Museum in 1951, Baytown Mounds was selected as the type site for the Baytown period, one of the major Lower Mississippi Valley chronological divisions.

At present, much of the Baytown site is federally owned as part of White River National Wildlife Refuge. Other portions of the site, however, including the northwest edge of Mound A, remain in private ownership. In December, House was informed that the privately owned portion of Mound A had been cut into to create a level building site for a new home in the Indian Bay community.

In January, House and Toltec Mounds Station Archeologist Elizabeth Horton visited the Baytown site to inspect the impacts to Mound A. They found a vertical cut some 11 m in length and as much as 1.2 m in height along the edge of the building site. While on the site, House and Horton examined the face of Mound A along Indian Bayou and noted toppled trees and other indications of rapid bank line erosion and collapse. They also noted prehistoric midden in the exposed face. These observations were reported to White River Refuge. Discussions with the U.S. Fish and Wildlife Service Regional Archeologist's Office in Savannah, Georgia have been initiated to address prospective measures to slow or halt the ongoing damage.

Following the January visit, House contacted the owner of the house site adjacent to Mound A and secured permission to clean and record a stratigraphic profile on the vertical cut. House and Horton returned to the Baytown site in March accompanied by UAM station assistant Jessica Howe and students from Horton's UALR archeology class. In addition to

cleaning and recording the stratigraphy in the cut, they used a soil probe and bucket auger to explore the undisturbed deposits below the cut. From this they learned that loaded mound fill extends more than a meter below the bottom of the cut, overlying dark, artifact-rich midden. The midden appears to represent occupation on the natural ground surface pre-dating construction of the mound. This result also indicates that the mound is at least a meter taller than was previously realized and that the "footprint" and total cubic meters of fill comprising the mound are many times greater than previously realized.

The primary occupation of the Baytown site is between AD 400 and 900, contemporary with the major occupation of Toltec Mounds. The Baytown site was placed on the National Register of Historic Places in 1976.

Reconnaissance on Bayou Meto

In May, House accepted an invitation from a landowner to conduct surface investigations on his farm along Bayou Meto near Humphrey in Arkansas County. On an initial visit, House recorded site 3AR228, with Archaic and Woodland components, and photographed artifacts in the landowner's collection. House returned later to make a controlled surface collection at the Crum site (3AR67) where he had previously made an intensive collection in 1979. The controlled collection consisted of 10 contiguous 10 x 10 m blocks from which all surface material was collected. The bulk of the collected material represents Archaic occupation and includes fire-cracked sandstone, chert, and quartz plus Big Sandy dart points and other chipped lithic items. Small plain, leached, shell-tempered pottery represents later Mississippian occupation. The character of the pottery plus a Sequoyah type arrow point in the 1979 collection supports assigning the Mississippian component to the AD 1100–1400 interval. This is a particularly little known portion of the Arkansas River Lowland's prehistoric sequence.

Wilson Collection

Over the past 30 years and more, Mike Wilson of Jacksonville has systematically collected prehistoric Indian artifacts from two sites on his property along the Bayou Meto in the outskirts of Jacksonville. Wishing to share his discoveries with the community, Mr. Wilson had collaborated with the staff of Esther Dewitt Nixon Library, Central Arkansas Library System, in preparing an exhibit of his artifacts in the lobby of the library, located on Main Street in Jacksonville. In August 2011, House met with Mr. Wilson, Dorothy Meeks, and Keith Martin from the Arkansas State Parks Program Office, Central Arkansas Library System Director Bobby Roberts, and HSU station archeologist Mary Beth Trubitt to discuss prospects for updating the exhibit. The meeting resulted in an agreement that House take charge of the process; the exhibit would occupy four newly constructed glass cases in the library lobby.

The following month, artifacts collected from one of the sites (3PU752) were transferred to the UAPB station where they were labeled with the site number by Mary Farmer. In

the spring House began designing the case, highlighting the sequence of prehistoric cultures in the Jacksonville area. This included photographing sorted groups of dart points and consulting with Survey colleagues on type assignments and ages of the specimens. House returned the sorted artifacts to Mr. Wilson in July 2012 along with labels allowing him to prepare a preliminary version of the first exhibit case.

The sites on Mr. Wilson's land on Bayou Meto span as much as 11,000 years of prehistory.

Other

House joined Jessica Howe and others in salvage and testing at the Sulphur Springs Mound (3AS1) in Ashley County, and Elizabeth Horton and others in emergency salvage at the Hoskyns site (3LN666) in Lonoke County.

Farmer numbered and made a list of nineteenth and early twentieth century bottles from the historic Pine Bluff riverfront. The bottles, collected from downtown construction sites by laypersons, had been donated by the Pine Bluff- Jefferson County Historical Museum.

Selected Archaic points from site 3PU752 near Jacksonville, part of the Wilson Collection.



UAPB Research Station — Academic & Service Activities

Teaching & Higher Ed

- House taught SOCI 2330, Introduction to Anthropology (78 students) during the Fall and Spring semesters at UAPB.
- During Fall 2011, House participated in training for Blackboard virtual teaching and learning management technology at UAPB, and created an online course page for the Introduction to Anthropology class. Enrolled students may access Blackboard for assignments, study materials, lecture notes, and supplementary web content including short videos.
- House serves on the doctoral committee for a student pursuing his degree in anthropology at SIU.

Professional Service

- **Peer Review.** House reviewed works for the University of Memphis Department of Earth Sciences, Reports of Investigations series.

Public Service & Outreach

- **Programs & Presentations.** House gave public talks to the Three Rivers Chapter of Arkansas Audubon Society (audience, 15), the Pine Bluff-Jefferson County Historical Museum (audience, 10), and the Stuttgart Rotary Club (audience, 50). He led a tour of the Menard-Hodges site, Osotouy Unit, Arkansas Post National Memorial for the Archaeological Conservancy's "Peoples of the Mississippi Valley" tour (25 participants).
- **Public Schools.** House served as Humanities Scholar for the project "College Tour 2012," an initiative funded in part by Arkansas Humanities Council. As part of the project he presented a talk on Careers in Archeology to 30 students from Jack Roby Middle School (Pine Bluff District).
- **Historic Cemetery Preservation Initiative.** House visited and documented McCreanor and Walnut Grove cemeteries in Lonoke County, Haven of Rest Cemetery in Pulaski County, Chism Cemetery in Monroe County, and Lost Hill Cemetery in Prairie County. He continued as Humanities Scholar for Gamble, Asbury, and Magnolia cemeteries in Phillips County and Walnut Grove Cemetery in Lee County.
- **Consultations.** The Quapaw Tribe of Oklahoma, on matters regarding preservation of prehistoric Native American graves in Arkansas; the National Park Service and Arkansas Post National Memorial, on proposals to form a Friends of Arkansas Post National Memorial group; City of Little Rock Police Department, on the search for possible human remains related to a criminal investigation in Lonoke County (with Survey colleagues Elizabeth Horton and Jessica Howe).
- Mary Farmer assisted Ouachita National Forest District Archeologist Diana Angelo with processing a backlog of flotation samples in Hot Springs.

Service to the Arkansas Archeological Society

- **Training & Certification Program.** Mary Farmer gave an evening program to participants in the 2012 Training Program at Historic Washington State Park (audience, 40). Farmer assisted Lab Supervisor Mary Ann Goodman in running the field lab during the Training Program.
- **Volunteer Opportunities.** The station has Lab Days which Society members and other volunteers may attend to work on processing, cataloging, and basic analysis. Volunteers also are welcome to assist station fieldwork.

Volunteer Hours

- Volunteers contributed 10 hours to station research projects in the field and lab during 2011–2012.



University of Arkansas - Fort Smith Research Station

Drennen-Scott Historic Site Project

Excavations continued in the backyard of the Drennen-Scott House during two fieldwork sessions from September 15–24, 2011 and from March 25–April 20, 2012. Both sessions included University of Arkansas - Fort Smith students taking an Introduction to Archaeology class. As part of the class, students get a hands-on introduction to archeological fieldwork, rather than just learning about it in the classroom. The second session was continued for a few weeks so that local Arkansas Archeological Society members could also participate in the excavations.

As more units are excavated, the history of the backyard over the last 170 years, in terms of outbuildings and activity areas that have come and gone, is slowly being pieced together. Three foundation corners of one of the outbuildings have now been located in association with intact 19th century deposits. The building is approximately 16 feet square and the original framed structure that sat on these foundation stones may now be a part of the main house. These foundations were buried, and so preserved, in an attempt to level off part of the backyard. In addition, a small section of a stone-lined drain was discovered at the original ground surface, approximately 60 cm (2 feet) below the present ground surface. Further excava-

tions will reveal the starting and ending points of this drain, its overall function, and clues to the function of the structure and other nearby structures as indicated by the geophysical survey conducted in 2006.

A metal detector survey was conducted February 2, 2012 on the bluff overlooking the Arkansas River searching for any possible Civil War activity on the property. Union troops took control of Van Buren in December 1862 and there were exchanges of cannon fire across the Arkansas River. Given the location of the Drennen house above the ferry landing, it is possible that skirmishes or other action occurred on the property at that time. The metal detector survey did not turn up any Civil War period artifacts, but further work is needed in areas that are currently overgrown with brush. The survey was conducted with the help of Survey employees Jared Pebworth, Mike Evans, Aden Jenkins, and Devin Pettigrew.

Mapping Projects

Tim Mulvihill began or completed several mapping projects during the year using the Topcon Imaging Station. The projects were in different parts of the state and involved helping other research stations with their research and basic recording of archeological sites. It is more important than ever, with the

The 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 House 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 Mississippian period archeology, site survey methodologies, and mapping.

Elizabeth Casanova (part-time lab assistant) is a UAFS undergraduate student majoring in Biology and minoring in Anthropology. She attended the 2012 Arkansas Archeological Society/Survey Training Program as part of a class through UAFS. She also participated in a Maymester class through UAFS, conducting mapping and geophysical survey at the Huaca Pucllana site in Lima, Peru.



Stone-lined drain at the Drennen-Scott Historic site.

increase in site destruction throughout Arkansas, to create three-dimensional records of sites before they completely disappear. Often there is little or no notice prior to the destruction of sites that were once thought to be relatively safe from harm.

Mulvihill assisted with the partial mapping of Prairie Grove Battlefield State Park as part of a larger project by the Survey. He also assisted Michelle Rathgaber and Marion Haynes of the Blytheville research station in mapping the Chickasawba site (3MSS) in Mississippi County. A day was spent assisting Vanessa Hanvey with mapping the Moccasin Creek Mound site (3SA19) in Saline County. A map was also begun on the Dooley's Ferry entrenchments (3HE39) in Hempstead County on June 14.

Mulvihill was also involved in two mapping projects in Oklahoma. The first involved creating a new map of the Spiro site (34Lf46) using the Topcon IS in robotic mode. This is part of a continuing cooperative project by the Arkansas Archeological Survey, the Oklahoma Archeological Survey, and the University of Oklahoma focused on broad-scale geophysical survey and high-accuracy mapping of the site. To date, the geophysical survey and mapping covers more than 22 hectares (just over 54 acres). The second project involved mapping the Dwight Mission site north of Sallisaw in preparation for a proposed geophysical survey at the request of

the site historian. The purpose was to help find the original building locations of the Mission, which was



Teaching the Mapping Seminar at the 2012 Arkansas Archeological Society and Arkansas Archeological Survey Training Program at Historic Washington State Park.

established in 1829. Arkansas Archeological Society members Bob Dalton and Phil Hayden helped with this project and have completed much documentary research on this early settlement in Oklahoma.

Dora Area

A landowner in the Dora, Arkansas area contacted the UAAS research station during the fall of 2011. They knew of several sites on their property that they wished to have recorded and to learn more about. Mulvihill made a visit to the sites in early 2012 and began collecting information about the sites, which included both prehistoric and late 19th/early 20th century historic occupations. Plans were made with the landowner to come back to the sites during the fall and winter of 2012–2013 to collect more information about these sites. Station archaeologists are often contacted by landowners concerning sites located on their property.

Pruitt Site Investigations

Most of the work on the Pruitt site (3LO769) this year involved the final processing of the artifacts in the lab by Elizabeth Casanova, part-time lab assistant. Casanova now has all of the artifacts cleaned, numbered, and sorted in preparation for writing a final report.

Other Projects

Mulvihill assisted other research stations with various projects, including:

- excavations at Carden Bottoms (3YE25) as part of the Central Arkansas River Valley project directed by George Sabo III and Jami Lockhart.
- grid survey and excavations as part of the Palisade Project at the Parkin site (3CS29), directed by Jeffrey Mitchem.
- grid survey at the Chism House (3LO946), for Larry Porter (AAS-WRI research station).

UAFS Research Station — Academic & Service Activities

Teaching & Higher Ed

- Mulvihill taught the fieldwork portions of ANTH 2203, Introduction to Archaeology (43 students) at UAFS during the Fall 2011 and Spring 2012 semesters, and coordinated ANTH 490v, Special Topics (1 student) at UAFS during the Summer 2012 semester. He also contributed a guest lecture to the spring Introduction to Archaeology class.

Public Service & Outreach

- **Presentations & Programs.** Mulvihill joined other Survey archeologists Jared Pebworth, Michael Evans, Aden Jenkins, and Devin Pettigrew to present a demonstration of prehistoric technology at the Arkansas River Valley Nature Center (audience, 45). He gave a talk to the Crawford County Genealogical Society (audience, 15), led site tours at The Narrows rock shelter for Leadership Crawford County (participants, 24) and at the Drennen-Scott Historic Site for the Historic Preservation Alliance of Arkansas (participants, 47).
- **Public Schools.** Mulvihill participated in Career Days at Alma Middle School with eight presentations (130 students).
- **Archaeological Conservancy.** Mulvihill continued to coordinate and assist clean-up at the Cavanaugh Mound in Fort Smith, owned by the Conservancy.
- **Media Outreach.** Mulvihill created and administered a Facebook Page for the research station.

Service to the Arkansas Archeological Society

- **Presentations & Programs.** Mulvihill gave public talks to the Ark-Homa (Fort Smith) and Tunican (Monticello) Chapters (combined audiences, 25).
- **2011 Annual Meeting.** The Annual Meeting was hosted by UAFS and the Survey's UAFS research station. Mulvihill helped with arrangements and led a site tour to Cavanaugh Mound for participants.
- **Training & Certification Program.** Mulvihill helped supervise excavations and taught the Mapping Seminar during the 2012 Training Program at Historic Washington State Park.
- **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 2011–2012. The station hosts monthly lab session for Chapter members, and provides fieldwork opportunities for volunteers.

Volunteer Hours

- Volunteers contributed 56 hours to station research projects in the field and laboratory during 2011–2012.



Winthrop Rockefeller Institute Research Station, Morrilton

Petit Jean Mountain & Carden Bottoms

The Station and the Arkansas River Valley Chapter of the Arkansas Archeological Society continued a variety of ongoing projects on Petit Jean Mountain and vicinity. These include documentation visits and research on rock art sites and historic farmsteads. Larry Porter visited newly recorded rock art sites on the Mountain with local volunteer Don Higgins. He also participated in the fieldwork directed by UAF station archaeologist George Sabo at Carden Bottoms (3YE25) as part of the Survey's NEH-funded Central Arkansas River Valley project.

The Cherokee in Arkansas

The WRI Station and the Arkansas River Valley Chapter continued to work on the Cherokee project. Although fieldwork was minimal, Leslie Stewart-Abernathy continued analysis of material from the September 2010 trip to the Oklahoma Historical Society archives in Oklahoma and included information on Old Settler Cherokee in his talk to the Arkansas Archeological Society annual meeting in September 2011. He also provided informal consultation on further mitigation work by Drew Buchner of Panamerican Consultants, Inc. at 3PP449 and other Old Settler Cherokee Period sites in South New Hope Bottoms, Pope County.

Shumaker Site 3PP164

Pope County Deputy Sheriff Sean Harris heard that this shelter had been disturbed, and then recovered human remains. Stewart-Abernathy and Porter visited the site in May, along with officers from the Pope County Coroner's office, the Sheriff's office, and Office of Emergency Management. This previously recorded site consists of what was formerly a very long (at least 75 m) and deep (at least 15 m from the drip line to the back wall) shelter with substantial midden development. Most of the occupation area of the shelter is buried by sandstone slab roof fall.

Currently the only exposure of midden is along the apparent back wall, but in fact the actual back wall is mostly buried. Unscientific digging has taken place in four areas along the apparent/false back wall. The Native American deposit is at least 8 m deep under the rock falls. The back wall of the shelter has only barely been approached. Examination of backdirt indicates excellent preservation, including deer mandibles, turtle carapaces, and also the possibility of perishables represented by a piece of split cane. The floor of the shelter has not been reached. Steps were taken that might help preserve the site in the future.

The 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 is responsible for archeological resources 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.

Leslie Stewart-Abernathy (Ph.D., Brown University, 1981) is the Survey’s Research Station Archeologist for WRI, and Research Professor of Anthropology, University of Arkansas–Fayetteville. He joined the Survey in 1977 as UAPB station archeologist and moved to ATU as station archeologist in 1989. In 2007 the ATU research station moved to WRI. He is a graduate of Jonesboro High School and Arkansas State University. His specialties include method and theory of historical archeology, historical archeology of Arkansas and the eastern United States, material culture (both industrial and pre-industrial), and the archeology of riverine watercraft.

Theresa Johnson (B.A. in Anthropology, 1978 & M.A. in Folk Studies, 1983, Western Kentucky University) began working with the Survey as half-time assistant at the ATU (now WRI) research station in 1991. That same year she also took on a part-time position as education coordinator at the ATU Museum of Prehistory and History.

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 an assistant at the ATU (now WRI) research station. His interests include the prehistoric Woodland and Mississippi periods of the northern Ouachita Mountains and Petit Jean River Valley, as well as early historic settlement in Arkansas. He is an accomplished artist whose depictions of archeological subjects have appeared in publications and museum exhibits.

African-American Cemeteries

The WRI research station continued to assist with documentation of these important locations. Cemeteries recorded by Stewart-Abernathy included Mt. Zion Cemetery in Conway County and Mountain Grove Cemetery in Faulkner County. The staff also continued processing over 80 site forms generated by a guided tour of the Bold Pilgrim Community in Faulkner County in 2008.

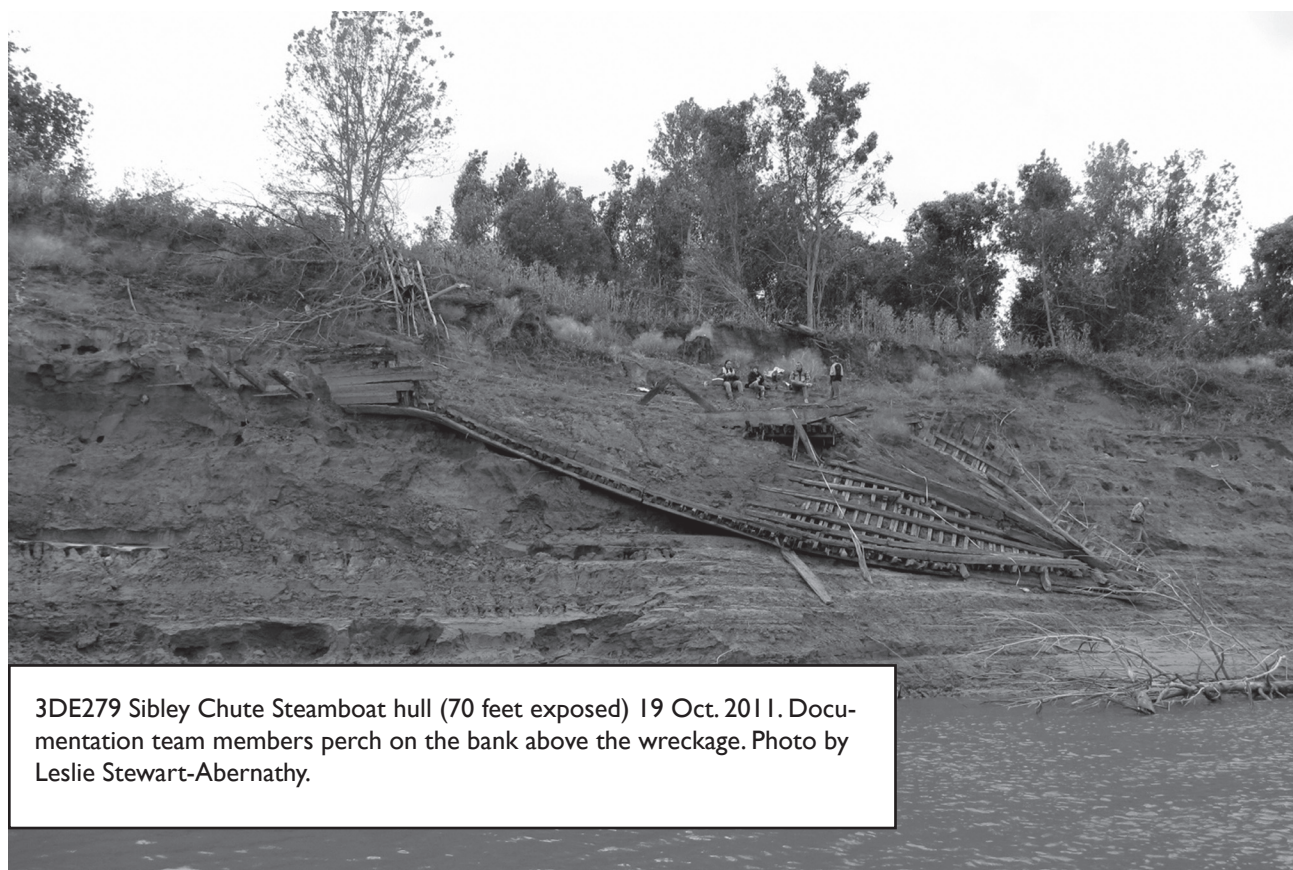
Porter recorded two historic cemeteries in Logan County. One, in northeast Logan County, is an African-American cemetery dating to around the turn of the twentieth century. The other is a small mid-nineteenth century family plot associated with the nearby Chism House (3LO956).

Stewart-Abernathy was an invited speaker on the above-ground archeology that can be carried out at these cemeteries, during the annual Preservation of African American Cemeteries conference in Fort Smith.

Logan County Research Projects

Porter continued to monitor the Wild Violet site (3LO226), making surface collections as catastrophic erosion continues, and reporting results of the 2009 excavation and subsequent developments. He assisted the USACE Little Rock District archeologist with collecting human remains dislodged by floodwaters at the site. Survey Director Dr. Tom Green and Porter prepared a grant proposal for major fieldwork to recover as much as possible before the site is inevitably lost to erosion and looters.

Porter also continued documenting the restoration of a two-story central open passage (dogtrot) log house built by the Chism family in the 1840s in Chismville. In May 2011 he did limited excavation of a geophysical anomaly at this property. Results of the project so far have been shared with the community via talks to the Logan County Historic Preservation Society and the Arkansas Archeological Society.



3DE279 Sibley Chute Steamboat hull (70 feet exposed) 19 Oct. 2011. Documentation team members perch on the bank above the wreckage. Photo by Leslie Stewart-Abernathy.

Sibley Chute Wrecks, 3DE279 and 3DE280

Stewart-Abernathy remains closely involved with monitoring and documenting the wreckage in Sibley Chute at the lower end of White River, a channel of the Mississippi River on the Arkansas side opposite Rosedale, MS. Stewart-Abernathy presented a paper about the site at the annual meeting of the Lower Mississippi River Conservation Commission in Memphis—which had been scheduled for June but was postponed till August due to the fight against the record-breaking April–May 2011 flood on the Lower Mississippi. The river reached about 40 feet on the gauge at Arkansas City, putting the wrecks at least 30 feet underwater and highly vulnerable to further exposure and destruction.

The site was monitored as the water went down in the summer into early fall. Stewart-Abernathy led a third revisit to the site on 19 October, this time by land guided by Mike Staten, wildlife biologist for Anderson-Tully, the forest management firm that owns the nearest several thousand acres and the land above the wreckage. Participants included Don Bragg, Arkansas Archeological Society volunteer and USDA Forester from UAM, Andy Zawacki from H.A.M., Jessica Howe (AAS-UAM station), and Blake Wintory from Lakeport Plantation Museum. Dean Coro came by boat from Montgomery Island Hunting Club and this permitted photography of the exposed wreckage from off-shore, and made it possible to check the location of the

Flatboat (3DE280). Unfortunately the Flatboat is now entirely gone or at least relocated from this spot. It appeared as if someone had scraped the bank with a bulldozer.

Not surprisingly, there is even more exposure of the presumed steamboat wreck (3DE279), from an intact stretch of starboard side hull that protrudes from the bank slope, and all the way to the bow stem. About 33 m/70 ft of the hull is now exposed. The port side of the hull is still upright, exposed to the main keelson running along the center line of the hull. The forward starboard half of the hull bottom has however dropped down almost vertically. The team was able to draw the timbers forming the bow part of the bottom of the hull, including the sister keelsons angling in toward the bow, and then a segment where the curving bow turns into the straight run of the side. The team was also able to measure the width of the hull from the starboard chine clamp (at the bottom of the side wall) to the port side wall in several ways—10 m/32.8 ft. This is wider than available numbers for the *Victor*, documented as 26 ft; the 6 ft difference may or may not be significant. So the wreck may or may not be the *Victor*. Our most significant new information, is that this vessel has a strongly reinforced stanchion about 12 m/37 ft aft of the bow. The stanchion is gone but a well designed triangle brace survives, notched and pinned to the main keelson along the centerline of the hull. This stanchion supported something heavy—it should be diagnostic in some way.

WRI Research Station — Academic & Service Activities

Grants, Honors & Awards

- 2012 National Endowment for the Humanities Chairman's Commendation "For His Dedication to Arkansas History," awarded to Leslie C. "Skip" Stewart-Abernathy.

Teaching & Higher Ed

- Stewart-Abernathy serves as Chair of one Ph.D. committee for a student in the Anthropology Department at UAF.

Service to Winthrop Rockefeller Institute

- **"Suite 270" Exhibit.** Stewart-Abernathy led the effort to develop an exhibit on Winthrop P. Rockefeller's 10-year service, from 1996–2006, as Lieutenant Governor. The exhibit includes a portion of his office, reassembled as it existed in Suite 270 at the Arkansas State Capitol, and two glass cases devoted to career milestones, goals, and achievements. Stewart-Abernathy researched and wrote all the exhibit texts and selected the photographs and other graphics to be used. WRI senior staff, particularly Kathleen Currie, edited the text. The Rockefeller family played a major role in developing this exhibit.
- **Picture the Past Film Series.** Stewart-Abernathy worked with WRI Program Directors Jill Bayles and Amy Stockton to help organize and host this series matching a speaker-expert with a film (attendees, about 60).
- **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. About 40 students from Dardanelle Elementary and Morrilton Intermediary schools participated, along with two teachers and 12 parents.
- **Programs & Presentations.** Stewart-Abernathy led tours of rock art sites on Petit Jean Mountain for WRI CEO Christy Carpenter and a private group, and for Legacy Day attendees; Porter led a tour for the Galaxy Conference. Stewart-Abernathy taught a training session on archeology to a Master Naturalists class (attendees, 27) and gave a talk on Petit Jean area archeology to UA System visitors.

Professional Service

- **SCHAC.** Stewart-Abernathy serves as editor for the online Proceedings of the South Central Historical Archeology Conference. He organized local arrangements for the 2011 Conference at the Winterville State Historic Site near Greenville, MS.

Public Service & Outreach

- **Programs & Presentations.** Stewart-Abernathy gave public talks at Petit Jean State Park (audience, 30) and at the Preservation of African American Cemeteries Conference in Fort Smith (audience, 30). Porter gave a talk at the Chism House Restoration Opening (audience, 25).
- **Consultations.** Stewart-Abernathy assisted the SHPO, AHTD, Arkansas State Parks, and Ozark-St. Francis and Ouachita National Forests with information on historical archeology.

Service to the Arkansas Archeological Society

- **Programs & Presentations.** Stewart-Abernathy gave four public talks to the Arkansas River Valley (Morrilton) Chapter (combined audiences, 54); the station and Chapter hosted an Open House for Archeology Month (attendees, 10).
- **Training & Certification Program.** Stewart-Abernathy provided on-site advice and assistance at the 2012 Training Program at Historic Washington State Park; he developed printed reference materials for crew members, and taught the seminar on Historical Archeology. Porter was an area supervisor during the Training Program.
- **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. Terry Johnson serves as Secretary/Treasurer, handles publicity and logistics for monthly meetings, and produces a quarterly newsletter. Stewart-Abernathy is Program Chair, arranges for guest speakers and made several presentations. The staff host regular field/lab days for volunteers.

Volunteer Hours

- Volunteers contributed 196 hours to station research projects in the field and lab during 2011–2012.

Henderson State University Research Station, Arkadelphia



Production and Exchange of Ouachita Mountains Novaculite

Investigating the use of Arkansas novaculite as a key resource for tool-making in the past has been a major focus for the HSU research station, addressing questions about tool production, craft specialization, and exchange. Stone tool manufacture left debris at a variety of site types, from quarries to residential areas, and these can be analyzed to reconstruct the spatial and social organization of novaculite tool production and exchange. Novaculite was used most intensively and exchanged most widely during the Middle and Late Archaic periods, so this research brings together information from the Archaic occupations of the Ouachita and Saline river valleys.

Two Arkansas Archeological Society/Survey Training Program digs (2007 and 2008) at the Jones Mill site (3HS28) gathered data about Indians who quarried novaculite from nearby outcrops and worked it into tools for use and possibly for trade. This year the station continued lab analysis of chipped stone tools and bifaces from the Jones Mill site. Mary Beth Trubitt and new research assistant Vanessa Hanvey, assisted by a core group of regular volunteers from the Arkansas Archeological Society, carried out the debitage analysis. Lab work also focused on various rock samples (fire-cracked rock, igneous rock) collected during 2008 excavations, and on groundstone

tool analysis. Trubitt and Hanvey worked together to prepare a poster presentation for the Southeastern Archaeological Conference on Jones Mill reduction sequences based on tool and debitage analyses.

Fieldwork on the project included visits to the Jones Mill site to acquire high-resolution GPS coordinates on datum points so Hanvey could finalize the site map for publication. Other visits to novaculite quarry and lithic production sites, including one on Ouachita National Forest land in Oklahoma, accompanied by ONF archeologist Meeks Etchieson, allowed Hanvey to familiarize herself first-hand with these large and complex sites.

Trubitt and several colleagues planned a new synthetic article on Archaic foodways that will bring together results of botanical, faunal, residue, microwear, and artifact analyses from Jones Mill. Meanwhile, Hanvey organized the records from 2007 Training Program excavations at 3HS195 and began analysis of the lithics, along with a volunteer in the lab.

Several small survey projects intersect with the ongoing research on Archaic period novaculite tool production and exchange. Trubitt, Hanvey, and volunteers conducted new fieldwork at a bluff overlooking the Ouachita River for the City of Arkadelphia during the fall of 2011. Reports on this cultural resources survey and an earlier one at DeGray Lake were approved by the Arkansas Historic Preservation Program.

The Arkadelphia research station is located on the campus of Henderson State University, where the station archeologist teaches anthropology courses in the Department of Sociology and Human Services. The station is responsible for archeological resources in 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.

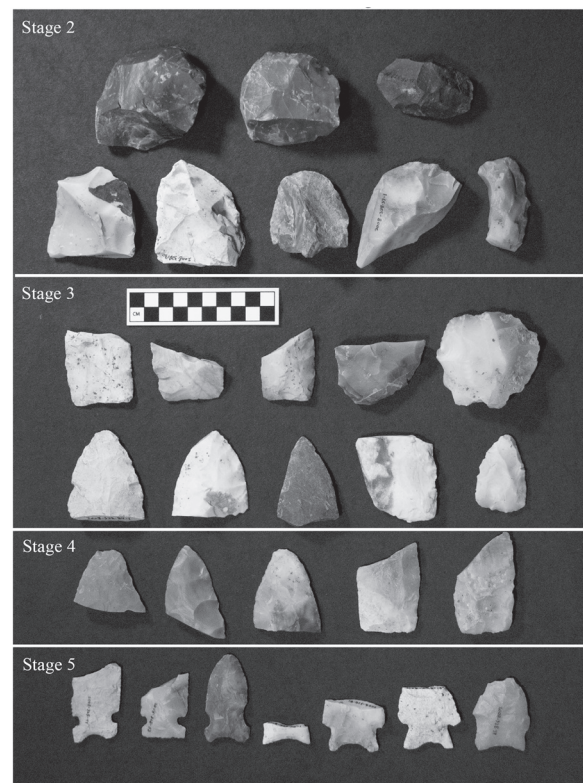
Mary Beth Trubitt (Ph.D., Northwestern University, 1996) is the Survey’s Research Station Archeologist for HSU/Arkadelphia, and Research Associate Professor of Anthropology, University of Arkansas–Fayetteville. She joined the Survey in 2000 after a teaching position at Western Michigan University. She 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.

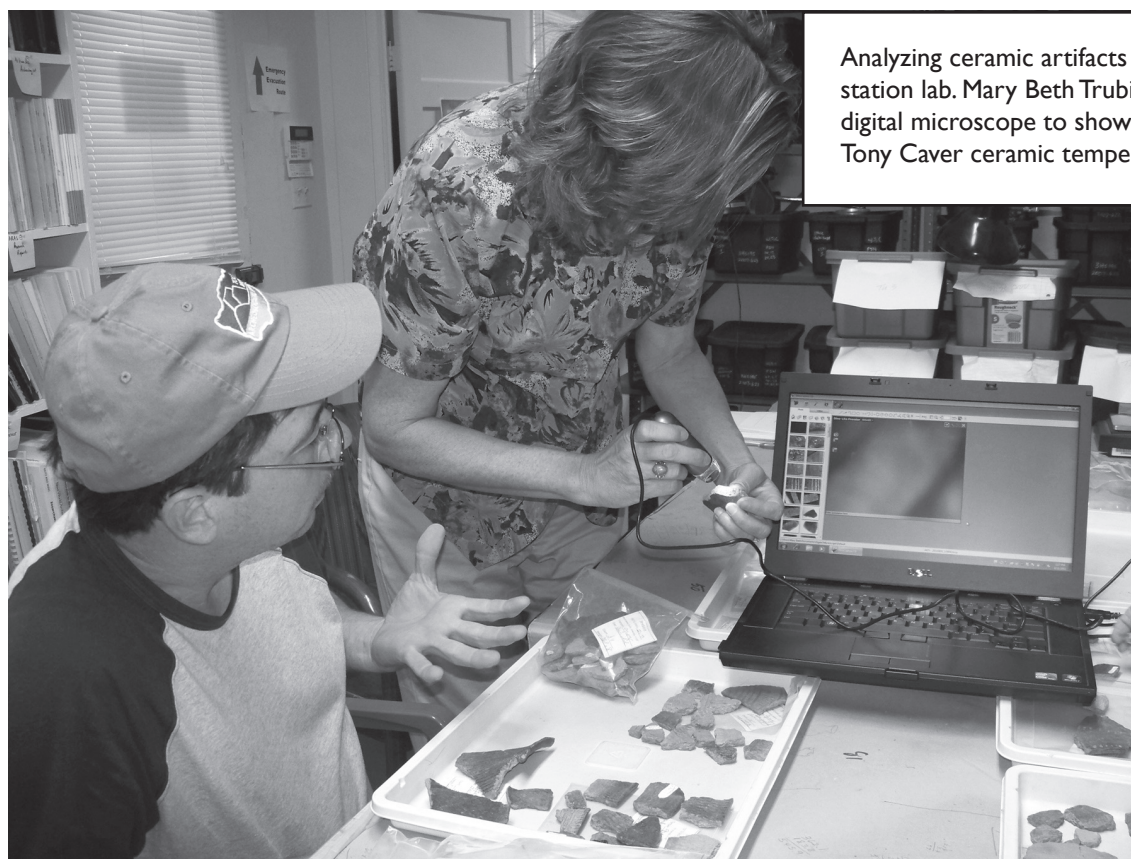
Vanessa N. Hanvey (B.A., University of Georgia, 2011) graduated Summa Cum Laude with a major in Anthropology and a minor in Geology. During her undergraduate career, she worked for the UGA Laboratory of Archaeology as a student laboratory technician. Under the direction of Mark Williams, Hanvey completed an undergraduate honors thesis titled “Spatial and Temporal Analysis of the Ceramics at the Burnt Village, 9TP9.” She presented the findings from her thesis at the Georgia Academy of Science Conference (2010, 2011) and at the Center for Undergraduate Research Conference (2011). Currently, Hanvey is working with station archeologist Mary Beth Trubitt on lithic analysis of the Jones Mill site, as well as ceramic analysis of the JEC-Hodges collection, and other station research projects.

“Taking Novaculite Down the River” Project

With Meeks Etchieson (Ouachita National Forest archeologist), Trubitt presented a paper in the Prehistoric Quarries and Early Mines Interest Group symposium at the annual meeting of the Society for American Archaeology. This was an overview of the novaculite tool production/exchange system from quarries in the Ouachita Mountains to habitation sites down the Ouachita and Saline rivers. The paper includes Trubitt and Hanvey’s analysis of novaculite debitage and hammerstones obtained from quarry, workshop, and habitation sites, and Etchieson’s mapping of quarry features at the Spanish Digging site (3GA48). The paper was later submitted to session organizer Anne Dowd for publication in a special issue of *North American Archaeologist*, in memory of George Odell (University of Tulsa), who passed away in October 2011. Odell was a senior North American archeologist and prominent authority on the study of stone tool production.

Examples of bifacial stone tools from the Middle Archaic period at the Jones Mill site (3HS28), showing the stages of reduction. From a poster presented at the Southeastern Archaeological Conference.





Analyzing ceramic artifacts in the HSU station lab. Mary Beth Trubitt uses a digital microscope to show volunteer Tony Caver ceramic tempering details.

Ancient Caddo Lifeways

Research on the Caddo period in southwest Arkansas continues with new fieldwork building on analyses of old collections. This work should refine the chronological framework and improve archeologists' understanding of settlement patterns and material culture in the middle Ouachita River valley as well as at the eastern edge of the Caddo area in the Saline and lower Ouachita river valleys.

Trubitt supervised lab volunteers who are helping to reanalyze ceramic sherds and chipped stone tools from curated Hedges site (3HS60) collections. She continued to study and interpret the 1973–1974 excavation records and stratigraphy, and wrote a paper summarizing this project for the annual meeting of the Arkansas Archeological Society. Once the Hedges site soil/flotation and botanical samples were organized, Trubitt submitted a sample for AMS dating (funded by a 2010 grant from the Arkansas Archeological Society's Research Fund), and submitted an article discussing the results.

A detailed comparison of Hedges with another Late Caddo period site—the Hughes site (3SA11)—is planned as a monograph. Both sites—Hughes on the Saline River and Hedges on the Ouachita River—have burned and buried structures adjacent to mounds. A chapter on the Hughes site appears in *The Archaeology of the Caddo*, a University of Nebraska Press book edited by Timothy K. Perttula and Chester P. Walker, published in 2012.

Trubitt and Hanvey worked with John Riggs to finish test excavations at another Caddo Mound site in the Ouachita River Valley, 3DA673. Trubitt analyzed the artifacts and findings, and summarized the results in a public talk. A short article in *Field Notes* reports on mapping project at 3CL60, a two-stage Caddo mound in Clark County.

Caddo Ceramics Project

Trubitt and coauthors (Tim Perttula and Jeffrey Girard) put the finishing touches on an article about shell-tempered ceramics for the journal *Southeastern Archaeology*. In the HSU lab, Trubitt, Hanvey, and volunteers began a new phase of coding and photodocumentation of Caddo ceramic vessels from the Joint Educational Consortium's Hodges Collection. Analysis of materials from this collection ties in with a larger effort, carried out with colleagues Ann Early, George Sabo III, and John Samuelsen, to improve the Survey's digital database for ceramic vessels. This will also include working with Ann Early to produce a digital publication on the collegiate system of Caddo ceramic decoration description—a system that is used by some regional archeologists but has never been fully implemented due to lack of publication. Hanvey and Trubitt updated the station's collegiate notebooks and JEC databases, and Hanvey scanned the notebooks and vessel photo cards as part of this process.



A ceramic jar excavated from a structure floor at the Hedges site (3HS60)—one of many items reanalyzed as part of a project comparing the Hughes and Hedges sites.

The “Borderlands” Project

Hanvey began background research on the archeology of the Saline River valley, a “borderlands” between the Caddo and Mississippian archeological culture areas. In addition to compiling information on previously recorded sites and past archeological projects, Hanvey and lab volunteers analyzed artifacts donated to the station from 3GR8 and curated from past salvage excavations at 3SA295. Hanvey collaborated with Survey colleagues Jessica Howe, Robert Scott, and Jami Lockhart to prepare a paper on the Borderlands Project, delivered at the 2012 Caddo Conference.

In response to landowners concerned about nearby construction impacts, the HSU station and others undertook mapping and test excavations at a Middle Caddo period mound site (3SA19) during fall 2011 and spring 2012. A program of topographic mapping, geophysical survey, and test excavations was undertaken at the site with Jami Lockhart (Survey archeogeophysical specialist), Tim Mulvihill (AAS-UAFS), Jessica Howe (AAS-UAM), students from HSU and UAF, and several Arkansas Archeological Society volunteers assisting the HSU archeologists. Maps and artifact analysis were completed,

results shared with landowners and interested agencies, and Hanvey is taking the lead on writing up the report.

Caddo Connections Book Project

At the urging of the “Issues in Eastern Woodlands Archaeology” series editors, Trubitt and colleagues Jeffrey Girard and Timothy Perttula wrote a prospectus for a new book on Caddo archaeology for AltaMira Press. *Caddo Connections* will take a macroregional approach and explore cultural diversity across the Caddo area between AD 900 and 1830, as well as highlighting interactions between Caddo communities and non-Caddo groups in the Plains and Southeast. The team signed a contract with AltaMira Press and began writing this year.

Mississippian Societies in the Midwest and Southeast

Trubitt and Hanvey continued research interests in complex societies of the late prehistoric Mississippian period. Trubitt has a years-long association with the Cahokia Palisade Project, a study of the palisade structures and associated features at the premier Cahokia site near East St. Louis, Illinois. With Lucretia Kelly, Trubitt wrote a short article reporting results of grant-funded faunal analysis from several pre-palisade deposits at the site, and submitted it to the Illinois Association for Advancement of Archaeology and *Illinois Antiquity*.

With F. Kent Reilly III and George Sabo III, Trubitt coauthored an introductory chapter with for an edited volume based on the 2010 Society for American Archaeology symposium honoring James Brown. The volume is currently in development. Trubitt also discussed plans with John Kelly to publish the papers from another SAA symposium on the Moorehead phase at Cahokia.

Site Visits and Other Projects

Hanvey and Trubitt made various site revisits through the year, some in response to landowner contacts, others accompanied by George Gatliff (a member of the Ouachita Chapter of the Arkansas Archeological Society). Sites were visited in Saline, Clark, Hot Spring, and Pike counties. Mapping and testing were conducted in some instances.

At Graysonia, Arkansas, Hanvey is working with Gatliff and Meeks Etchieson (Archeologist with the Ouachita National Forest) to create an up-to-date map of 3CL176, a large site incorporating building remnants, railroads, and machinery from the historic mill town.

Hanvey also conducted shovel testing at 3SA370—this was an area of residential property that will be affected by transmission line right-of-way.

During the year Hanvey assisted other station projects at Toltec Mounds, the Parkin site, and in the Magnolia area. She also worked toward a publication based on her undergraduate thesis research at the Burnt Village site (9TP9).

HSU Research Station — Academic & Service Activities

Teaching & Higher Ed

- Trubitt taught ANT 4053/SOC 4063, World Cultures (39 students) and ANT 2023, Introduction to Physical Anthropology and Archeology (8 students) during the Spring 2012 semester at HSU. She gave a guest lecture to an English class (25 students). Trubitt advised several HSU and OBU students and wrote recommendations for scholarship and job applications. Trubitt and Hanvey supervised students in the HSU archeology lab and occasional fieldwork.
- Trubitt mentored HSU graduate student Linda Evans on her MLA project about Depression-era avocational archeologists in the Arkadelphia area. Evans installed an exhibit at Huie Library in March and completed her degree in August 2012.
- Trubitt and Hanvey continued to curate artifacts and records of the Joint Educational Consortium's Hodges Collection.
- Trubitt participated in Sociology and Human Services Department and other HSU campus activities.

Professional Service

- **Caddo Conference Organization.** As President of the new Caddo Conference Organization, Trubitt presided at the board meeting and business meeting at the annual Conference at Natchitoches, LA, wrote several short items for the *Caddo Archeology Journal*, and contributed to the website, conference planning, and membership development.
- **Society for American Archaeology.** Trubitt served on the SAA Media Relations Committee, and participated in a committee-sponsored symposium at the SAA annual meeting. She also served on the Gene Stuart Award Committee, and agreed to serve on the 2013 Program Committee.
- **East Texas Archeological Conference.** Trubitt helped organize a panel on Caddo archeology for the 2012 annual conference.
- **Peer Review.** Trubitt reviewed works submitted to *The Arkansas Archeologist* and the Texas Academy of Sciences; she also commented on a manuscript for a colleague.
- Trubitt served on the Survey's Personnel Committee, currently searching for an archeologist for the UAM research station.

Public Service & Outreach

- **Programs & Presentations.** Trubitt presented four workshops on careers in archeology to 8th grade girls at a Women's Foundation of Arkansas "Girls of Promise" event on the HSU campus (combined audience, 48).
- **Exhibits.** Trubitt and Hanvey assisted the Jacksonville Library, the community of Caddo Gap, the City of Arkadelphia, Clark County Historical Museum, the Ross Foundation, and DeGray Lake State Park with exhibit planning, installation, maintenance, or signage. Trubitt agreed to serve as Humanities Scholar for a grant proposal by the City of Arkadelphia to Arkansas Humanities Council for interpretive signs and a walking trail at DeSoto Bluff, and drafted text for the signs.
- **Media Outreach.** Hanvey created and administers a Facebook page for the HSU research station. Trubitt updated the station webpages.
- **Historic Cemetery Preservation Initiative.** Trubitt continued to advise several groups seeking grants from Arkansas Humanities Council for cemetery projects.
- **Public Schools.** The HSU research station loans a "show & tell" box on archeology to local teachers for classroom use.

Service to the Arkansas Archeological Society

- **Programs & Presentations.** Trubitt gave public talks to the Ouachita (Hot Springs) and Ko-ko-çi (Fayetteville) Chapters (combined audience, 60). Hanvey gave two public talks to the Ouachita (Hot Springs) Chapter (combined audience, 50).
- **Training & Certification Program.** Trubitt assisted with 2012 Training Program excavations and post-field school clean-up at Historic Washington State Park, taught the Basic Excavation Seminar, and gave an evening program to participants (audience, 40). Hanvey also attended the Training Program and assisted with excavations.
- **Ouachita Chapter.** The HSU station advises and helps to support the Ouachita Chapter of the Society, serving the Hot Springs area. A weekly lab day for Society volunteers is hosted at the station lab. Hanvey edits the Chapter newsletter; she helped organize the Chapter's Archeology Month event. Chapter volunteers also participate in station fieldwork projects.

Volunteer Hours

- Volunteers contributed 892 hours to station research projects in the field and lab during 2011–2012.



At the request of the USACE, Vanessa Hanvey installed new exhibits in the Visitor's Center at DeGray Lake. This display highlights past uses of the Caddo River region by Caddo Indians.



Southern Arkansas University Research Station, Magnolia

Archeology at Historic Washington State Park

The largest project conducted by SAU research station staff in 2011–2012 was again the archeological investigation of the antebellum town of Washington (3HE236). Once the Hempstead County seat, the Confederate state capital during the Civil War, and a booming cotton town on the Southwest Trail, Washington is perhaps the best surviving example of a nineteenth century town in the Old Southwest.

Immediately after directing a successful 2011 Arkansas Archeological Society Summer Training Program on Block 6—the heart of the town’s commercial district from the 1830s through the 1880s—Jamie Brandon (with the help of new research station assistant Carl Carlson-Drexler and returning technical assistant Anthony Clay Newton) began planning and public promotion for a second year of excavations. This began with the August publication of “Preliminary Results of the 2011 AAS Summer Training Program at Historic Washington, Arkansas” in *Field Notes* (the newsletter of the Arkansas Archeological Society) and continued with a series of talks about the 2011 excavations across the state throughout the fall and spring. Although fieldwork in the fall of 2011 and spring of 2012

predominately focused on other Civil War-related sites in the state (see below), station staff and volunteers were constantly at work on logistics and outreach for the upcoming 2012 summer dig. In the spring a second *Field Notes* article, “More Digging for History: The Arkansas Archeological Society Summer Training Program Prepares to Continue Excavations on Block 6 in Historic Washington, Arkansas in 2012,” outlined the plans for the new season. Finally, the SAU station staff fully focused on preparing for the dig through May and early June. Excavations began on June 9th and ran through June 23, 2012.

Over the last two summers (2011 and 2012) the excavations on Block 6 discovered at least six different structures and 3–5 cellars dating from three major periods of activity—antebellum (1830–1850s), Civil War & postbellum (1860s–1880), and a flurry of activity in the 1920s filling in long-abandoned buildings following the 1870s and 1880s fires. There is very little in the way of photographs, maps, or archival material about Block 6, so this archeological information is invaluable for reconstructing the kinds of buildings and types of mercantile activity that occurred there. These excavations also recovered hundreds of thousands of artifacts which help to show what

The Survey's research station in Magnolia is located on the Southern Arkansas University campus, 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. The SAU research station is responsible for the archeological resources of 11 counties in southwestern Arkansas. Station territory stretches from the southern edge of the Ouachita Mountains to the Arkansas/Louisiana state line, and incorporates the Great Bend region of the Red River. Among the important sites in 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.

Jamie C. Brandon (Ph.D., University of Texas at Austin, 2004) is the Survey's Research Station Archeologist for SAU/Magnolia, and Research Assistant Professor of Anthropology, University of Arkansas–Fayetteville. He has almost 25 years of experience in the field of archeology, 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. He has worked with the Arkansas Archeological Survey in various capacities since 1997. Brandon has excavated at sites dating from the Pleistocene to the twentieth century, but his research interests focus on historical archeology of the 19th century South, prehistoric and protohistoric cultures of the Midsouth and trans-Mississippi south, cultural and historical memory, and working with descendant communities.

Carl G. Carlson-Drexler (M.A., University of Nebraska, 2004) is completing his Ph.D. at the College of William and Mary in Virginia. He has been working in Arkansas since 2001 on domestic and military sites, including the battlefield of Pea Ridge. He has worked as an archeologist for the National Park Service, Colonial Williamsburg Foundation, and the United States Army. He has field experience in eight states and three foreign countries. Major research interests include conflict archeology, spatial analysis, historical archeology of the U.S. South and Midwest, Cuban archeology, terrestrial and aerial laser scanning (LiDAR), and the history and ethnography of sports in the United States, primarily baseball and hockey. His publications include articles in the *SAA Archaeological Record* and *Arkansas Historical Quarterly*, and a book chapter on spatial analysis in conflict archeology, in addition to a number of reports.

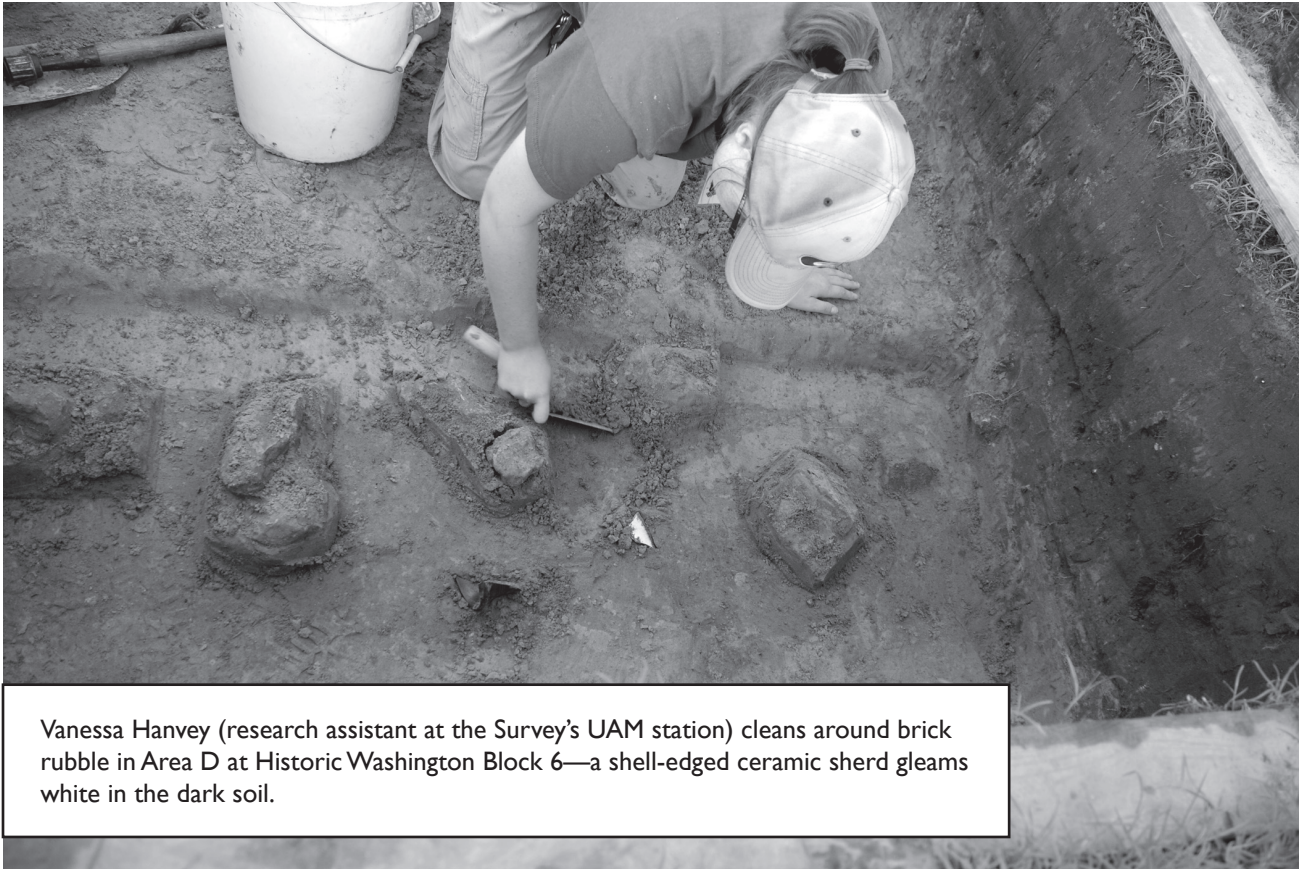
Anthony Clay Newton (B.A., Southern Arkansas University, 2004) is a Magnolia native and a professional archeological technician who has worked for various cultural resource management companies on projects in Arkansas, Texas, Louisiana, Oklahoma, and Mississippi. Newton is interested in the archeology and history of southwestern Arkansas and the Ark-La-Tex region. He is also an accomplished photographer.

life was like on the Arkansas cotton frontier of the nineteenth century. Some examples are more than twenty gunflints, several early faceted blue and glass black beads, and a surprising number of coins—both U.S. (1827 and 1806 silver half-dollars as well as several early- to mid-nineteenth century silver coins of smaller denominations) and Spanish (at least four Spanish silver *reales*).

Although the SAU station staff conducted promotional talks throughout the year, the public outreach element during the Training Program brought a great deal of positive attention to the Park and to the excavations. There was coverage in several media outlets including Sunday Features in the *Arkansas Democrat-Gazette* and the *Texarkana Gazette*, and interviews with KTXK 91.5 FM (a National Public Radio and American Public Media affiliate community-oriented, non-commercial radio station licensed to Texarkana College) and KTYC 88.5 FM (a non-commercial radio station affiliated with the Cossatot

Community College of the University of Arkansas). Additionally, the dig was covered by Rex Nelson in his blog *Southern Fried* and in his regular column in the *Arkansas Democrat-Gazette*.

As in 2011, over 100 volunteers and staff members were involved in the 2012 summer dig. Despite the hot weather, everyone had a good time and made some great discoveries. Thanks are due to the supervisors who made everything run smoothly in the field—Paul and Marilyn Knapp, Larry Porter, Jessica Howe, Elizabeth Horton, Gary Knudsen, Mary Beth Trubitt, Vanessa Hanvey, and Carl Carlson-Drexler. Thanks also to all those who taught classes and helped supervise in the field—Michelle Rathgaber, George Sabo, Jeff Mitchem, Bob Scott, Tim Mulvihill, and Melissa Zabecki-Harvey. Finally, thanks to Mary Ann Goodman and Mary Farmer for supervising in the lab, and thanks to project “supernumerary” Leslie C. “Skip” Stewart-Abernathy, who has been doing archeology in Washington since the late 1970s.



Vanessa Hanvey (research assistant at the Survey's UAM station) cleans around brick rubble in Area D at Historic Washington Block 6—a shell-edged ceramic sherd gleams white in the dark soil.

Civil War Archeology in Arkansas

The SAU research station conducted several smaller research and outreach projects related to the Civil War in Arkansas. As noted in last year's report, the staff is immersed in the 150th Anniversary of the Civil War. Brandon continues to serve as Vice-Chairman of the Arkansas Civil War Sesquicentennial Commission. This year he participated in commission meetings in Little Rock, Helena-West Helena, and Washington, in addition to a number of other sesquicentennial efforts undertaken by the SAU research station.

Wallace's Ferry. Personnel from the SAU and UAM research stations, the Survey coordinating office, and U.S. Forest Service, along with Arkansas Archeological Society volunteers, began searching for the site of the July 1864 battle of Wallace's Ferry (also known as Big Creek), near Helena in Phillips County. Due to his research interest and extensive experience working on battlefields at Wilson's Creek, Missouri, Pea Ridge, Arkansas, and Little Bighorn, Montana, incoming station assistant Carl Carlson-Drexler took the lead on this field project.

From October 23–28, 2011, teams searched in two areas of Phillips County, first around the point where Phillips County Road 350 crosses Big Creek, and second on the west side of Big Creek in an area where one of the landowners had found Civil War era artifacts. Neither site yielded materials that would suggest a battlefield, but there were some useful gains made

during the research. First, the station established contacts with local preservationists and historians that will serve well in subsequent rounds of investigation. Second, two large areas that do not appear to have any trace of the battlefield could be ruled out of the picture. Finally, the work helped in developing an approach to metal detecting on potential battlefield sites that need maximal areal coverage by a small crew.

Carlson-Drexler and Brandon look forward to renewing the effort to find this battlefield in the coming year. This was the first engagement in Arkansas that was fought almost entirely by African-American troops (on the Union side, of course), and, along with the Battle of Helena, marks a major step forward in African-American enfranchisement and liberty in the Natural State. It also dovetails with the significant effort being made by Helena-West Helena to promote heritage tourism focused around the Civil War.

Dooley's Ferry. With Carl Carlson-Drexler's arrival, the station increased emphasis on the Dooley's Ferry site (3HE12) in Hempstead County, the subject of his dissertation. In early 2012, Carlson-Drexler, Brandon, Newton, and volunteer Kjörstin Carlson-Drexler collected forty 20 x 20 m grid squares of remote sensing data with a Bartington Grad601 gradiometer. These were on both banks of the old Red River channel now known variously as 1916 Cutoff Lake or Jones Lake, covering both the old Lafayette and Hempstead County approaches to the ferry landing.

The results of the gradiometer survey identified a number of magnetic anomalies that appeared to be shallowly buried historic deposits. Several of those were selected for follow-up in a week-long excavation in March 2012. Over the course of the dig, some 24 volunteers and staff opened five 2 x 2 m test units, exposing the footing and likely front porch area of a structure, several scatters of historic materials, and the top of an 1850s cistern. The recovered material ranges in age from the mid-19th through 20th centuries.

Finally, during the 2012 Arkansas Archeological Society Summer Training Program, Dooley's Ferry was used as the location for the "Site Survey Seminar" taught by ASU station assistant Robert Scott. Carlson-Drexler and Scott led eight volunteers who conducted a small shovel test survey on the Lafayette County side of Dooley's Ferry.

All these efforts—the remote sensing survey, the March testing, and the summer survey—set the stage for a series of archeological investigations in the Fall of 2012. In the coming year, the goal is to locate and define the house of the Carlock family, the antebellum ferry-owners and operators.

Public Archeology. The staff of the SAU station remained very active in giving public presentations on Civil War-related research. These included many well outside of station territory, bringing the subject of Civil War archeology, and conflict archeology in general, to a wide audience around the state.

Dun Records at the Baker Library, Harvard University

To support several SAU station projects, Carlson-Drexler travelled to Boston following the 2012 Conference of the Society for Historical Archaeology (held in Baltimore) to examine the Hempstead and Lafayette County portions of the Dun & Company Records at the Baker Library at Harvard University. These books contain reviews of local businessmen, written by Dun & Company agents, to advise manufacturers in the northeast about who to trade with.

Carlson-Drexler transcribed every entry for names associated with Block 6 at Historic Washington, Dooley's Ferry, and Spring Hill. This last place is an early settlement near Dooley's Ferry that was home to most of the early landowners of the ferry site. The Dun & Company records, dating primarily to the 1850s through 1870s, provide a unique window onto the personalities and habits of the people who inhabited the sites currently being explored. This research trip was funded in part by a grant from the Arkansas Archeological Society's Archeological Research Fund.

Continuing Projects in Caddo Archeology

Although the vast majority of the SAU station staff's time was focused on historical archeology projects this year, work did continue on several projects dealing with the prehistoric

Carl Carlson-Drexler checking GPS coordinates at Wallace Ferry during the search for the Big Creek Battlefield site.



Caddo of southwestern Arkansas. University of Arkansas graduate students Pritam Chowdhury and John Samuelsen continued to work on their dissertations dealing with Ferguson Mounds (3HE69) and Crenshaw Mounds (3MI6) respectively, and Duncan McKinnon (Ph.D. candidate at the University of Arkansas and Graduate Research Assistant with the Arkansas Archeological Survey) continued fieldwork as part of his dissertation research at Battle Mound (3LA1).

McKinnon collected remote sensing data at Battle Mound in both October 2011 and May 2012. The October survey added 3.68 hectares (9.09 acres) and the May survey added another 2.08 hectares (5.4 acres) of magnetic gradiometry data. The total area surveyed using magnetic gradiometry at Battle Mound is currently 14.24 hectares (39.19 acres) and represents one of the few truly landscape-scale visualizations of a Red River Caddo community. Other geophysical methods were also used (resistivity, magnetic susceptibility, conductivity, and ground-penetrating radar) in several select areas where magnetometry data proved successful in revealing buried Caddo features. Both surveys were completed with the assistance of the SAU station personnel, volunteers from the Kadohadacho Chapter of the Arkansas Archeological Society, and several students from the University of Arkansas–Fayetteville.

SAU Research Station — Academic & Service Activities

Grants, Honors & Awards

- \$416 from the Arkansas Archeological Society's Archeological Research Fund to Carl Carlson-Drexler for an archival research trip.

Teaching & Higher Ed

- **School of Liberal and Performing Arts, SAU.** Brandon taught SOC 1003, General Anthropology (50 students) and SOC 3143/ HIST 3143, Anthropology of North American Indians (52 students). Carlson-Drexler taught CRJU 3153, Research Methods (22 students) and ANTH 4133, World Archeology, an Honors course, (5 students). Brandon gave two guest lectures in Ben Johnson's Social History class (HIST 4213). Brandon is the web content manager for the Department. Brandon and Carlson-Drexler assisted with a display of dinosaur casts (curated at the SAU research station) during the 2012 SW Arkansas Regional Science Fair held on the SAU campus. Brandon served as a judge for National History Day events at SAU.
- **University of Arkansas–Fayetteville and Other Institutions.** Brandon served on five Ph.D. committees for students enrolled in the Anthropology Department, and one Ph.D. committee at the College of William and Mary.

Professional Service

- **Professional Organizations.** Brandon chairs the Society for Historical Archaeology's Academic and Professional Training Committee and Student Paper Prize sub-committee. He is Associate Editor for Historical Archaeology for *The SAA Archaeological Record* and Associate Editor of the journal *Historical Archaeology*. He serves on the Board of Trustees of the Arkansas Historical Association and was Conference Committee Chair and Local Arrangements Chair for the 2012 AHA Conference in Fayetteville. Carlson-Drexler is Continuing Education Coordinator for the Society for Historical Archaeology. He served as Program Chair for the 2012 Arkansas Historical Association Conference in Fayetteville.
- **Peer Review.** Brandon reviewed works submitted to *The Journal of Social Archaeology*, *The Arkansas Archeologist*, and *Historical Archaeology*. Carlson-Drexler reviewed works submitted to *Historical Archaeology*.
- **Boards and Commissions.** Brandon is Vice-Chairman of the Arkansas Civil War Sesquicentennial Commission and is a member of the Arkansas State Review Board for Historic Preservation (both are appointed by Arkansas Governor Mike Beebe); he is also on the board of the Historic Preservation Alliance of Arkansas.
- **Science Blogging.** Brandon and Carlson-Drexler wrote five posts for professional blogs—the *Society for Historical Archaeology Blog* ("Making Historic Archeology Visible: Community Outreach and Education" by Brandon and "Surviving the Academic Job Talk" by Carlson-Drexler), *Then Dig* ("Shovels: Regional Variations in One of Our Most Indispensable Tools" by Brandon), and *A Day of Archaeology 2012* ("Professional, Avocational and Public Involvement in Archaeology in Arkansas" by Brandon and "Excavating an Archaeologist's Desk" by Carlson-Drexler). Both also maintain their own Blogs devoted to archeology—*Farther Along* by Brandon and *Trowel 'n' Transit* by Carlson-Drexler.
- **Consultations.** Brandon and Carlson-Drexler provided consultation and advisory assistance to Mosaic Templars Cultural Center in Little Rock, Historic Washington State Park, the Arkansas Historic Preservation Program and the City of Helena-West Helena, the Calhoun and Ouachita County Sheriff's Offices, and Panamerican Consultants.
- Brandon is Chair of the Survey's Publications Committee.

Public Service & Outreach

- **Programs & Presentations.** Brandon presented public programs at the South Arkansas Historical Association, the Diamond Head Chapter of the Questers, the Old State House, the Delta Gateway Museum, the Northeastern Chapter of the Louisiana Archeological Society, the Friends of Hobbs State Park, Historic Washington State Park, Hooks Public Library in Texas, and Ouachita County Genealogical Society (combined audiences, 261). Carlson-Drexler gave a tour of ongoing archeological excavations at Dooley's Ferry (audience, 30); he was one of five presenters at the 5th Annual Red River Heritage Symposium held at Historic Washington State Park.
- **Civil War Sesquicentennial Commission.** Brandon spoke at two marker dedications (Mount Holly Cemetery in Union County and the Magnolia City Cemetery in Columbia County). Brandon and Carlson-Drexler recorded podcasts on Civil War archeology for the Commission: Brandon provided "Battlefield Archeology" and Carlson-Drexler offered "Arkansas Battlefield Archeology" and "Camp and Civilian Archeology."

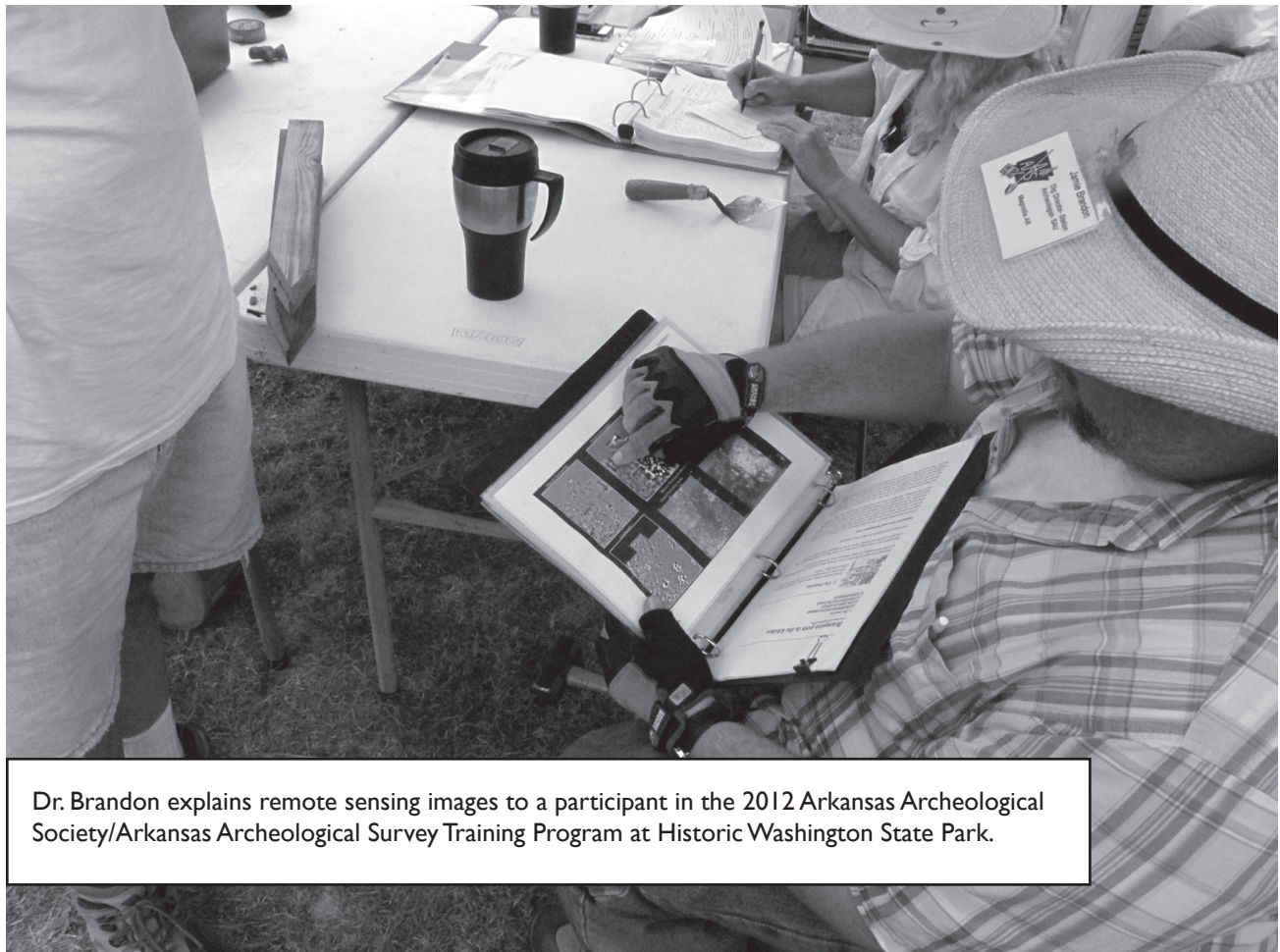
- **Training & Workshops.** Brandon gave a half-day archeology program to an Arkansas Master Naturalist class in Northwest Arkansas (audience, 59). He participated in Arkansas Department of Parks and Tourism's "Market Place of Ideas" as part of Park Interpreter Training at DeGray Lake Resort (audience, 250), and took part in the Arkansas Historic Preservation Program's Cemetery Preservation Fair in Little Rock (audience, 250). Brandon also taught a month-long, non-credit "Arkansas Archeology" class as part of South Arkansas Community College's Community Education program in El Dorado (audience, 15).
- **K–12 Outreach.** Carlson-Drexler gave a talk to 4th graders at Camden-Fairview Elementary School (audience, 200) and participated in Miller County 4-H's "Back to Nature" program at Lost Prairie (audience, 250).

Service to the Arkansas Archeological Society

- **Programs & Presentations.** Brandon gave public talks to the Ouachita (Hot Springs), Tunican (Monticello), Arkansas River Valley (Morrilton), and Kadohadacho (Magnolia) Chapters (combined audiences, 85). Carlson-Drexler gave public talks to the Kadohadacho (Magnolia) and Ouachita (Hot Springs) Chapters (combined audiences, 45).
- **Training & Certification Program.** Brandon directed the 2012 Training Program at Historic Washington State Park. Carlson-Drexler assisted Brandon at the Training Program, and taught the Basic Excavation and Site Survey Seminars.
- **Kadohadacho Chapter.** The SAU station hosts and advises the Kadohadacho Chapter, serving the Ark-La-Tex area. Brandon writes and distributes a monthly newsletter.

Volunteer Hours

- Volunteers contributed 7234 hours to station research projects in the field and laboratory. This total includes the Arkansas Archeological Society Training Program.



Dr. Brandon explains remote sensing images to a participant in the 2012 Arkansas Archeological Society/Arkansas Archeological Survey Training Program at Historic Washington State Park.



Arkansas State University Research Station, Jonesboro

Paleoindian/Fluted Point Research Updates

Juliet Morrow maintains a database of fluted points—the diagnostic Paleoindian artifact form—within Arkansas and the region. She is an expert on the Clovis archeological culture and extinct Pleistocene fauna. During the year she updated her fluted point files and worked on two publications—an article for an edited volume based on her recent Society for American Archaeology presentation, and a paper responding to an article in *Science* on the Friedkin site in Texas, claimed to be a pre-Clovis site.

Archeology & Paleoseismology in NE Arkansas

Northeast Arkansas falls within the New Madrid Seismic Zone and archeological sites containing earthquake features have the potential to help date the frequency and periodicity of earthquakes in the past. In addition, it is helpful to the archeologists to study how these earthquake effects damage sites and displace artifacts and cultural features.

Working with Martitia Tuttle under a grant from the Nuclear Regulatory Commission, aerial photos were used to identify several areas of high potential for earthquake features. Foot survey of two locales resulted in the documentation of three new archeological sites: two (3PO1253 and 3PO1254) near Caraway in Poinsett County and one (3MS909) near Leachville in Mis-

issippi County. The sites were all in cotton fields with limited surface visibility.

Site 3MS909 was first identified in a ditch beneath an earthquake feature called a sand blow. Three sand-tempered ceramic sherds were found 6 to 8 cm below the sand blow, and 20 small sand-tempered sherds were from the surface of the site area. The portion of the site exposed on the surface is less than 1 acre in size.

Site 3PO1253 consists of a light scatter of lithic debitage and sand-tempered pottery collected from the surface. The site was systematically surveyed every two meters. Several small pits were hand excavated to determine the depth of the soil horizons and sand blow. Two chert flakes were recovered from the plowzone in Soil Pit 3.

Site 3PO1254 was identified by an even sparser scatter of lithics and pottery with surface conditions similar to those at site 3PO1253. Soil pits excavated to investigate the sand blow did not reveal any cultural material.

At all three sites remote sensing (using resistivity) was conducted by Lorraine Wolf of Auburn University to identify subsurface earthquake liquefaction features (dikes, sand blows, etc.). To ground-truth any anomalies thought to represent earthquake features, we excavated two 3-foot-wide backhoe

The Jonesboro research station is located on the Arkansas State University campus, where the station archeologist teaches in the Department of Criminology, Sociology, Geology and Social Work. The ASU research station territory includes 15 counties of northeastern Arkansas. American Indian cultural development from 12,000 B.C. 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 10,000 years ago between the Ice Age (Pleistocene) and modern (Holocene) climatic regimes. Geographically, the ASU station incorporates the eastern border of the Ozark Plateau and the vast lowland areas of the Mississippi River basin and its tributaries. Station territory 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 Associate Professor of Anthropology, University of Arkansas – Fayetteville. Prior to joining the Survey in 1997, she had a position with the Office of the State Archeologist of Iowa's Highway Archeology Program, and 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.

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.

trenches at 3PO1253, five at 3PO1254, and one at 3MS909. The plowzone was carefully removed first to determine the presence or absence of features, and continued excavation was monitored for the presence of cultural material or features. Despite thorough observation during cleaning and logging of all these trenches, no cultural material or human-constructed features were observed. Ancient buried tree roots and tree trunks were identified in several trenches. Two at the base of the plowzone were mapped, photographed, and twenty liters of matrix taken for flotation processing from each. Wood samples and carbon obtained from them will help constrain the age of the earthquakes at these sites.

In summary, no subplowzone archeological deposits were encountered during our investigations at these three sites. However, a number of earthquake liquefaction features were encountered and documented. Natural carbon associated with these features will be assayed to constrain the date of the earthquake events at these sites.

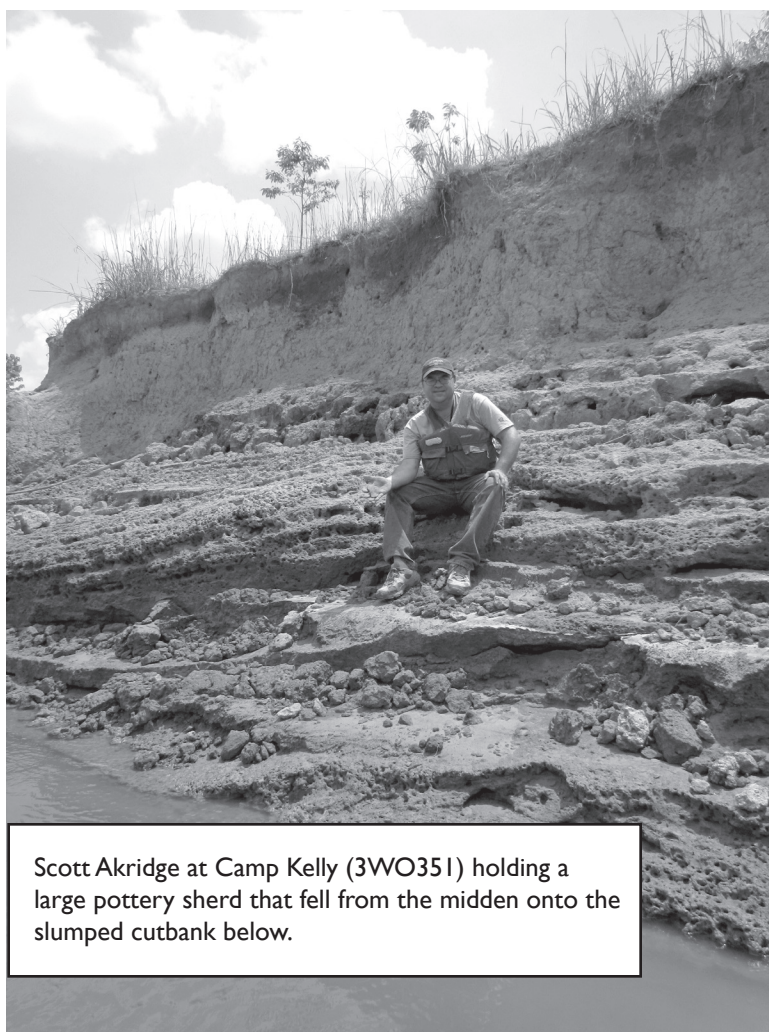
Explorations at 3PO578

In early April, the station surface collected, mapped, shovel tested, and monitored trenching for a pipeline installation at a

previously recorded multicomponent site in Poinsett County. Morrow wants to record and date more Woodland sites in northeast Arkansas, and this provided an opportunity. No state or federal permit was required; permission to investigate the site was granted by the landowner.

A surface collection was possible only in the northeastern portion of the site, which had 100 per cent surface visibility. The higher elevation portion of the site was in winter wheat (0% visibility). Bob Scott excavated five shovel tests across the portion of the site where the pipeline was to be installed, and Morrow recorded the soil profile of each. Scott and ASU student volunteer Sarah Stuckey made an instrument map of the tested portion of the site.

Stuckey and Morrow later monitored the trenching. No features were found in shovel tests, but two possible cultural features were identified in the trench. The two features were fairly shallow basin-shaped pits with very few artifacts visible in the trench cut. A few grog-tempered pottery sherds were recovered from the investigation; most are from the surface, some from shovel tests, and one from a feature observed in the trench. No samples suitable for radiocarbon dating were observed.



Scott Akridge at Camp Kelly (3WO351) holding a large pottery sherd that fell from the midden onto the slumped cutbank below.

Camp Kelly Cutbank Survey, Woodruff County

In May 2012, Scott Akridge and John Griffin accompanied Morrow on a revisit to Camp Kelly (3WO351), a Woodland period site on the White River. The site was first discovered by a local informant who led Scott Akridge to the site in 2009. Scott recorded it as 3WO351 and deposited his substantial surface collection from the cutbank at the station. A pottery rim sherd of the type French Fork Incised found by a local collector and retained in a private collection suggests an indirect or direct relationship with people of the Plum Bayou culture who built the Toltec Mounds site. Morrow took great interest in the site as little is known about the Woodland period in Northeast Arkansas, and one of her research interests is the relationship between early Mississippians and the Coles Creek-affiliated Plum Bayou culture.

While going through some collections from Middle Mississippian period (Wilson phase) sites a few years ago, Morrow came across a Coles Creek ceramic sherd from a site in Lawrence County which is possibly the farthest north that a Plum Bayou-related artifact has been found. She was amazed to see it that far

from the Plum Bayou heartland, but felt that it certainly demonstrates a flow of goods (or people).

In 2010 Morrow met with a representative from a timber company in Memphis that currently owns 3WO351 and obtained permission to test the site, but other projects took precedence. In May 2012 the White River was at an historic low finally affording a good opportunity to view the cutbank. Among the artifacts collected from the surface of the cutbank are sherds from flat bottom grog-tempered vessels and Scallorn points of Pitkin chert, along with some well-preserved deer bone. What appears to be an intact, 30 to 40 cm thick buried midden is visible in the cutbank. Future plans for the site include determining its dimensions and whether houses are present, possibly using bucket auger testing as a search technique.

The Grigsby Site, 3RA262

The privately owned Grigsby site in Pochontas was periodically occupied between about 12,000 years ago to recent times. The site is on the Black River near the edge of the Ozark escarpment, giving access to two major resource areas, the Ozarks and the Mississippi Alluvial Plain. Originally known as the Brass Tinkling Cone site, it was investigated in 1982 as part of a CRM project. The landowner allowed Dan Morse, then of the Arkansas Archeological Survey, to test the site again in 1988. With the 1988 results and 17th century French archival sources, Morse interpreted the Grigsby site as a summer village of the Michigamea, one of the five Illinois tribes

that survived into the 1700s. The others were the Cahokia, Kaskaskia, Peoria, and Tamaroa. Only the Kaskaskia and Peoria are known to have existed in the early 1800s. Morse knew that he could not prove conclusively that the Michigamea occupied Grigsby in the late 1600s–early 1700s, but thought that the documentary record combined with the assemblage of artifacts from the site (Madison type arrow points, brass tinkling cones and points and copper/brass scrap from making them, a trade mirror fragment, iron hair pipe fragment, iron ax fragment, a possible iron sword fragment, gun parts, and musket balls) made them a likely candidate.

In December 2011 Morrow received landowner permission to conduct new investigations at Grigsby that could better define the historic Native American occupation at the site. After creating a new transit map, Survey archeologists from the Fayetteville office led by Jared Pebworth and Michael Evans, Morrow's ASU students, staff and students from Black River Technical College, Arkansas Archeological Society members, and other volunteers joined Morrow and Robert Scott in the field for a metal detecting survey followed by shovel tests.

Over two days 215 copper/brass and iron artifacts were recovered. A transit map was made of all metal detector “hits” and then gridded for the shovel testing. Fifty-one 40 x 40 cm shovel tests were excavated in 10 cm levels. In 1988 one blue seed bead was found on the surface of the Native American portion of the site, and none in the excavations, that were screened through ¼-inch mesh hardware cloth. The 2012 crew used ⅛-inch mesh and water-screened soil samples from every level of every shovel test in order to recover anything tiny, like glass seed beads or small rolled copper or brass beads. Despite these efforts, only two seed beads and one rolled copper/brass bead were found in the shovel tests.

ASU student volunteer Sarah Stuckey and Robert Scott have completed the water-screening plus cleaning and sorting all the artifact samples in the lab.

Everything is currently being inventoried. Artifacts recovered from the metal detecting include copper/brass artifacts (tinkling cones, rivets, a rolled bead, kettle rim, possible gun parts, and others as yet unidentified), iron artifacts (two iron trade axes, scissor fragments, a chisel, an awl, a possible iron gun mainspring), and lead (one piece of hand-made lead shot and approximately 10 lead musket balls). Jared Pebworth is cleaning and studying the metal artifacts in the Survey lab at Fayetteville.

Results of this project confirm the presence of a fairly substantial occupation during the late 17th to early 18th century at the Grigsby site. Continued analyses and comparisons of the corpus of Native American modified European trade goods may help answer the question of whether this is an Illinois-affiliated site or possibly some other group. We also gathered evidence for Early Woodland and Middle Woodland occupations. Future plans involve the expansion of several shovel tests to define the presence of possible buried soil horizons and potential *in situ* artifacts that were encountered.

Tillar Farms (3DR30)

Robert Scott continued working on a reanalysis of pottery and animal bone recovered during salvage excavations at the Tillar Farms site in 1973. He submitted charred nutshell from Feature 1 for an AMS date. Pottery types and decorative modes suggested an early Protohistoric occupation ca. AD 1500–1600, but the date returned by Beta Analytic, Inc., falls squarely in the early 1400s. Either the submitted nutshell was intrusive, or the current ceramic chronology for the Terminal Prehistoric and Protohistoric periods needs considerable revision.

In January John Harris kindly assisted in collecting a control sample of living mussels from Bayou Bartholomew for oxygen isotope analysis of the archeological mussel shell at the site. Several mussel shells from Feature 1 were submitted for stable oxygen isotope analysis in Fall of 2011 as a follow up to a refit study by Evan Peacock and Amy Moe-Hoffman, which found that a large number of the left and right valves of numerous



Iron trade axe from the Grigsby site, 3RA262.

species could be “put back together.” The amazing condition of the mussel shell from Feature 1 in conjunction with the large number of refits suggests rapid deposition, possibly within a matter of days. This argument would be supported if it could be shown that the shells of multiple species were all deposited during the same season.

The stable oxygen isotope analyses of both the modern and prehistoric mussel shells were conducted by Joe Collins, a graduate student at Mississippi State University. In a paper presented at the annual meeting of the Society for American Archaeology, Scott and Collins reported that the mussels in Feature 1 were likely harvested in late fall to early winter. These results are supported by other seasonal indicators represented in the vertebrate faunal assemblage from the same feature. Altogether the preliminary results of this pilot study suggest freshwater mussels do provide a reliable means of determining the season(s) of occupation at archeological sites.

ASU Research Station — Academic & Service Activities

Grants, Honors & Awards

- \$595 from the Arkansas Archeological Society's Archeological Research Fund to Robert Scott for an AMS radiocarbon date.

Teaching & Higher Ed

- Morrow taught Introduction to Archaeology (15 students) and Introduction to Cultural Anthropology (55 students) during the Spring 2012 semester in the Department of Criminology, Sociology, Geology and Social Work at ASU. She also supervised two student internships in the History Department, and one Ph.D. candidate in the Heritage Studies Program.
- Morrow advised the ASU Museum on Archeology Month and helped organize activities for the public; she also gave advice and assistance regarding documentation of a private collection.
- Morrow served as judge for the Earth and Atmospheric Science exhibits at the Northeast Arkansas District Science Fair hosted by ASU.

Professional Service

- **Peer Review.** Morrow reviewed works submitted to the *Journal of Archaeological Science* and *Lithic Technology*.
- **Organizations.** Morrow is Vice President of the Missouri Archaeological Society. She agreed to serve on the program committee for the 2013 annual meeting of the Society for American Archaeology.

Public Service & Outreach

- **Programs & Presentations.** Morrow gave public talks to the 20th Century Club (25) and the University Rotary Club (75). She created an exhibit and conducted an Artifact Identification event at the ASU Museum (attendance, 70) and joined other Survey personnel in two other Artifact ID events, at Parkin Archeological State Park (15) and Delta Gateway Museum (30), during Archeology Month (combined audiences, 215).
- **Public Schools.** Morrow presented Sand Box Archeology at Concordia Elementary School in Jonesboro (45 students), and gave a talk to Green County Tech High School AP students and parents at ASU Museum (25 students).
- **Other Public Outreach.** The station responded to more than 100 visitors and citizen requests for information about archeological sites and artifacts, rock art, and fossils. The station accessioned five collections of artifacts donated from private individuals and inventoried another that will be accessioned elsewhere.

Service to the Arkansas Archeological Society

- **Programs & Presentations.** Morrow gave three public talks to the Central Mississippi Valley Chapter (combined attendance, 180) in Jonesboro.
- **Training & Certification Program.** Robert Scott taught the Site Survey seminar during the 2012 Training Program at Historic Washington State Park.
- **Central Mississippi Valley Archeological Society.** The station hosts and advises the CMVAS serving the northeast Arkansas area. Morrow arranges guest speakers for the monthly meetings of this active Chapter, which typically boast a large attendance of 60 or more, and publicizes the meetings. Numerous volunteer opportunities are provided in the lab and field.

Volunteer Hours

- Volunteers contributed 1950 hours to station research projects in the field and lab during 2011–2012.



ASU research station archeologists and volunteers shovel testing at 3RA262, the Grigsby site.

Blytheville Research Station



Mississippian Architecture and Community Planning

A primary focus of the Blytheville station is research and management at Eaker (3MS105), a well-preserved multicomponent site with major occupations in the Mississippian period (late 1200s and early 1400s). Study of this site and related sites in northeast Arkansas contribute to a larger regional program that seeks to understand how pre-Columbian communities were organized by looking at architecture and site structure.

One goal has been to obtain complete geophysical survey coverage of the Eaker site. After Survey archeogeophysics specialist Jami Lockhart's work in the fall of 2010 filled in large gaps in this effort, Blytheville station archeologist Claudine Payne, Lockhart, Marion Haynes (then Blytheville station research assistant), and Tim Mulvihill (AAS-UAFS research station archeologist) presented a poster at the annual meetings of the Arkansas Archeological Society and the Southeastern Archaeological Conference. The geophysical results hinted at the presence of a plaza in an area of the site which was also known to have few artifacts. Payne and colleagues then organized a small project to look into that possibility. A research design pro-

posing shovel testing across the suspected area was submitted to the Arkansas Historic Preservation Program, and approved for the spring.

In May, Payne, new station assistant Michelle Rathgaber, and volunteers Marion Haynes and Lora Anderson braved poison ivy to put in nine shovel tests on a north-south line. These yielded very few artifacts—in keeping with expectations for a plaza, but were still inconclusive. Rathgaber and volunteers washed and rough sorted the artifacts.

Rathgaber built an Access database to record all of the lithics from the 2004–2006 Eaker excavations. The database will record the stone type, tool/flake type, size, retouch, heat treatment, and platform information. She consulted with Julie Morrow (AAS-ASU research station archeologist) about recording lithic data and spent a day working with Morrow to see what she records and what different lithic features look like. (Morrow maintains a database of fluted points in Arkansas and surrounding areas.) Payne began writing the introductory sections of the Eaker site report. Rathgaber, Haynes, and Mulvihill mapped the mound and part of the surrounding area at site 3MS5 (Chickasawba).

The Blytheville research station is located at the Arkansas Aeroplex on the decommissioned Eaker Air Force Base, now owned by the City of Blytheville. The station is responsible for archeological research in Crittenden and Mississippi counties in northeast Arkansas, which together contain about 1370 recorded sites, including four American Indian sites that are listed on the National Register of Historic Places—Chickasawba Mound, Eaker, Nodena, and Zebree; Eaker and Nodena are also National Historic Landmarks. A site on Bradley Ridge is the probable location of the American Indian town of Pacaha, visited by Hernando de Soto in 1541. The former air base property incorporates a number of significant, well-preserved archeological sites. One focus of the station is a program of cooperative research with geologists to identify and date ancient earthquake features in order to better understand the frequency and periodicity of earthquakes in this seismically active region, and to study ways in which earthquakes affect archeological sites.

Claudine Payne (Ph.D., University of Florida, 1994) is the Survey's Research Station Archeologist at Blytheville, and Research Associate Professor of Anthropology, University of Arkansas – Fayetteville. She joined the Survey in 1999 to run the Blytheville research station, which was created in response to community interest. Previously, she taught anthropology at the University of Florida, the University of Illinois at Champaign–Urbana, and Armstrong Atlantic State University in Savannah, Georgia. Her research specialization in late pre-Columbian archeology of the Southeast, especially political organization of chiefdoms, is ideal for the Blytheville station territory, which was home to a thriving and complex American Indian society 500 years ago.

Michelle Rathgaber (MSc, Bournemouth University, 2011) earned her B.S. degree in Anthropology and Zoology from the University of Wisconsin. After attending field school in Bolivia, she spent a year doing CRM in Kansas, Oklahoma, Florida, Alabama, and Ohio, then enrolled at Bournemouth University in England to earn a Master of Science degree in osteoarcheology, writing a thesis about bone tools in the Iron Age of Wessex and Southwest Britain. She joined the Survey in the late summer of 2011 as Blytheville station assistant, and delved immediately into ceramic and lithic analysis, site mapping, and organizing the collections. With her varied experience, British training, and osteoarcheological skills, Michelle brings unique expertise and perspectives to the Survey team.

David Dye (Department of Earth Sciences, University of Memphis) proposed revising and re-submitting the NSF grant proposal from a couple of years ago, "Community Organization in Pre-Columbian Arkansas and Missouri." He will take the lead in addressing reviewers' comments.

Manley-Usrey Site Testing

Rathgaber conducted test excavations at the late Mississippian Manley-Usrey site (3MS106) across Pemiscot Bayou from Eaker. After getting permission from the landowner and tenant farmer, she wrote a proposal to put in two 2 x 2 m excavation units to see if at least part of the site was covered by a sand blow (earthquake effect) and to locate the boundaries of the site. In February and March, she excavated the two units with the help of Haynes, Payne, Nita Lovins (of the Arkansas Archeological Society), and Lora Anderson (a local volunteer). In the spring, she washed and sorted all recovered artifacts and started working on an Access database in which to record them.

Collections Rehabilitation

With Rathgaber on board, the station tackled the necessary reorganization of collections following the guidelines Payne had set out in the 2010 NEH collections grant proposal. Once

she gained familiarity with the process and the collections, Rathgaber took over the lead. She and her volunteers have sorted, re-bagged, and re-boxed all of the Crittenden County collections into 3-gallon Rubbermaid containers. Rathgaber ordered additional shelves along with 732 3-gallon tubs, and re-configured the shelving units to make efficient use of the space now that smaller boxes are being used. She also re-shelved most of the boxes according to accession numbers to make access quicker and easier.

Payne finalized the electronic inventory format using an Access database and tested it by entering data on the objects in the special collections cabinet. Rathgaber and volunteers then began entering the Crittenden County artifacts into the Access database. They have now started re-bagging and re-boxing the Mississippi County collections.

Faunal Comparative Collection

Rathgaber applied for and was granted a Scientific Collection Permit from the Arkansas Game and Fish Commission allowing her to salvage dead animals for a faunal reference collection at the station. She began the comparative collection to help future analysis of archeological faunal collections at the station.



Delta Gateway Museum Commissioners (Claudine Payne, second from left) and Director accept a “Bootstrap Award” from Arkansas Delta Byways, 2012.

Marine Shell Sourcing Project

Last year the station started up a marine shell inventory and sourcing project in collaboration with Parkin station archeologist Jeff Mitchem and Cheryl Claassen (Department of Anthropology, Appalachian State University). The purpose is to identify the source areas where marine shell artifacts in eastern Arkansas archeological sites originated, thus adding to knowledge about the interactions of Mississippian people in this region. Two analytical techniques were used by researchers at Appalachian State and the University of Tennessee to identify constituent elements in samples of marine shell beads from sites in the St. Francis Basin.

The chemical and PXRF analyses of these Mississippian marine shell artifacts were completed, and the raw data point to Gulf origins. The shell sourcing group met briefly at the Society for American Archaeology conference in Memphis last April.

SAA Symposium: The Nodena Art Style

The ceramic art of the St. Francis Basin of Arkansas and Missouri enjoys worldwide renown, with examples residing in museums across the country. Portrait head vessels are the best known exemplars of the Nodena art style, but the style also includes vessels with rim effigies, whole plant, animal, and human effigies, and painted and engraved vessels. These ceramic sculptures are open to approaches beyond the usual archeological ceramic analyses.

Payne organized and chaired a symposium titled “Pre-Columbian Ceramic Art in the St. Francis Basin: Approaches to the Nodena Art Style” at the 2012 annual meeting of the Society for American Archaeology. Payne’s introductory paper defined the Nodena art style, and was followed by eight additional contributions. The papers examined the Nodena style from multiple perspectives, addressing social issues such as the identities of artists and audience, archeological concerns such as geographic and temporal boundaries, and design matters such as execution, motifs, iconography, and affective properties.

Locating and Contacting Landowners

Rathgaber is working to get in touch with the landowners of the Barton Ranch (3CT18), Bradley (3CT7), and Nodena (3MS3/4) sites, and is in contact with the land manager of the Lawrence properties in southern Mississippi County. These are all sites where the station would like to do some work in the future. She created a “Landowner Packet” to give to landowners and farmers on whose land the station would like to work. The packet contains information about the Survey, landowner/farmer’s rights with respect to archeology and allowing Survey personnel access to their land, brief overviews of the different types of archeological testing, and examples of the types of maps that are produced by topographic and geophysical mapping. A written packet gives the landowners/farmers something to refer to after Survey representatives speak to them and allows them to better understand what archeologists want to do and why.

Such efforts enabled the staff to conduct a one-day salvage of a Mississippian site (Carson Lake, 3MS13) that was being leveled.

Recruiting Volunteers & Community Involvement

Rathgaber took volunteer recruitment seriously, and her efforts have brought 52 volunteers to the research station. To prepare for the Collections Rehabilitation project, and to build relationships with the community, she posted fliers around town and sends monthly emails to interested local citizens and NE Arkansas members of the Arkansas Archeological Society, notifying all potential volunteers about current projects and opportunities to get involved with local archeology. She also stays in contact with professors at Arkansas Northeastern College, who send their students out to help for extra credit.

Rathgaber began holding Open Lab Days one Saturday per month from 9am–1pm. With the added help of announcements in the Blytheville *Courier News*, anywhere from 4–18 volunteers usually come out. Rathgaber provides basic lab training in how to sort, label, and package artifacts.

Claudine Payne & Michelle Rathgaber “judging heirlooms” at the Mississippi County Fair.



One of the interesting activities that grew out of Open Lab Day last spring was the Native Garden. Rathgaber, in consultation with Haynes (an experienced farmer), started an experimental native garden, planting corn, beans, and several kinds of squash and gourds with the help of the volunteers. They put whole fish in some of the corn mounds and not in others, hoping to see a difference in growth over the summer.

Rathgaber also created and maintains a Facebook page for the Blytheville research station and an updated webpage that will link to the Survey's main website. Through social media, she can publicize upcoming events at the station and at the Delta Gateway museum, and share interesting articles about archeology from around the world with Facebook "fans." Not only does this increase the station's visibility locally, it helps the Survey mission of public education about archeological work in Arkansas.

Blytheville Area Public Outreach

Public outreach is a major part of the Blytheville research station's mission. Rathgaber gave three public presentations, while Payne completed a teaching box/suitcase exhibit on agriculture in the Delta, gave a media interview to the *Memphis*

Commercial Appeal, and advised a local author. During Archeology Month, the two team-taught an Arkansas Northeastern College community education class called "Archeology in Action," covering basics about archeology and including hands-on time in the lab working with different types of artifacts. Payne began working with Big Lake National Wildlife Refuge on an archeology exhibit. Payne, Rathgaber, and/or Haynes participated in six public outreach events around Northeast Arkansas, reaching about 171 people.

One major outreach focus is the Delta Gateway Museum. Payne continued in her role as Vice-Chair of the Delta Gateway Museum Commission. With the building infrastructure issues taken care of (painting, carpeting, tuckpointing of leaking walls), the Commission began planning events. A monthly "Heirloom Saturday at the Museum" is designed to allow local residents to show off their heirlooms and share stories with other attendees. At a reception for the opening of a traveling Civil War exhibit, Jamie Brandon (Survey archeologist at the AAS-SAU research station) gave a presentation. Haynes joined the Commission in the spring, and began working with Payne on a photographic exhibit showcasing life in rural Mississippi County from the 1930s through the 1960s.

Blytheville Research Station – Academic & Service Activities

Grants, Honors & Awards

- The Delta Gateway Museum Commission (Claudine Payne, Vice-Chair) and Founding Director received the Arkansas Delta Byways 2012 *Bootstrap Award* for “significant achievement on a shoestring.”

Professional Service

- **Professional Organizations.** Payne organized and chaired a symposium at the 2012 annual meeting of the Society for American Archaeology. She completed a survey sent to current and previous SEAC officers.
- **Peer Review.** Payne reviewed works submitted to *The Arkansas Archeologist*.
- **National Park Service.** The station provided information and photos about the Eaker site to the NPS Midwest Archeological Center for their website.
- **Projects at Other Research Stations.** Rathgaber, Payne, and/or Marion Haynes took part in Parkin site geophysical survey and palisade excavations, Suphur Spring (3AS1) salvage excavations, Carden Bottoms (3YE25) excavations, and Grigsby site (3RA262) salvage.

Public Service & Outreach

- **Delta Gateway Museum.** Payne serves as Vice-Chair of the Delta Gateway Museum Commission. She attended monthly meetings, worked with the Goals Committee, and participated (along with Rathgaber and Haynes) in “Heirloom Sundays at the Museum” and an open house during a city festival. During Archeology Month, the station hosted an Artifact ID event at the Museum (attendance, 40). Payne arranged for loans of several items to the Museum and transfer of some items from the Museum of Discovery. She participated in the planning and organization of a December reception for the opening of a traveling exhibit “Civil War Arkansas, 1861–1865” at the Museum, and hosted Jamie Brandon (AAS-SAU station archeologist and Chair of the Arkansas Civil War Sesquicentennial Commission), who gave a talk at the reception. Payne completed a teaching box for 4th–6th graders on *Agriculture in the Delta*, covering Native American through modern cotton agriculture, and began preparation of a teaching box on *Exploring Native American Life in the Delta through Ceramic Art*. Teaching boxes contain instructor guides, replica artifacts, and demonstration materials. Payne and Haynes proposed a photographic exhibit for the Museum, using 1930s photos by a local farmer, Eric Bollard, and began work on the project.
- **Arkansas Northeastern College.** Rathgaber and Payne staffed a booth at the College’s Native American Day (attendance, 30). Payne and Rathgaber taught a community education course, “Archeology in Action,” with lecture and two lab sessions.
- **Programs & Presentations.** Rathgaber gave two public talks to Westminster Village Retirement Village’s Coffee gathering in Blytheville (combined audience, 45). Station staff (and Marion Haynes) participated in Artifact ID events at Parkin Archeological State Park, and served as judges in the Heirlooms category at the Mississippi County Fair.
- **Exhibits.** Payne began work on an archeology exhibit for Big Lake National Wildlife Refuge.
- **Media Outreach.** Payne gave an interview to a reporter from the Memphis *Commercial Appeal* for a story on earthquake research. Rathgaber updated the station’s web pages that link to the Survey’s main website; she also created and administers a Facebook page for the research station, which has been an effective way to publicize activities and volunteer opportunities. Payne assisted a local author who is writing a book on northeast Arkansas in the De Soto era.
- **Community Volunteers.** Rathgaber recruited volunteers in the Blytheville community and surrounding area and instituted Open Lab Days once a month to work on various station projects. About 52 people so far have become involved.
- Total attendance at various presentations and events, 171.

Service to the Arkansas Archeological Society

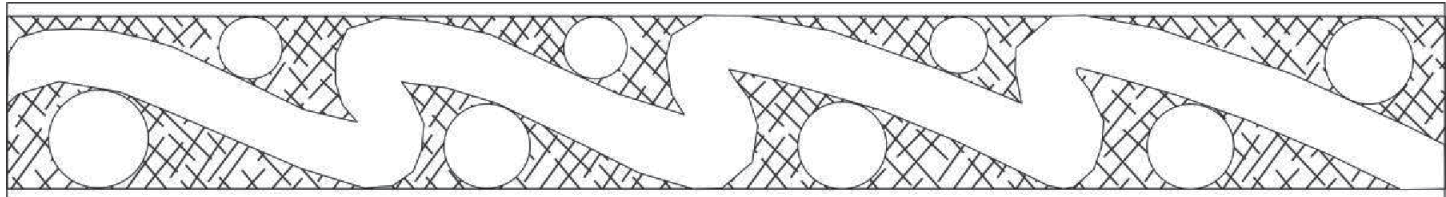
- **Training & Certification Program.** Rathgaber attended the 2012 Training Program at Historic Washington State Park, where she helped supervise excavations, and taught the Basic Lab Seminar. She also gave one of the evening lectures to participants (audience, 40). During the year she worked with a Society member on a collections rehabilitation project in the Blytheville station lab.

Volunteer Hours

- Volunteers contributed 236 hours to station research projects in the field and lab during 2011–2012.



Coordinating Office Reports



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



Teaching & Higher Ed

- Early taught a session of George Sabo's Ethnographic Approaches class during the Spring 2012 semester.
- Early served as a member of two UAF anthropology student Ph.D. committees, advised two other Ph.D. students on their doctoral research projects, and supervised a graduate student on a summer work project.
- Early also advised out-of-state graduate students from the University of Oklahoma, the University of Minnesota, and the University of Texas working on projects related to Arkansas. She supervised an Oberlin College student's inter-session internship in the Survey Lab, working on documenting collections.

Professional Service

- **Organizations.** President, Southeastern Archaeological Conference (2010–2012); Vice President, National Association of State Archeologists (2011–2012).
- **Boards & Commissions.** Arkansas Humanities Council (Board member, Minigrant Committee Member, Washington D.C. Lobbying Team member); Chairman, State Review Board for Historic Preservation; Judge, regional History Day entries, Rogers, AR.

- **Peer Review.** Early reviewed works submitted to the Butler Center for Arkansas Studies' *Encyclopedia of Arkansas History & Culture*.

Records & Collections Management

- **Guidelines.** Early rewrote and distributed "Survey Procedures for Treatment of Human Remains"; she wrote and distributed a memorandum on treatment of site information and Survey activities in social media.
- **Photo Archives.** Early reviewed non-cataloged black-and-white film rolls to identify the source and projects photographed, and assisted in inventory and reorganization of records and photo archives. She inventoried and organized material from Hester Davis's (Emerita State Archeologist) office for archive.
- **Permission Requests.** Early responded to 17 requests to re-use or publish Survey text or graphic products.
- **Museum of Discovery Collections.** Early continued to organize, inventory, and record Museum of Discovery (Little Rock) records and collections that were transferred to Survey custody for permanent curation. Appropriate items were separated and distributed to the various research stations.

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 Education Program, which produces a variety of materials such as books, exhibits, and informational flyers for teachers, students, and the general public, and works closely with the Arkansas Archeological Society, an active organization of amateur archeologists, on such projects as the annual Training Program and Archeology Month.

Ann M. Early (Ph.D., University of Massachusetts – Amherst, 1973) is a Research Associate Professor of Anthropology at the University of Arkansas – Fayetteville, and is the second person to serve as State Archeologist for Arkansas. She was hired to the position in 1999 after 27 years as Survey research station archeologist at Henderson State University. 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.

Cultural Resource Management

- **Project & Permit Reviews.** Early reviewed all Federal grant applications, Corps of Engineer Permit Requests, Arkansas Historic Preservation Program Section 106 letters, and contract reports.
- **Agencies and Firms.** Early responded to 167 requests for advice, assistance, or information from professional archeologists, land managers, and CRM firms, with replies ranging from a single contact to extended periods of research; 35 of these requests concerned historic cemeteries.

Public Archeology

- **Public Outreach.** Early responded to approximately 105 requests for information and/or assistance from the public (individuals or organizations) concerning archeology; 38 of these requests concerned historic cemeteries. Responses ranged from single phone calls to extended periods of assistance requiring lengthy research and collaboration with other professionals.
- **UA Museum Collections.** Early helped Mary Suter organize and prepare hands-on teaching and outreach collections using University of Arkansas Museum Collections materials.
- **Arkansas Archeological Society.** Early advised the Society committee on Archeology Month activities. She attended the 2012 Training Program at Historic Washington where she taught a Site Stewards workshop and helped supervise excavations. She gave a public talk to the Ouachita Chapter in Hot Springs (audience, 25) and presented a paper at the Annual Meeting.

- **Programs & Presentations.** Early gave talks to the South Arkansas Historical Foundation in El Dorado, and the History Symposium at UA Fort Smith.

Research Projects

- Research on ceramics in the Central Arkansas River Valley (the Survey's NEH-funded CARV project).
- Development of a relational database for Indian pottery from the Trans-Mississippi South and master file of pottery classifications.
- Wrote "Pots and Identities" chapter on Caddo and Mississippian pottery for *Medieval Mississippians*, edited by Tim Pauketat, forthcoming from SAR Press.
- Biographical essay on Hester A. Davis for Springer Press *Encyclopedia of Cultural Resource Management* (published).
- Wrote a chapter for *All the King's Horses*, edited by Paula Lazrus and Alex Barker, The SAA Press (published).
- Critical analysis of Will Soule's photographs of a historic Caddo farmstead, and chapter on this topic submitted for a book forthcoming from University of Texas Press.
- Research on the archeology of slave cemeteries in Arkansas.
- Presented papers at the annual meeting of the Arkansas Archeological Society (2011), Caddo Conference (2012), Arkansas Historical Association Conference (2012), and the annual meeting of the Society for American Archaeology (2012). Panelist at the Colonial and Post Colonial Ceramics Conference (2011).



Office of the Registrar

Managing the State's Archeological Site Files

The 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, 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 **944** new sites were recorded, bringing the total for the state of Arkansas to **46,436**. New information for **282** previously recorded sites (revisited by various persons during the year) was also added. New archeological projects numbered **191** this year, bringing the total projects listed in AMASDA to **6331**. Finally, **11** archeological collections were accepted for curation.

Arkansas Archeological Survey Site File Activity, 2011–2012

New Sites Recorded	944	Total no. of sites in Arkansas site files: 46,436
New Data for Known Sites	282	
Access to Site Records	161	
Collections Accessioned	11	
New Projects Entered in AMASDA	191	Total no. of projects in AMASDA: 6331

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.

Marian Kunetka (M.A., University of Arkansas, 1999) joined the staff as assistant registrar after working part-time in the office while pursuing her B.A. and M.A. degrees in anthropology as a nontraditional student at UAF. She previously was an executive secretary for a major corporation, and owned and operated a rare books and graphics store in Chicago. She has archeological field and laboratory experience in Arkansas.

Teka McGlothlin, Duncan McKinnon & Leslie Walker are students in the UAF Department of Anthropology. Teka is a graduate anthropology major. Leslie and Duncan are Ph.D. candidates; both have completed their master's degrees in the department and continue to work with Survey archeologists as their advisors.

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 11 Survey research stations, and others performing legitimate research in the state.

The office fielded approximately **161** requests for site information during FY 2011–2012 via in-house visit, telephone, email, or fax. These contacts are 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. Responses were by email, fax, telephone, or post, in addition to helping visitors in person. In the course of the year, the registrar's office also assisted about **32** private firms doing research in Arkansas. A comprehensive list is provided on page 79.

Teaching Service

The registrar's office conducted tours of its facilities for students enrolled in "Approaches to Archeology" classes at UAF during fall and spring semesters. The office also worked with students in Survey Director Thomas Green's "Cultural Resource Management" class; each student learned how to use the site files and databases to do a records check by conducting a review of archeological records and reports for a specific project and writing a letter in the persona of a SHPO with recommendations on archeological work.

Office staff also assisted students (undergraduates, master's students, and Ph.D. candidates) with their respective projects for class work or thesis research. This year student researchers included Anna Evatt (Isgrig skeletal material), Andrew Gottsfield (Spradley Hollow site), Trevor Seekamp (Breckenridge Shelter), Teka McGlothlin (Cane Hill), Leslie Walker (Carden Bottoms), Duncan McKinnon (Battle Mound), Pritam Chowdhury (Ferguson), Emily Bitley (M.A. project), and others. Student Interns Joanna De Maio and Tracy Hadlett performed an overview of records and operations. The number of students using Survey records has steadily increased.

The Survey employed three UA students in the registrar's office: Teka McGlothlin (UAF anthropology graduate student) and Ph.D. candidates Leslie Walker and Duncan McKinnon.

NAGPRA Functions

In addition to grant-funded activities (see below), the Registrar's Office accepted and curated prehistoric human remains from the Arkansas Medical Examiner's Office in Little Rock, in accordance with NAPGRA. Also, Melissa Zabecki, working through a grant with the Ozark-St. Francis National Forests, inventoried human remains from the forest area. These will be curated at the Survey until they are repatriated.

Funded Research

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

National Park Service NAGPRA. \$73,769 in funds was awarded in the summer of 2006 for a project whose primary objective is to determine the cultural affiliation of the detached crania and mandibles at the Crenshaw Site in Miller County. Barbara Farley, anthropology Ph.D. candidate at UAF, worked on documenting and inventorying the skeletal elements of the 396 crania and mandibles and the 19 known Caddo skeletons from the site. In September 2010, Farley quit the project. In her place, a team was formed to complete the grant. A report was finished in July 2011. There are plans to publish the report in *The Arkansas Archeologist*.

AHTD AMASDA Online. The original three-year grant from the Arkansas Highway and Transportation Department began in January 2007; it has been extended through January 31, 2014. The grant makes available \$425,436 to allow AMASDA to go online via the web. The online system will provide archeological researchers who obtain a secure password from the registrar's office with the means to access the full information on known sites and projects without the need to visit the Survey's coordinating office. This grant enables the updating of the AMASDA database, the Citation database, the registrar's office project quads, and the scanning of new and revisited site forms. The GIS portion of the project database is now undergoing extensive testing. Linear sites such as culverts and roads had been given UTM's every 1000 meters in order to represent the sites more actually on the GIS data layer. Currently the grant

team are working the bugs out of the online "Access to Records" and the "Procedure for Access" to AMASDA. Access to the Projects database for all federal and state archeologists was accomplished in 2010. The team are still working on getting all the projects digitized and stitched together. Artifact cards from the early 1970s will be scanned to provide additional photos and descriptions from various sites. These can be linked to individual sites in AMASDA.

DOD Fort Chaffee and Camp Robinson. The office received grant funds to scan reports pertaining to Camp Robinson, Ft. Chaffee, and National Guard Armories so these could be added to the digital database. This was completed during the year and copies of the scanned reports were sent to Camp Robinson as well as placed on our server.

Future Plans. The Registrar's Office continues to look for grants that would allow us to scan our limited distribution reports and have them online for archeologists to use. The main problem is that most granting agencies want public access for records, but these reports contain some protected information.

The Survey has several COE collections that need to be brought up to current curation standards. The office will work with the COE districts to help secure funding for this project.

With the Survey's new file share server in place, the Registrar's Office needs to start uploading various records such as digital photos (with records), NAGPRA records, etc. to share with the research stations.

The Registrar's Office provided assistance to the following groups & agencies during 2011–2012

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 & Partnerships / National NAGPRA Program
 Natural Resources Conservation Service, Little Rock
 U.S. Forest Service

- Ouachita National Forest
- Ozark-St. Francis National Forests

State

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

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

Private Firms

- AArcher, Inc.
- AMTEC (Knoxville, TN)
- American Resources Group
- Archeological Assessments, Inc. (AR)
- Archeological Environmental Consultants, LLC (TX)
- Atkins

- Blackshire Environmental
- Brockington Associates (nationwide)
- Burns & McDonnell, Kansas City
- CHRS, Inc. of PA
- C-Dimensions, TX
- CenterPoint Energy
- Center for Archaeological Research
- Cultural Resources Analysts
- Coastal Environments Inc., Baton Rouge
- Deep East Texas Archeological Consultants
- Dynamic Environmental Associates, Inc.
- Earth Search of New Orleans
- EMR
- Environmental Research Center of Missouri
- Environmental Corporation of America (GA)
- Flat Earth Archeology (AR)
- Goodwin and Associates (nationwide)
- Gulf South Research Corporation (LA)
- Historic Preservation Associates (AR)
- Horizon Environmental Services, Inc.
- Louis Berger (nationwide)
- MACTEC (TN)
- Mid-Continental Research Associates (AR)
- Miller Environmental
- Natural Resource Group (nationwide)
- Panamerican Consultants of Memphis
- Peregrine Environmental (TX)
- Price Laird
- PBS&J (TX)
- Powers Engineers
- AAS Sponsored Research Program (AR)
- Seas Dimensions, Inc.
- Sphere 3 (TX)
- SW Power Administration Rows (nationwide)
- Terracon (nationwide)
- TRC Solutions, Atlanta, GA
- Weaver & Associates (TN)
- William Self Associates
- URS (nationwide)

Sponsored Research Program



Davidsonville 3D Reconstruction & Online Catalog

Kathleen Cande collaborated with Angie Payne and Snow Winters of the Center for Advanced Spatial Technologies (CAST) at UAF to create three-dimensional visualizations of several buildings at the early nineteenth century county seat town of Davidsonville in Lawrence County, Arkansas. Generous funding for this project was provided by a grant from the Arkansas Natural and Cultural Resources Council.

Payne and Winters have developed two-dimensional geospatial visualizations and animation of features at late prehistoric archeological sites such as Parkin and Upper Nodena that are featured on CAST's website. Results of Arkansas Archeological Survey excavations at Davidsonville (2004–2009) guided the digital reconstruction of the courthouse and two taverns (the town is now a state park). Historically accurate data from other sites of the same period were used to recreate a cotton gin and warehouse that might have stood near the Black River at Davidsonville.

The goal of the animation project was to make the recreations as accurate as possible. They include building interiors and furnishings. Extensive research was conducted to gather information on interior structural details (such as fireplaces, staircases, and wood trim) and hardware that were not preserved in archeological deposits. Animation software allows viewers to control what they see as if they were flying over the buildings and looking down into the (roofless) interiors. These images will be used for teaching purposes and public interpretation. The reconstructions will be of particular value at Davidsonville Historic State Park, where there are no surviving buildings.

Cande also selected photographs of over a hundred artifacts found during excavations at Davidsonville that have been used to create an online artifact catalog. As the viewer clicks on an artifact photo on the new website, a description of the artifact appears, along with keywords (terms describing the object's function), AAS catalog number, and provenience. Seventeen artifact images will appear in 3D. The viewer will be able to

The Sponsored Research Program (SRP) conducts externally funded research based on grants, contracts, and cost-share agreements. Projects range in scope from documenting cultural resources within small areas in Arkansas, to resource overviews of large regions of the United States, to assisting with interpretation at state parks. To date, SRP has completed nearly 1000 studies within Arkansas and neighboring states. SRP service to the University community includes teaching, membership on graduate student committees, and employment opportunities for qualified students as field and laboratory technicians. SRP staff members routinely serve as consultants to various state and federal agencies.

Robert C. Mainfort, Jr. (Ph.D., Michigan State University, 1977) is Research Archeologist with the Survey and Research Professor of Anthropology, University of Arkansas – Fayetteville. He joined the Survey in 1994 as SRP administrator and also serves as Series Editor of Survey Publications. His interests include mortuary studies, archeological systematics, and historical archeology.

Kathleen H. Cande (M.A., University of Arkansas, 1984) works as a Survey Project Archeologist. 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 manages and supervises the SRP laboratory.

Randall L. Guendling (M.A., University of Arkansas, 1993) works as a Survey Project Archeologist. He has been employed by the Survey since 1981. His specializations include historical archeology, Arkansas history, and prehistoric lithic analysis.

look at all sides of these artifacts. The artifacts pictured include whole and reconstructed ceramic dishes, fragments of stone-ware vessels, food storage jugs, silverware, candlesticks, nails, door and shutter hardware, and personal items such as glass beads, coins, jewelry elements, buttons, thimbles, and mouth harps. Many of these artifacts were painstakingly reconstructed and conserved by Survey archeological technicians Aden Jenkins and Jared Pebworth.

These 3D building visualizations and online artifact catalog have been created for an interactive educational website that will allow the public to learn about Arkansas's first county seat town, and the results of the Survey's excavations at the town site. They will also enhance the experience of those who visit Davidsonville Historic State Park in Pocahontas.

Preserving the Prehistoric Heritage of NE Arkansas

Randall Guendling heads this project, funded by Arkansas Natural and Cultural Resources Council. The first goal is to inventory and evaluate the condition of the extensive collections from northeast Arkansas that are curated by the University of Arkansas Museum Collections Facility. Much of this material was excavated by the Museum during the 1930s. As part of the inventory process, data for each object or object class is entered into a computerized database. The second goal is to upgrade, following the recommendations made by a museum conservator who evaluated the collections' status under ANCRC Grant 07-006 (Documenting and Preserving Arkansas's Bluff Shelters). This will include re-boxing the collections by museum staff into conservation quality receptacles purchased through this grant. This project is being implemented step by step with multi-year grant requests.

The first year (ANCRC Grant 10-008) estimated 386 boxes of collections from the general northeast Arkansas region; however, it was quickly realized that many of the collections included in the first compilation were from mandated regulatory cultural resource studies. These included sites that had been analyzed, and though the artifact analysis data have not been transferred onto museum catalog cards, the data are extant and thus available in different formats. These sites are being excluded from the grant processing as they are encountered. A much more efficient approach was adopted that concentrated on large sites that had uncataloged multi-year museum collections. The second and current third year grant has continued this process on a county by county basis.

Integral to the ongoing inventory of the northeast Arkansas collections is upgrading the storage of objects. The re-boxing is taking place in several steps. As the project archeologist inventories objects, they are placed in new chloride-free zip lock bags. In many instances objects or specimens are still found in the original acidic paper bags as returned from the field decades ago. The process of boxing the collections is ongoing, largely through volunteer work, in new acid-free archival quality containers provided by grant funds.

To date for the fiscal year, inventories for 85 previously uncataloged collections have been completed. A total of 4252 catalog records for classes of artifacts, representing some 39,520 individual objects, have been generated under this grant.

An extension was requested to allow the total funding for ANCRC Grant 12-005 to be applied to the documentation of the collections. A final report will be prepared at the end of the extension.

New Grants and Contracts in FY 2011–2012

Project No. & Name	Firm or Agency	Budget
11-02 Archiving Records & Photographs of the AASurvey	ANCRC	\$66,466.00
11-06 Davidsonville 3D Visualization & Online Catalog	Subcontract with CAST	\$8,274.00
12-01 Preserving the Prehistoric Heritage of NE Arkansas (Yr 3)	ANCRC	\$91,586.00
12-02 Aiding Interpretation at Parkin Archeological State Park	ANCRC	\$19,847.00
12-03 City of Scranton Water Improvements	McGoodwin, Williams, and Yates, Inc.	\$3,856.00
12-04 Lake Fayetteville Trail Additions	City of Fayetteville	\$1,504.00
12-05 Washington County Water Extensions	Engineering Services	\$3,325.00
Total		\$194,858.00

*ANCRC = Arkansas Natural and Cultural Resources Council

SRP Reports Completed in FY 2011–2012

Cande, Kathleen

- 2011 Archeological Monitoring of Waterline Construction Near Site 3SC51 Within Phase II of the James Fork Regional Water District, Scott County, Arkansas. Final Report, AAS Project No. 09-06. Submitted to EDM Consultants, Inc., Fort Smith.
- 2011 A Cultural Resources Survey of Sites 3SC40, 3SC130, and the Chant Cemetery (3SC2659), Part of Phase II of the James Fork Regional Water District, Scott County, Arkansas. Final Report. AAS Project No. 09-06. Submitted to EDM Consultants, Inc., Fort Smith.
- 2011 A Phase I Cultural Resources Survey for a Proposed Visitors Center, Jacksonport State Park (3JA53), Jackson County, Arkansas. Final Report. AAS Project No. 10-06. Submitted to the Arkansas Department of Parks and Tourism, Little Rock.
- 2012 Inventory and Archiving Records and Photographs of the Arkansas Archeological Survey. Final Report. AAS Project 11-02. Submitted to the Arkansas Natural and Cultural Resources Council, Little Rock.
- 2012 Online Catalog of Artifacts Found at Davidsonville, Arkansas by the Arkansas Archeological Survey. <http://davidsonville.cast.uark.edu> (under construction).
- 2012 3D Reconstruction of Early Nineteenth Century Buildings at Davidsonville, Arkansas. <http://workspace.cast.uark.edu/angie/webplayer.html> (under construction).

Guendling, Randall L.

- 2012 A Cultural Resources Survey of the City of Scranton Water Facility Improvements, Johnson and Logan Counties, Arkansas, AAS Project 12-03. Arkansas Archeological Survey. Submitted to McGoodwin Williams and Yates, Fayetteville, Arkansas.

Sponsored Research Program – Academic & Service Activities

Teaching & Higher Ed

- Mainfort taught ANTH 4243 Archeology of the Midsouth (11 students) at UAF. He served on one M.A. and four doctoral student committees.
- Cande gave an introduction to the Survey and Collections Facility for three groups of UAF undergraduates taking ANTH 3023 Approaches to Archeology during the Spring 2012 semester (30 students).

Professional Service

- **Peer Review.** Mainfort reviewed works submitted to *Southeastern Archaeology*, and is a member of the editorial review board of *Midcontinental Journal of Archaeology*. He also reviewed a National Science Foundation proposal and served as external reviewer for a tenure/promotion case at a Big Ten university. Cande is current research editor for Arkansas for the *Southeastern Archaeological Conference Newsletter* and current research editor for the Gulf States region for the *Society for Historical Archaeology Newsletter*.
- **Consultations.** Mainfort served as consultant to the University of Arkansas Museum, Arkansas Department of Parks and Tourism, Department of Arkansas Heritage, and Shiloh Museum. Cande served as consultant to the Arkansas Department of Parks and Tourism, Davidsonville Historic State Park, the Buffalo National River, and Arkansas Post National Memorial.
- Cande is a member of the Survey's Publications Committee.
- Cande attended a workshop at the University of Tulsa on Midwestern Archaeological Nomenclature for Cataloging Museum Collections held in conjunction with the American Association for the Advancement of Science regional meeting.

Public Service & Outreach

- **Programs & Presentations.** Cande gave two guided tours of the Davidsonville town site and a public lecture for the first Archeology Day at Davidsonville Historic State Park (audience, 100) and hosted a tour of Survey facilities as part of the Arkansas Living History Association's annual meeting (audience, 30).
- Cande serves on the Territorial Lawrence County Research Consortium, planning research activities and public events for Lawrence County's bicentennial in 2015.
- Cande was shadowed for a day by an 8th grade student from Kirksey Middle School in Rogers.



Field and Laboratory Support

The combined experience and expertise of our coordinating office Field and Laboratory Support staff put them in constant demand within the Survey's statewide archeological program. This year Michael Evans, Jared Pebworth, and Aden Jenkins participated in all of the Survey's major research efforts, as well as many important but shorter-term projects. Some highlights of the year are presented.

Breckenridge Shelter (3CR2)

This intensive project was conducted by the Survey's UAF research station in cooperation with UA Department of Anthropology archeologist Marvin Kay and his student Trevor Seekamp. Evans, Pebworth, and Jenkins carried out preliminary site preparation and mapping, location and reexcavation of units previously dug at the site in the 1960s, new excavations of small balk areas in between the areas of previous work, reconstruction and documentation of soil profiles, and collection of soil samples for dating and specialized analyses.

Prairie Grove State Park (3WA300)

This project was in cooperation with the State Park with grant funding from the National Park Service's American Battlefield Protection Program. Tasks included setting up geophysical grid and helping to perform survey with ground penetrating radar and electrical resistivity, mapping, feature location and identification, excavation, final site map, and report production. Houses, a road, and other features significant to the battlefield landscape were identified and mapped, with excavations concentrating on the William Rogers House. The work was directed by Jerry Hilliard and Jami Lockhart.

Parkin State Park Palisade Excavations (3CS29)

Responsibilities included mapping and test unit layout, excavation, and documentation. This project, under the direction of Parkin research station archeologist Jeff Mitchem, was conducted to learn more about the site and to aid Park development and interpretation.

Field and laboratory support for the statewide archeology program is provided from the coordinating office in Fayetteville by a staff of highly experienced archeologists with wide-ranging skill sets, including 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. These staff members are invaluable contributors to station research projects, emergency salvage operations, grant-funded research, specialized laboratory and computer tasks, SRP projects, consulting, and public outreach.

Michael Evans (Research Assistant) has been with the Survey since 1991. His specialized skills include digital Total Station and theodolite mapping, AutoCAD and Surfer map production, data editing and management, geophysical fieldwork and data interpretation, archeological fieldwork planning and supervisions, project background research and report production. Evans is interested in flint knapping, 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.

Aden Jenkins (Research Assistant) has been with the Survey since 2005. His specialized skills include archeological excavation, lab processing, artifact encoding, rock art documentation and drafting, lithic analysis, historic ceramic analysis, flotation systems operations, and electrical resistivity operation. Jenkins is interested in Ozark prehistory, rock art, flint knapping, and primitive technology and replication.

Drennen-Scott House in Van Buren (3CW1050)

Ongoing excavations in the yard at this historic property, owned by the University of Arkansas - Fort Smith, are part of the long-term commitment of the Survey's research station at UAFS. This year involved a metal detector survey to look for possible Civil War activity, and excavations in the yard to investigate foundations of former outbuildings and other features. UAFS station archeologist Tim Mulvihill directs this research.

Grigsby Site (3RA262)

This was a project of the ASU research station, directed by Julie Morrow. The goals were to better define the historic Native American occupation at this contact period site. Because historic metal trade artifacts had been found in previous work, the responsibilities included a detailed metal detector survey, with associated data collection and documentation.

Carden Bottoms Excavations (3YE25)

Extensive excavations at this site continued as part of the Survey's NEH-funded "Art, Ritual, and Social Interaction in the Central Arkansas River Valley" project directed by UAF station archeologist George Sabo III and Survey archeogeophysical research director Jami Lockhart. Pebworth, Evans, and Jenkins have been vital members of this project at all stages, including taking the initiative to expand the research along new lines that were not envisioned in the original proposal. Work on the

project this year primarily consisted of excavations at 3YE25, a Native American village site in central Arkansas. Previous geophysical mapping had identified buried features including house outlines and pits that were the focus of excavations. These maps show that houses are organized in "neighborhoods," and excavations have sampled each identified neighborhood. Responsibilities of the Support team include site mapping and documentation, all phases of site preparation and excavation, and data recording in the field, plus data processing and preparation of graphics such as site plans. In addition, Aden Jenkins processed, bagged, and labeled flotation samples from 3YE25, and inventoried artifacts from another site, McClure (3CW34), as part of this project.

Metal Conservation

Jared Pebworth received training in conservation of metal objects through a Historical Resources & Museum Services workshop in 1994. Since then, he has analyzed and conserved hundreds of historic and contact period metal artifacts from archeological sites in Arkansas. This year, Pebworth treated artifacts from the late 17th century Grigsby site (3RA262). Methods were electrolytic reduction, micropicks under magnification, manual cleaning, and fiberglass abrasion. Some chemical and protective sealants were applied in the final stages of the conservation process. He also analyzed the collection to identify the items and determine if they had been used.

Cemetery Initiative

Archeological field crew have assisted in many projects to map and document historic cemeteries. These projects originate in a number of ways, as part of research station service activities or directly from the coordinating office. This year Aden Jenkins worked at Walker Cemetery for the Northwest Arkansas African American Heritage Association; at Kimes Cemetery (3CW810) with a Heritage Resources Conservation class at UAFS; and Thibault Cemetery as part of the large-scale Fourche Island project near the Little Rock port. Jenkins also visited several cemeteries (Quesenbury Cemetery, Beneux Plantation and Cemetery, Quesenbury Cemetery No. 2, Marlar Cemetery, and Rankin Cemetery) in response to a citizen contact.

Sponsored Research Program

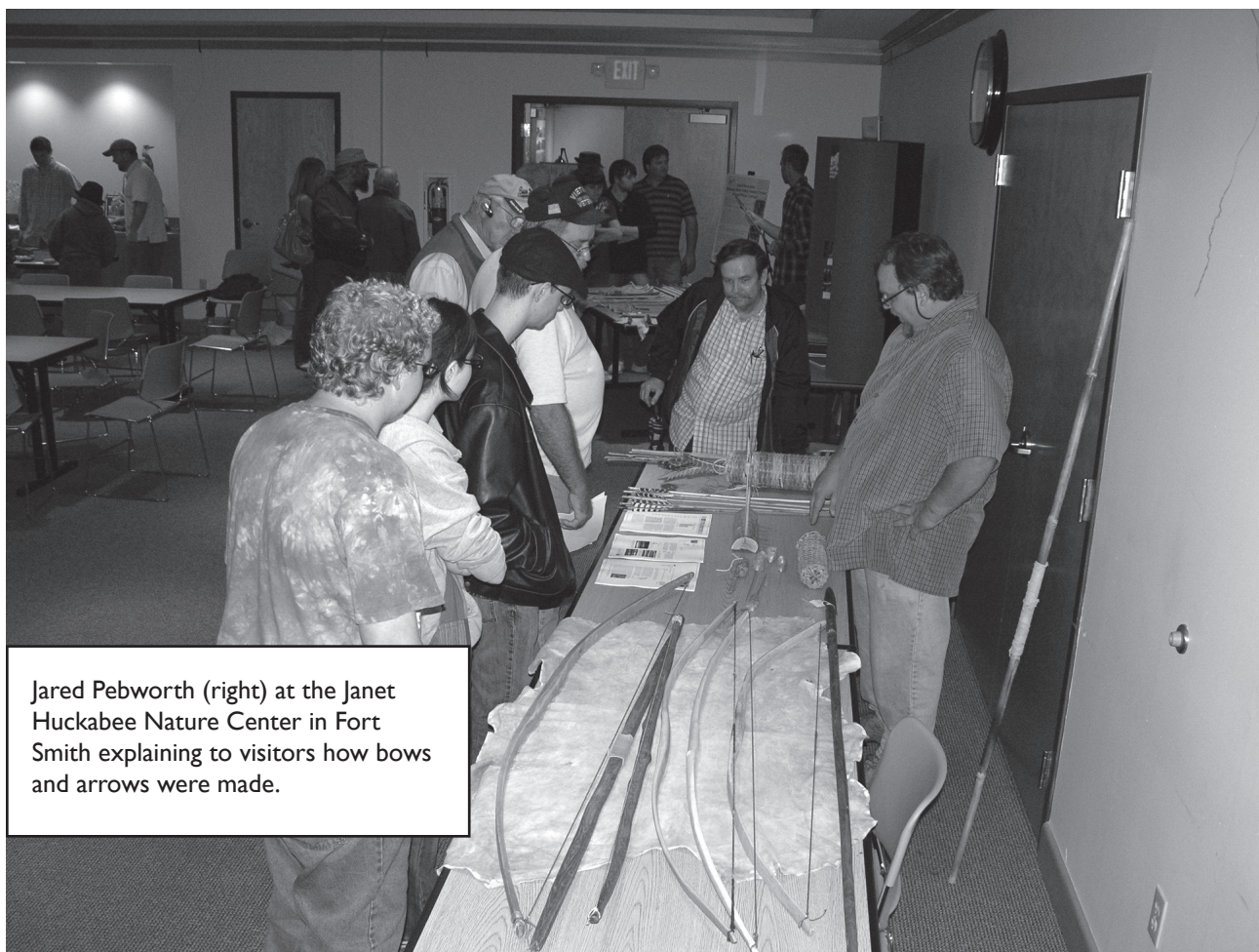
Field and Lab Support personnel served as crew members for several SRP projects during the year, including Washington County waterline surveys. Responsibilities included site survey and documentation, map and site record production, and

report writing. There were also records checks for a waterline project in Woodruff County, and testing and recording of sites along the Lake Fayetteville trail system.

Public Outreach

Pebworth, Evans, and Jenkins work together to craft and maintain a collection of replica artifacts, and practice using many of these implements. Flint knapping, and blow dart and atlatl target practice often are set up in a grassy area behind the Survey building during lunch breaks. The team travel with their collection to give demonstrations of primitive technology at schools, fairs, and parks as a way to bring Arkansas archeology alive for the public, especially younger audiences, who are invited to try out the equipment. This year demonstrations were given at Old High Middle School in Bentonville and at the Janet Huckabee Nature Center in Fort Smith.

Jenkins also assisted with logistics and leadership at the 2012 Arkansas Archeological Society Training Program, held at Historic Arkansas State Park.



Jared Pebworth (right) at the Janet Huckabee Nature Center in Fort Smith explaining to visitors how bows and arrows were made.

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.

Ms. 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.

2011–2012 Activities

- 25 rolls of black and white film processed and cataloged.
- 1200 images scanned from black and white negatives, color slides and film, digital images, and prints for research, teaching aids, Society publications, reprints, journal and newsletter articles, poster / public presentations, station archives, and academic publications.
- 41 graphic and design works, maps, graphs, posters, and illustrations (two examples of Kellett's artworks illustrate this page).
- 1400 items photographed: prehistoric and historic pottery and artifacts for grants, publications, research, presentations, museum collections, and public and professional meetings.



Greenbrier gorget from the University of Arkansas Museum

Computer Services Program



AMASDA Database & Backup Systems

John Samuelsen maintains the Survey's servers, databases, and comprehensive backup system, including AMASDA (the main database for management of archeological site records), the AMASDA Online website, the arkarcheology server, and arasbackup server. Use of the backup system by Survey personnel increased this year, with 2.10 TB of data backed up in the File Share folder, and 1.47 TB in use for system and AMASDA database backups. All eleven research stations were added to the system this year, and Samuelsen looked into grant opportunities that would allow expanding the system to include some analog data.

Samuelsen provides support to the Survey Registrar's Office and anyone else needing help with the AMASDA Online website and AMASDA database. Individuals logged in over 5000 times this year to retrieve records on archeological sites and projects in Arkansas. The AMASDA Online was updated to address several issues, including password security, addition of the digitized Projects database to the Geographic Interface, and other improvements to the text interface. Also, testing on a new access to records procedure was begun.

Ann Early, Mary Beth Trubitt, and George Sabo, and Ph.D. student Leslie Walker created a new Ceramics database to be

accessible from the AMASDA Online website, and populated it using materials from the Survey's ongoing NEH-funded research program in the central Arkansas River valley (the Carden Bottoms site, 3YE25).

GIS Research

Jami Lockhart completed a site-wide Geographic Information System as part of the Survey's Civil War Battlefield Project at Prairie Grove State Park. The digital layers include historic maps, modern battle interpretations, elevation models, and a time-series of aerial photos beginning in 1941 that were used to locate and interpret lost features of the 1862 battle.

For the AMASDA Online project that was funded by a \$425,000 grant from the Arkansas Highway and Transportation Department, Lockhart completed statewide environmental similarity and archeological site potential models. Individual models based on time period, cultural affiliation, and physiographic region were developed for research and land-planning applications.

Lockhart also continued to construct, analyze, and present GIS data associated with the \$240,000 grant from NEH to study prehistoric and protohistoric cultures in the central Arkansas River valley.

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. The newest component of the Survey's computer applications program is 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, archaeogeophysics, and human-environmental relationships through time. He is CSP Coordinator and Director of Archaeogeophysical and GIS Applications.

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.

John Samuelsen (M.A., University of Arkansas, 2009) is currently a Ph.D. student in Anthropology at UAF and a research assistant at the Survey. His specializations include web application development, database management, GIS, archaeogeophysics, and archeology of the American Southeast. He is the Survey's Server Administrator and assists with database and web application development.

Equipment & Technical Support

Most of Deborah Weddle's time is devoted to computer systems security, end user support (both hardware and software), web server administration, computer repairs and upgrades, and acquisition and deployment of equipment and software. Weddle is responsible for oversight and maintenance of all day-to-day computer operations for the statewide organization, including computer systems procurement, inventory, and administration.

Due to our in-house technology support and upgrades, the Survey is able to sustain a useful product life of 6–7 years per desktop computer, and an average of 4.5 years per notebook computer. This is more than double the useful life cycle in most corporate environments.

Facilities at the coordinating office in Fayetteville include a computer lab for staff and student use, and a large format printer/scanner for documents such as posters for conference presentations and excavation records such as maps, site plans, and rock art tracings. Only trained CSP staff may operate this equipment. John Samuelsen currently maintains the large format printer/scanner, which was used this year for digital backup of Museum of Discovery materials, excavation records from Parkin State Park, and several conference posters.

The Survey on the Web

Weddle is responsible for design, administration, and maintenance of the Survey's main website <www.arkansasarcheology.org> which had 8276 visits during the year (average 690 page views per month). The Archeology Month section of our website received over 1100 visits, reflecting high interest and use of the activities listed there among educators and the public. Weddle is the initial point of contact for inquiries received via the website, and relays those to the appropriate staff person. The site provides information for various audiences and is continually updated:

- a section on state laws relevant to archeological resources
- state standards for fieldwork and report writing, providing guidelines for private research firms and agency archeologists
- contact information for our research stations, and instructions on how to report a site, or to request information
- news about excavations and research projects
- information on Survey publications and how to order them
- free digital versions of out-of-print Survey publications available as downloadable PDFs (new titles were added this year)

- educational flyers and handouts for teachers and students on a wide range of topics available as downloadable PDFs (all flyers were redesigned and updated this year)
- sections on activities we co-sponsor with the Arkansas Archeological Society such as Archeology Month and the annual Training Program
- a link to the statewide Arkansas Archeological Society, an organization for people of all ages and walks of life who are interested in prehistoric and historic archeology
- information about volunteer opportunities, including the annual Training Program, a flexible field school at which any interested person can participate in Arkansas archeology under the guidance of Survey professionals

Interactive Educational Websites

Samuelsen maintains the Survey's two interactive educational websites. **Indians of Arkansas** <<http://arkarcheology.uark.edu/indiansofarkansas/index.html>> is designed for the public and for students and educators. It contains both academic and indigenous perspectives on American Indian history. Last year, George Sabo, who created the site, also added a menu area for articles and progress reports on Survey research projects from around the state. Three articles were posted this year: "Reconstructing Ancient Foodways" by Mary Beth Trubitt, "Caddo Dance Performance as Public Education" by George

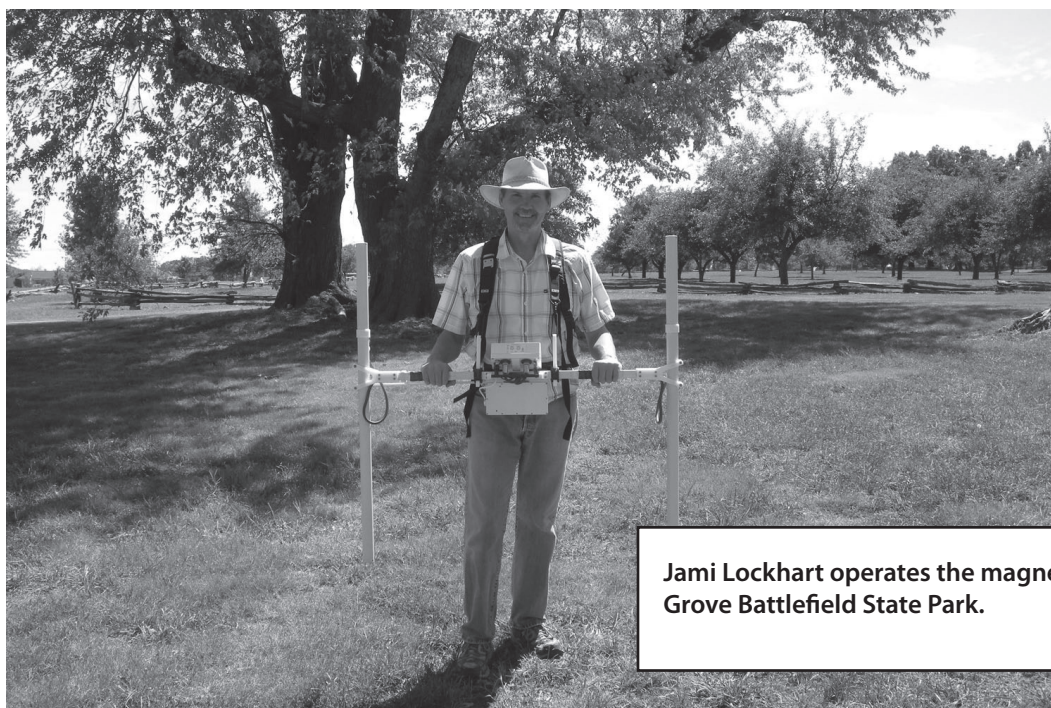
Sabo III, Mary Beth Trubitt, and Tim Mulvihill, and "The Early Mississippian Village at the Bruce Catt Site" by Julie E. Morrow. The site received 149,248 hits and 66,371 unique visits, an increase over last year.

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 31,019 hits and 12,099 unique visits.

These sites have their greatest popularity during the school year, indicating a high use by students and teachers for learning and classroom preparation about Arkansas history and Arkansas Indians. **Rock Art in Arkansas** had increased traffic in March 2012 after an article in the *Arkansas Democrat-Gazette* highlighting this cultural resource and the Survey's research, with a link to the website. The content of the websites is a group effort, but is mostly created and updated by George Sabo.

Service Websites

Archeological Parks in the U.S. <www.uark.edu/misc/aras> has information on parks that interpret archeological sites or feature results of archeological investigation. It received 3154 page views in 2011–12 (an average of 309 per month). We also host a service website for the **South Central Historic Archeology Conference** and provide a link to the **Arkansas Archeological Society**.



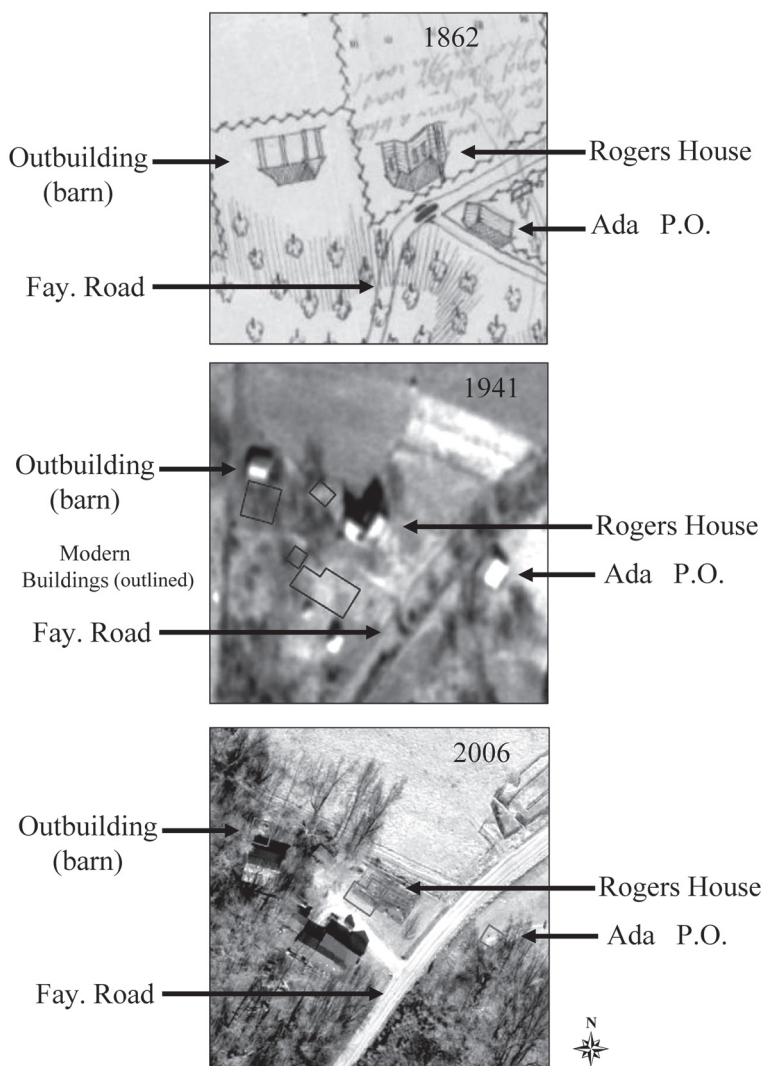
Jami Lockhart operates the magnetometer at Prairie Grove Battlefield State Park.

Archaeogeophysical Research Projects

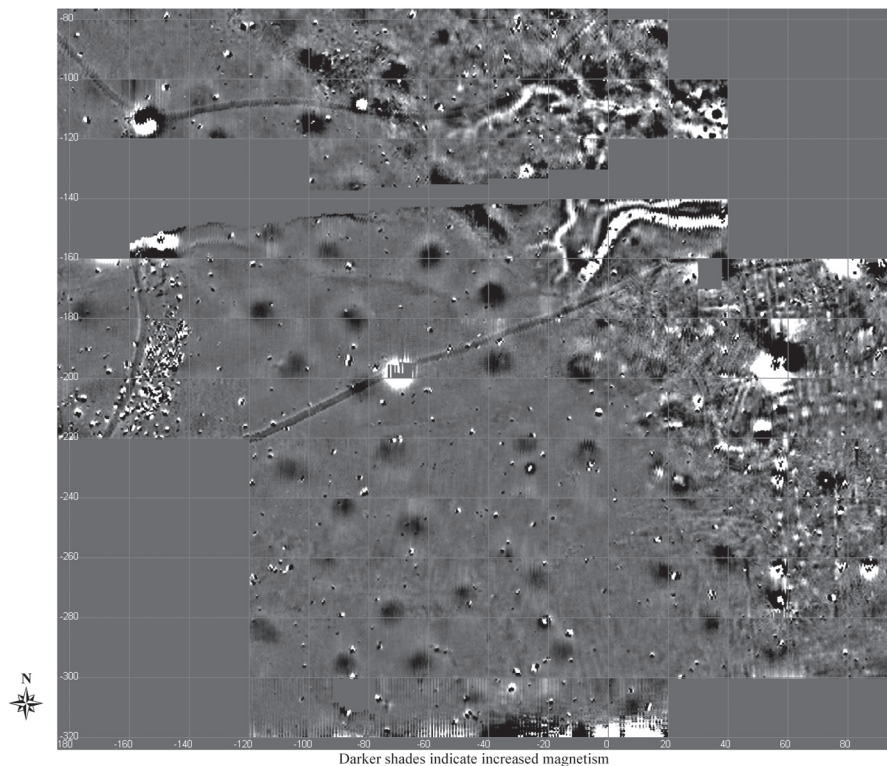
The Survey's comprehensive program of archaeogeophysical remote sensing applications is directed by **Jami Lockhart**. As a nondestructive reconnaissance technique that can save time and expense by focusing excavation efforts for the most beneficial result, archaeogeophysical remote sensing has revolutionized archeological methodology and has become an integral part of cultural resource management. The Survey endeavors to remain at the forefront of this development.

- Geophysical remote sensing continues to play an important role in long-term research and land planning at the prehistoric/protohistoric Carden Bottoms archeological site (3YE25) near Dardanelle, AR. In 2009, George Sabo and the Arkansas Archeological Survey received a \$240,000 National Endowment for the Humanities grant to conduct fieldwork and research in this area where little is known about the lifeways of past cultures. The project is ongoing, and Lockhart and Sabo are using the remote sensing data to analyze intrasite settlement patterns, accurately locate archeological features for protection, and pinpoint excavations of multiple prehistoric structures and other cultural features by the Survey's team of archeologists.
- Lockhart (with Jerry Hilliard, Michael Evans, Jared Pebworth, Aden Jenkins, Devin Pettigrew, Tim Mulvihill, Duncan McKinnon, John Samuelsen, and UA graduate students) carried out remote sensing surveys at Prairie Grove Civil War Battlefield as part of a \$101,000 grant from the National Park Service and Arkansas State Parks. The objectives of the project were to locate four houses with outbuildings, a post office, a cellar, a road, and trench burials—features that figured prominently in the December 7, 1862 battle. The final report and data transmittal were submitted in June, 2012.

At right: Prairie Grove Georeferencing Image. General Blunt (Union) and General Hindman (Confederate) met at the Rogers house the night of the Dec. 7, 1862 battle to discuss terms. The location of the Rogers House and the contemporaneous Ada Post Office (across the road) had been lost. The Survey was tasked with finding the buildings. The top panel shows an eyewitness map by 1st Sergeant David B. Arthur (Union). He drew his map with south to the top, so it has been inverted here for consistency. The middle panel shows a 1941 aerial photo Lockhart obtained from the National Archives. After georeferencing the images in GIS, the team were able to pinpoint the location of the lost buildings, which had been demolished by the time the next aerial photos were taken in the early 1950s. The house and the Post Office figure prominently in descriptions of the battle, and both were heavily damaged as that area was a focal point for the fighting. This work assists the Park in preserving and interpreting the battlefield landscape.



- Lockhart's interpretations of data generated by a CSP-led remote sensing survey of Block 6 at Historic Washington, AR were used to guide excavations during the 2012 Arkansas Archeological Society's Annual Training Program in June. Excavations confirmed historic structures, wells, and other smaller features dating to the early 19th century. Survey personnel involved in the original geophysical data collection with Lockhart were Duncan McKinnon, Mike Evans, David Jeane, and Jamie Brandon.
- Lockhart continued his research in support of an interdisciplinary, multicultural research project in the sparsely populated southern Brazilian highlands. Lockhart and British and Brazilian co-investigators are submitting an article to the *Journal of Field Archaeology* describing work in the Grande do Sul region to study a cultural landscape once inhabited by the twelfth-thirteenth century Taquara/Itarare tradition. Lockhart provided instruction for site mapping, remote sensing, and geographic information system technology to a Brazilian field school while collecting data to pinpoint prehistoric features for 2011 winter and 2012 summer excavations directed by Silvia Copé and José Iriarte.
- Lockhart, along with Mary Beth Trubitt and Vanessa Hanvey of the HSU research station, and UA Anthropology students, conducted a gradiometer survey of the prehistoric Moccasin Creek mound site.
- Lockhart conducted a multisensor geophysical survey at Parkin Archeological State Park with assistance from Jeff Mitchem, Claudine Payne, Marion Haynes, Michelle Rathgaber, Arkansas Archeological Society members, and Arkansas State Parks personnel.
- Lockhart, working with George Sabo, John Samuelsen, and Tim Mulvihill from the Survey, and Scott Hammerstedt, Amanda Regnier, and Patrick Livingood of the Oklahoma Archeological Survey and OU, continued remote sensing at Spiro Mounds in Oklahoma. Many thanks also to Spiro Site Manager Dennis Peterson and visiting UA graduate students. Thus far, the project has resulted in a magnetometry dataset that encompasses the entire park owned by the Oklahoma Historical Society. Multisensor remote sensing is providing insights into hundreds of archeological features, including prehistoric ceremonial and habitation structures, as well as other activity areas.



Spiro Gradiometry. This image shows gradiometry data for a portion of the Spiro Mounds site. The larger, discrete dark spots indicate prehistoric structure-sized magnetic anomalies, some of which are to be ground-truthed by excavation in the coming year. This image may provide evidence of intrasite organization and a Spiroan settlement pattern in previously unimagined detail.

Computer Services Program – Academic & Service Activities

Teaching & Higher Ed

- **UAF Department of Anthropology.** Lockhart served on two M.A. and four Ph.D. committees; he taught an internship for an Anthropology graduate student, and assisted other students with projects and instruction on GIS and other matters. CSP staff provide tours and lectures to students in the “Introduction to Archaeology” classes.
- **UAF Environmental Dynamics Program.** Samuelsen provided assistance to Dr. Margaret Guccione (Geosciences) for a research project that contributes to her Quaternary Environments (ANTH/GEOS/ENDY 5053) classes.
- **Other Institutions.** Lockhart provided Independent Study instruction for Grinnell College student David Halperin.

Professional Service

- **Organizations.** Lockhart is the Arkansas representative on the Caddo Conference Organization Board of Officers. The Board met this year to establish by-laws.
- **Programs & Presentations.** Lockhart and Samuelsen each gave presentations at the Digital Institute for Archaeology Colloquium as part of CAST’s DIA Visiting Fellowship program, which brings students from around the world to the UA campus.
- Lockhart serves on the Survey’s Publications Committee.

Public Service & Outreach (including Arkansas Archeological Society)

- **Law Enforcement.** Lockhart assisted the Federal Bureau of Investigation, the Arkansas State Police, and the Pine Bluff Police Department in three separate investigations involving remote sensing.
- **Visiting Scholars.** Lockhart and Samuelsen provided a tour and demonstrations of Survey GIS and geophysical capabilities and applications to UA Anthropology Department Stigler Lecture Series guests Dr. Jarrod Burks (Director of Archaeological Geophysics at Ohio Valley Archaeology, Inc.) and Dr. Vincent Gaffney (Chair of Landscape Archaeology and Director of the IBM Visual and Spatial Technology Centre, University of Birmingham, UK).
- **Programs & Presentations.** Lockhart gave invited public presentations at the Cemetery Information Fair sponsored by the Arkansas Historic Preservation Program in Little Rock; at Prairie Grove Battlefield State Park; and to the Ark-Homa Chapter of the Arkansas Archeological Society in Fort Smith.
- **Public Schools.** Samuelsen organized and conducted a tour of the Survey and UA Museum Collections Facility for 3rd–5th grade classes from Lincoln Elementary School and their teachers. Museum Registrar Mary Suter, and Survey staff members Aden Jenkins and Jerry Hilliard also participated.
- **Other Consultations and Outreach.** Job-shadowing and mentoring for two high school students; Project assistance to Arkansas Archeological Society member Steve Irwin (Lockhart). Consultation with the Caddo Nation about anticipated work at the Crenshaw site (Samuelsen).



Education Specialist

Pioneer Cemetery Project

In 2009 Kwas and Jami Lockhart completed a research project for the Arkansas Department of Parks and Tourism on the early 19th-century Pioneer Cemetery located at Historic Washington State Park. Following that, Kwas worked with the Southwest Arkansas Regional Archives (SARA) Foundation to prepare and publish an expanded version of the report. The SARA Foundation received a mini-grant from the Arkansas Humanities Council to help fund the project, and Kwas was listed as the humanities scholar for the grant. Photographs to accompany the report were provided by Jamie Brandon of the SAU research station, and Josh Williams and Sarah Wade of Historic Washington State Park. Deborah Sabo created the design and layout. The monograph was printed in the fall of 2011 and is available for sale through the SARA Foundation, Washington, Arkansas.

C. W. Riggs Research

In 2012 Kwas began a research project on C. W. Riggs, an early excavator of Indian mounds in eastern Arkansas. Riggs collected a vast quantity of artifacts from Arkansas in the 1880s–90s and exhibited them at the Cincinnati Centennial Exposition in 1888 and the Chicago World's Columbian Exposition in 1893. He won a medal at Chicago for his exhibit of “mound-builders” pottery. He then sold much of his collection to the Field Museum and other northern and eastern museums. Kwas hopes to publish one or more articles about Riggs and to identify the major museums that hold Riggs's Arkansas collections.

Dig Magazine Publication

Kwas contributed a 500-word photo-essay on children's artifacts from Old Washington to the national children's magazine *Dig*. The two-page spread, which appeared in the May/June 2012 issue, was illustrated with photographs by Leslie Walker.

Pinson Mounds Publication

Kwas contributed a lengthy historical chapter and an appendix to Robert Mainfort's book manuscript on Pinson Mounds. She also assisted with proofreading and editing. The manuscript has been submitted to a publisher.

Other Research Projects

Kwas began biographical research on William Woodruff, the founder of the *Arkansas Gazette*, as part of a cooperative project with Swannee Bennett and Bill Worthen of the Historic Arkansas Museum. Unfortunately, the project had to be discontinued until an unspecified time in the future. She also pursued a potential writing project on Fayetteville's Walker Cemetery, in response to initial interest on the part of the Southern Memorial Association, but this did not come to fruition.

Arkansas Archeology Month

Kwas continues to serve as Archeology Month Coordinator. During Archeology Month, a variety of activities, programs, and exhibits are scheduled by different state agencies, museums, parks, archeologists, and Society members at a variety of locations throughout the state. Kwas coordinates with the Society

The Arkansas Archeological Survey has been a state, national, and world leader in public education since its inception. The Survey's education specialist manages Archeology Month, develops educational and interpretive material, and disseminates information about Arkansas archeology for the general public and for use by professional educators through print media, the Internet, hands-on classroom activities, and exhibits and presentations at workshops and conferences. She also works closely with the Arkansas Archeological Society.

Mary L. Kwas (M.S., University of Wisconsin – Milwaukee, 1980) joined the Survey in 1996 with extensive experience in public education and archeology. Her previous positions include collections archeologist for the Mississippi Department of Archives and History, site manager of Pinson Mounds State Archeological Area in Tennessee, and curator of education at Chucalissa Museum, University of Memphis. In 2007 she was one of a three-member team to receive the Society for American Archaeology's Presidential Recognition Award for developing the SAA's public outreach website. Her interests include historical archeology and archeological parks.

Executive Committee to determine a theme for the year's event, sends out advance notices and follow-ups to potential programmers, then compiles and edits submissions into an Events Brochure. She updates information for the Archeology Month webpages and supervises the mailing of the brochure, posters, and press releases. She concludes by preparing a summary of that year's events.

In March 2012 the theme of Archeology Month was *The Archeology of Communities*. Forty programs were scheduled at 26 venues across the state, including 7 museums, 8 state and national parks, 7 schools and colleges, and other agencies. Over 1000 people attended the various activities. Events included illustrated talks, exhibits, artifact identification programs, and hands-on activities. For more information and a picture of the 2012 poster, see www.uark.edu/campus-resources/archinfo/archmonth.html.

Arkansas Archeological Society

Kwas provides service to the Arkansas Archeological Society through her work on the Annual Meeting, on Archeology Month, and in the Ko-ko-qi Chapter in Fayetteville, and provides occasional items for the Society newsletter *Field Notes* and updates for the Society website.

Annual Meeting. Kwas and Barbara Scott coordinate the Society Annual Meeting. Kwas serves as program chair. Planning occurs throughout the year for the fall meeting. Kwas solicits papers and gathers abstracts, and makes arrangements with the keynote speaker. She developed a "Guide to Setting Up an Arkansas Archeological Society Annual Meeting" which is sent to each year's arrangements chairperson.

Ko-ko-qi Chapter. Kwas continued to serve as newsletter editor for the Ko-ko-qi Chapter. The monthly newsletter is sent by email and regular mail to members and distributed to departments on campus. Kwas also handles press releases for the Chapter and sent news updates by email to the Chapter members.

Web Sites

Kwas periodically submits updates for the Survey's Education webpages (www.uark.edu/campus-resources/archinfo/resources.html) and Archeology Month webpages (www.uark.edu/campus-resources/archinfo/archmonth.html). Kwas also maintains the content of the "Archaeological Parks in the U.S." web site (www.uark.edu/misc/aras/index.html). Deborah Weddle posts the new content in an attractive and workable design.

Professional & Public Service Activities

- Arkansas representative for the Network of State and Provincial Archaeology Education Coordinators, SAA
- Southeastern Archaeological Conference, Public Outreach Grant Committee (Chair)
- Arkansas Archeological Survey, Publications Committee
- Attended the Arkansas Education Coalition meeting in Fayetteville
- Assisted individuals working on research related to the Block family, Simon Sanders, and Hempstead County cemeteries
- Led a tour of the lab for a job-shadowing student
- Arranged CPR/First Aid instruction at the Survey on April 30; 14 staff members attended and received certification
- Reviewed works submitted to the *Arkansas Historical Quarterly*
- Gave a public talk to the Daughters of American Colonists, Fayetteville (audience, 12)

Publications Program

New & Forthcoming Publications

Production of Research Series No. 65, *Toltec Mounds: Archeology of the Mound-and-Plaza Complex* by Martha Ann Rolingson, was completed under the Survey's new subvention agreement with the University of Arkansas Press. The UA Press undertook all copy editing, design/layout, and printing tasks. Three hundred copies of the 293-page volume were delivered shortly after the end of the 2011/2012 fiscal year at a cost of \$10,211.

One new manuscript was submitted to the Series Editor for consideration during this fiscal year.

New Developments

During FY 2011–2012, PDF versions of 31 Research Reports and 12 Research Series volumes were posted online for download at no cost. Many of these publications were out of print and it was no longer economically feasible to keep them available in hard copy formats, considering the low demand for each title. With the free digital download option, these Survey publications remain available to the widest possible audience, thus satisfying our mission to disseminate the results of archaeological research in Arkansas. From time to time, more titles will be added to the “free list,” especially the older Research Series books as they go out of print. We will continue to reprint for

sale those volumes that remain in demand as printed books, in response to customers and to keep our Program viable.

Sales & Distribution

Publication sales and distribution numbered 1078 volumes in all series and produced \$23,224.97 in sales (\$17,014.07 in gross profits). This includes 45 volumes given away as complimentary copies, including books distributed to colleagues, teachers, reviewers, libraries and archives, and graduate students, and books contributed to the Student Paper Prizes at Southeastern Archaeological Conference and the Society for American Archaeology's annual conference. Our bestselling book continues to be RS44 (*Standards for Data Collection from Human Skeletal Remains*, 598 copies or 74% of the total Research Series volumes sold). Others that do well are PS03 (*Paths of Our Children, Historic Indians of Arkansas*, 56 copies) and TP11 (*A Handbook of Soil Description for Archeologists*, 131 copies).

Survey archeologists sold books this year at the Caddo Conference in Natchitoches, Louisiana (\$189.00 in sales), the annual meeting of the Society for American Archaeology in Memphis, Tennessee (\$622.73 in sales), the Arkansas Archeological Society Annual Meeting in Fort Smith, Arkansas (\$105.97 in sales), and the Arkansas Archeological Society Training Program in Hope, Arkansas (\$114.71 in sales).

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 and is self-supporting.

Robert Mainfort (Series Editor) solicited manuscripts, and worked with authors who are revising manuscripts prior to production.

Deborah Sabo (Popular Series Editor) compiled, edited, and designed the Annual Report of the Survey for FY2010–2011. With help from Deborah Weddle, she keeps the html and PDF catalogs on the Publications webpages updated and organized. Sabo makes all arrangements for reprints. She is (*ex officio*) a permanent member of the Survey Publications Committee. She completely redesigned all educational flyers from the Survey's old Teacher Packet, which were placed on the website as downloadable PDFs, and designed and produced the Program for the Arkansas Archeological Society's Annual Meeting in Little Rock. As editor of the Popular Series, she continued consultation with the author of a planned replacement for the Survey's bestselling *Crossroads of the Past*, now out of print. She is also the editor of the Arkansas Archeological Society Newsletter, *Field Notes*, published six times per year, and a member of the Society's Executive Committee. This year Sabo gave a public talk on "Archeology and *The Hobbit*: JRR Tolkien's Lake Town and the Lake-Dwellings that Inspired Him" to the Ko-ko-çi Chapter of the Arkansas Archeological Society (audience, 30).

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. Lisa handles all communications with our college bookstore customers, the major market for our bestselling RS44.

Brian Duncan (Customer Service) answers the email and handles tasks related to mail order sales and customer service.

Publications Committee for 2011–2012: Jamie Brandon (Chair), Kathleen Cande, Mary Kwas, Jami Lockhart, and Deborah Sabo. The Committee reviews submissions and provides input on various matters regarding the program.

Publication Sales and Distribution for 2011–2012

	Research Series	Research Reports	Popular Series	Technical Papers	Total
No. of Titles	64	32	5	11	112
Sold	813	11	74	135	1033
Free	38	2	3	2	45
Total	851	13	77	137	1078

Partners in Preservation: Survey & Society



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 station, and ensure that the cooperative relationship between Survey and Society moves forward productively.

AAS Chapters

The Arkansas Archeological Society's total membership averages around 550. Eight active chapters across the state work closely with the Survey research archeologists in their areas. Chapters have monthly meetings through most of the year 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 stations host volunteer work sessions in the laboratories, and Society members participate in Survey field and lab projects throughout the year.

Society Volunteers

Many Survey research projects in the field and laboratory depend on volunteers, mostly Society members. Altogether, volunteers, mostly Society members, contributed over 11,725 hours to archeological projects across Arkansas in 2011–2012. This citizen participation demonstrates the level of interest and support for archeology across the state.

The Site Stewards Program

Another role for Society volunteers is the Site Stewards Program, which enlists individuals to monitor the condition of important archeological sites. The Survey provides training and guidance for site stewards via a workshop plus mentoring for individual stewards. Gary Knudsen is the chair of the Stewardship Committee; he has worked to reassess how prospective Stewards are evaluated and prepared to carry out their mission, and to grow the 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 (Research Assistant for the Survey coordinating office and Publications Program) is Editor of *Field Notes*. The newsletter format emphasizes short substantive articles about archeological research in Arkansas, and also publishes relevant information about the Society's statewide activities and business matters, plus news and announcements.

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 emergency projects.

Glen Akridge of Fayetteville is editor of *The Arkansas Archeologist*. Volume 50 was distributed to members during 2011–12,

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 and Certification 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, Petit Jean Mtn.
Ark-Homa Chapter, Fort Smith
Central Mississippi Valley Chapter, Jonesboro
Kadohadacho Chapter, Magnolia

Ouachita Chapter, Hot Springs
Toltec Chapter, Little Rock
Tunican Chapter, Monticello
Ko-ko-çi Chapter, Fayetteville

and volumes 51 and 52 were in development. *The Arkansas Archeologist* is now available on the EBSCO database via a subscribing library or other institution. The Society receives a royalty from EBSCO which helps to pay for publication costs.

Archeology Month – March 2012

Archeology Month is a multifaceted public education concept to promote awareness and appreciation of Arkansas archeology. The theme of Archeology Month for 2012 was *The Archeology of Communities*. Mary Kwas manages the Survey contributions to Archeology Month by working with the Society's Archeology Month committee, collecting information on events and compiling them into a printed Events Brochure, distributing information and posters to a mailing list, and updating information for the Archeology Month webpages.

Over 1000 people attended the 40 scheduled programs at 26 venues across the state, including 7 museums, 8 state and national parks, 7 schools and colleges, and other locations. Events included illustrated talks, exhibits, tours, artifact identification programs, and hands-on activities. Carl Carlson-Drexler (station assistant at SAU) led a "Spring Break Dig" at the Dooley's Ferry site. Survey archeologists led or assisted 26 of the 40 events.

The poster was sponsored by the Arkansas Archeological Society and designed by Ben Swadley (who is Superintendent at Parkin Archeological State Park, a Society vice president, and chair of the Archeology Month committee). It featured a photograph taken by Society member Dawn Novak of her husband and fellow Society member David Mark Alvírez drawing a unit profile at Historic Washington. Melissa Smith of Arkansas State Parks contributed computer and digital services for the final artwork. The poster was included in the national display of Archeology Month posters at the 2012 Society for American

Archaeology meeting in Memphis, Tennessee. It can be seen on the website at www.arkansasarcheology.org/archmonth.html.

Annual Meeting

The 2011 meeting was held September 30–October 2 in Fort Smith. There were 89 registrants, down somewhat from the previous year's strong attendance at the 50th anniversary meeting. Mary Kwas was Program Chair and Society member Lexie Rue-Harris handled local arrangements.

Of 14 scheduled papers, eight were by Survey employees, and one was by Professor Marvin Kay (UA Department of Anthropology) and his student, reporting on work they did alongside Survey archeologists. In addition, there were two poster presentations by Survey staff. The keynote speaker, Mark Christ (Arkansas Historic Preservation Program), spoke on "Commemorating the Civil War in Arkansas, 2011–2015." Tim Mulvihill (Survey archeologist at UAFS) led a Sunday morning tour to the Cavanaugh Mound in Fort Smith. Deborah Sabo (Survey) designed and managed printing of the meeting Program.

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 2011 annual meeting in Fort Smith were Duncan McKinnon (UAF Ph.D. candidate working with the Survey), \$595 for an AMS radiocarbon date from Battle Mound; Robert Scott (ASU station assistant), \$595 for one AMS radiocarbon date; and Carl Carlson-Drexler (SAU station assistant), \$416.50 for an archival research trip.

“Society Dig”: The Training & Certification Program

This unique program is managed by the Arkansas Archeological Survey. Every year in June a two-week field school for amateurs is conducted at an archeological site chosen according to criteria of ongoing research interests at the Survey stations, 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 qualified Society members. Survey archeologists and other qualified individuals also teach a series of five-day seminars on various archeological topics during the Training Program. Those who complete the required number of hours in the field, lab, and classroom and demonstrate their abilities may earn optional Certification in several categories. 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 16 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 2012 Training Program at Historic Washington State Park

Fieldwork

The 2012 Training Program continued archeological investigations begun last year at the antebellum town of Washington (3HE236), concentrating on Block 6, the commercial and mercantile center of the town (see pp. 56–57 of this Report). Washington is perhaps the best surviving example of a nineteenth century town in the Old Southwest. Excavations began on June 9th and ran through June 23, 2012. Jamie Brandon, head archeologist at our SAU research station in Magnolia, directed the project.

Over the two seasons of work on Block 6, crews discovered at least six different structures and three to five cellars dating from three major periods of activity—antebellum (1830s–1850s), Civil War & postbellum (1860s–1880), and a flurry of activity in the 1920s when long-abandoned buildings were filled in following fires of the 1870s and 80s. With little in the way of photographs, maps, or archival material about Block 6, the archeological information is necessary to reconstruct the kinds of buildings and the types of mercantile activity found there. The hundreds of thousands of artifacts recovered will help us understand what life was like on the Arkansas cotton frontier of the nineteenth century. These include things like gunflints, blue and black glass beads, and a surprising number of coins—both U.S. (1827 and 1806 silver half-dollars and early- to mid-nineteenth century silver coins of smaller denominations) and Spanish (at least four Spanish silver *reales*).

Over 100 volunteers and staff members contributed to the summer dig. In addition to Brandon, Survey personnel who worked at the Training Program (as field or lab supervisors, seminar teachers, or general assistants) include Larry Porter, Jessica Howe, Elizabeth Horton, Mary Beth Trubitt, Vanessa Hanvey, Carl Carlson-Drexler, Michelle Rathgaber, George Sabo III, Jeff Mitchem, Bob Scott, Tim Mulvihill, Mary Farmer, Aden Jenkins, Leslie “Skip” Stewart-Abernathy, and Barbara Scott. Melissa Zabecki-Harvey (Parkin park interpreter) taught a seminar and helped on site. Society members who acted as

supervisors were Paul and Marilyn Knapp, Mary Ann Goodman, and Gary Knudsen.

Seminars & Certification Program

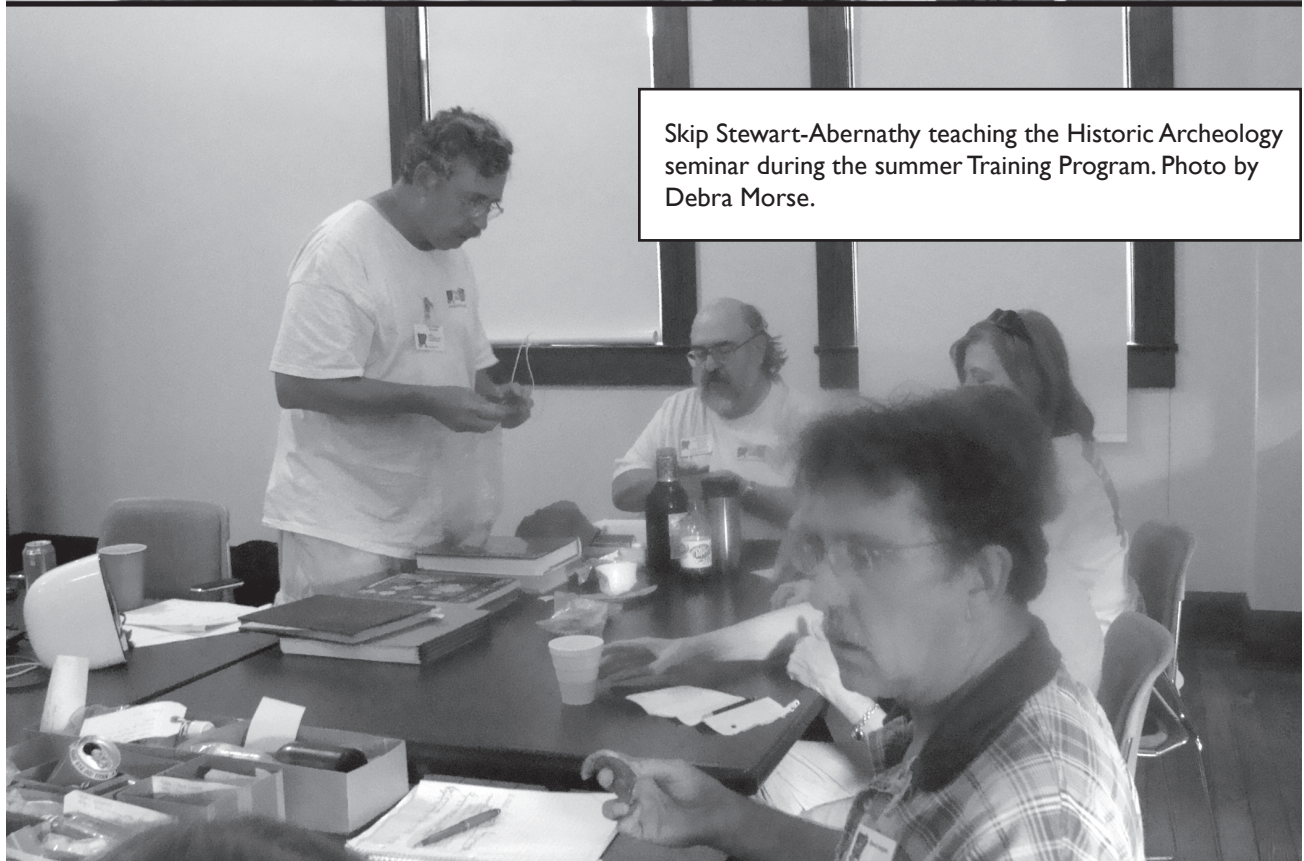
The Certification Program is an optional offering for Society members who wish to pursue classroom and practical training in more depth, for enrichment and to earn recognition at various levels. Participants work under supervision to gain additional experience by volunteering for lab and field projects and completing necessary seminars. They move along at their own pace and according to individual interests.

Seminars taught at the Dig this year were two sessions of Basic Excavation (taught by Elizabeth Horton and Mary Beth Trubitt), and one session each of Basic Lab (Michelle Rathgaber), Site Survey (Robert Scott), Mapping (Tim Mulvihill), Arkansas Indians (George Sabo III), Establishing Time (Jeff Mitchem), Human Osteology (Melissa Zabecki-Harvey), and Historic Archeology (Leslie “Skip” Stewart-Abernathy).

Certificates earned by members are presented each year at the Annual Meeting. During the 2011 meeting at Fort Smith, the following Certificates were presented: **Provisional Site Surveyor**—Don Higgins, Samantha Mater, Suzie Marshall, Aly Fox. **Provisional Crew Member**—Kara Alsbaugh, David Mark Alvirez, Aly Fox, Tony Caver, Steve Longacre, Greg Taylor, Nathan Carmichael, Samantha Mater, Suzie Marshall, Vanessa Salas. **Provisional Lab Technician**—Deanna Holdcraft, Don Higgins, Sharlene Brown, Florence Davis, Fiona Taylor. **Certified Lab Technician**—Kristin Huddle, Lewis Huddle. **Certified Site Surveyor**—Mary Little, Richard Marshall. **Certified Archeological Technician**—Mary Little, Richard Marshall. **Certified Field Archeologist**—Jean Hartfield became the fourth person to complete the Program with publication of her independent research, *The Ladner-Dedeaux Site: 22-Pr-913*, by Jean S. Hartfield. Volumes in Historical Archaeology, Vol. 51, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.



Aly Fox and Anthony Clay Newton map a brick pier in Excavation Area D during the summer Training Program.



Skip Stewart-Abernathy teaching the Historic Archeology seminar during the summer Training Program. Photo by Debra Morse.

Accounting & Administrative Staff

Assistant Director for Fiscal Affairs Sherril Bowman

Sherril Bowman took over the Assistant Director for Fiscal Affairs position in November 2009. Prior to this she had been employed at the University of North Carolina – Chapel Hill. She received her accounting degree from the University of Arkansas – Fayetteville in 1982. She is responsible for all budgeting functions of the Survey and works closely with the Survey Director. This includes fiscal year budgets, quarterly budgets, and annual budgets. She balances our accounts monthly against the Departmental Budget Reports in order to stay within our allocated fiscal year budget. She also manages the finances for all grants and contracts the Survey is awarded. She is in charge of all building maintenance functions and has worked closely with the University's "Going Green" Team to implement changes to the Survey building. She supervises the Administrative Assistant 1 and Institutional Service Assistant.

Survey Research Assistant/Publications Accountant Lisa Davison

Lisa Davison has been with the Survey for five years and the University of Arkansas for almost 14 years. She serves as Survey Research Assistant and as Accountant for the Publications Program. Lisa is the Departmental Representative for Human Resources, Benefits, Payroll, Leave, Vehicle Fleet, Travel, Procurement, Property Accounting, and Financial and Business Affairs. As Accountant for Publications she is responsible for all accounting functions, book orders, shipping, receiving, reports, and billing issues. The University continues to implement changes that require training. Ms. Davison completes certification in each new program.

Administrative Assistant Barbara Scott

Barbara Scott has been the Survey's Administrative Assistant at the coordinating office in Fayetteville since 1998. At the CO she divides her time between administrative duties for the Survey, and as liaison with the Arkansas Archeological Society. Ms. Scott coordinates communications throughout the Survey's statewide organization and performs numerous tasks for other staff members. Among these, she helps the Survey's education specialist prepare and distribute Teacher Packets and Archeology Month materials. As Society Liaison, she keeps the Membership database up to date, assists the Society's officers, and works on logistical arrangements for the summer Training Program, acting as Field Secretary. Ms. Scott also assists with preparations and logistics for the Society's Annual Meeting and manages the Certification Program's database.

Administrative Assistant I Brian Duncan

Brian Duncan was hired as Administrative Assistant in August 2010. He manages the reception area in the coordinating office, seeing to it that visitors check in at the front desk and helping them find their destinations within the building. He answers the telephone and coordinates all communications within the CO. Brian maintains office supplies, assembles and distributes the mail, checks in deliveries from UPS and various vendors, and is the caretaker of the conference room calendar. Brian assists the Publications Program by answering email and telephone orders, and helping with inventory.

How to Contact the Arkansas Archeological Survey



For the Director, State Archeologist, and various Coordinating Office units:

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

Research Stations:

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

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

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

Arkansas Archeological Survey
Blytheville Research Station
2520 Friday Spur
Blytheville, AR 72315
870.532.9104

Arkansas Archeological Survey
P.O. Box 4814, UAPB
Pine Bluff, AR 71601
870.535.4509

Arkansas Archeological Survey
P.O. Box 3087, UAM
Monticello, AR 71656-3087
870.460.1090

Arkansas Archeological Survey
P.O. Box 9381, SAU
Magnolia, AR 71754-9381
870.235.4229

Arkansas Archeological Survey
P.O. Box H-7841, HSU
Arkadelphia, AR 71999-0001
870.230.5510

Arkansas Archeological Survey
Winthrop Rockefeller Institute
Petit Jean Mountain
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Morrilton, AR 72110
501.727.6250

Arkansas Archeological Survey
UAF Research Station
2475 N. Hatch Ave.
Fayetteville, AR 72704
479.575.3556

Arkansas Archeological Survey
P.O. Box 3649, UAFS
Fort Smith, AR 72913-3649
479.788.7812

Appendix 1. Reports & Publications by Survey Staff during 2011–2012*

Brandon, Jamie C.

2011 Preliminary Results of the 2011 AAS Summer Training Program at Historic Washington, Arkansas. *Field Notes* 363:3–9.

2012 More Digging for History: The Arkansas Archeological Society Summer Training Program Prepares to Continue Excavations on Block 6 in Historic Washington, Arkansas in 2012. *Field Notes* 365:3–7.

Carlson-Drexler, Carl G., Ellen R. Hartman, Carey L. Baxter, and Susan L. Enscoe

2012 Prioritizing Historical Archaeological Sites at Fort Leonard Wood, Pulaski County, Missouri. Technical Report 12-6, U.S. Army Engineer Research and Development Center, Construction Engineering Research Laboratory.

Davidson, James M., and **Jamie C. Brandon**

2012 Descendant Community Partnering, the Politics of Time, and the Logistics of Reality: Tales from North American, African Diaspora Archaeology. In *The Oxford Handbook of Public Archaeology*, edited by Carol McDavid. Oxford University Press, Oxford, UK.

Davidson, James M., and **Robert C. Mainfort, Jr.**

2011 Hidden Differences Beneath a Surface Equality: Mortuary Variability in Two Late Nineteenth-Century Cemeteries in Crawford County, Arkansas. *Southeastern Archaeology* 30(2):203–214.

Early, Ann M.

2012 Form and Structure in Prehistoric Caddo Pottery Design. In *The Archaeology of the Caddo*, edited by Timothy K. Perttula and Chester P. Walker, pp. 26–46. University of Nebraska Press, Lincoln.

2012 What “All the King’s Horses” Has to Say to American Archaeologists. In *All the King’s Horses: Essays on the Impact of Looting and the Illicit Antiquities Trade on Our Knowledge of the Past*, edited by Paula Lazrus and Alex Barker, pp. 127–132. The SAA Press.

Feidel, Stuart, and **Juliet E. Morrow**

2012 Comment on “Clovis and Western Stemmed: Population Migration and the Meeting of Two Technologies in the Intermontane West” by Charlotte Beck and George T. Jones. *American Antiquity* 77(2):376–385.

Howe, Jessica R., and Don C. Bragg

2012 Searching for the Remains of the 1870–1933 Drew County Courthouse. *Field Notes* 364:3–8.

Jeter, Marvin D.

2012 Ripe for Colonial Exploitation: Ancient Traditions of Violence and Enmity as Preludes to the Indian Slave Trade. In *Native American Adoption, Captivity and Slavery in Changing Contexts*, edited by Max Carocci and Stephanie Pratt, pp. 23–46. Palgrave Macmillan, New York.

Kwas, Mary L.

2011 Review of *Creekside: An Archaeological Novel*, by Kelli Carmean. *Mississippi Archaeological Association Newsletter* 46(4):10.

Kwas, Mary L. (with contributions by Jami J. Lockhart)

2011 *Thou Wert Dear To Us: A Record of Pioneer Cemetery, Washington, Arkansas*. Southwest Arkansas Regional Archives Foundation, Inc., Washington, Arkansas.

Kwas, Mary L. (with photographs by Leslie Walker)

2012 Uncovered in Arkansas: Finds that Trigger the Imagination. *Dig* 14(5):24–25.

Lockhart, Jami J.

2011 Geophysical Remote Sensing and Mapping at Pioneer Cemetery. In *Thou Wert Dear to Us: A Record of Pioneer Cemetery, Washington, Arkansas*, by Mary Kwas, pp. 73–80. Southwest Arkansas Regional Archives Foundation, Inc., Washington, Arkansas.

2012 Spatial Patterns of Caddo Mound Sites in the West Gulf Coastal Plain of Arkansas. In *The Archaeology of the Caddo*, edited by Timothy K. Perttula and Chester P. Walker, pp. 313–334. University of Nebraska Press, Lincoln.

* Survey authors are shown in boldface for works co-authored with non-Survey colleagues

- Lockhart, Jami, Jerry Hilliard, Jared Pebworth, Michael Evans, Aden Jenkins, Devin Pettigrew, Duncan McKinnon, and Timothy Mulvihill
- 2012 Archeological Reconnaissance of Selected Features at Prairie Grove Battlefield State Park. Submitted to Arkansas State Parks. American Battlefield Protection Grant–GA-2255-10-001. AAS Project No. 11-07. Arkansas Archeological Survey, Fayetteville.
- Lockhart, Jami J., Juliet E. Morrow, and Shaun McGaha
- 2011 A Town at the Crossroads: Site-wide Gradiometry Surveying and Mapping at the Old Town Ridge Site (3CG41) in Northeastern Arkansas. *Southeastern Archaeology* 30(1):51–63.
- Mainfort, Robert C., Jr., Mary L. Kwas,** and Andrew M. Mickelson
- 2011 Mapping Never-Never Land: An Examination of Pinson Mounds Cartography. *Southeastern Archaeology* 30(1):148–165.
- McNutt, Charles H., and **Marvin D. Jeter**
- 2011 Lewis R. Binford and the 1961 Historic Sites – SEAC Meetings. *Southeastern Archaeological Conference Newsletter* 53(2):12–14.
- Mitchem, Jeffrey M.
- 2012 Safety Harbor: Mississippian Influence in the Circum-Tampa Bay Region. In *Late Prehistoric Florida: Archaeology at the Edge of the Mississippian World*, edited by Keith Ashley and Nancy Marie White, pp. 172–185. University Press of Florida, Gainesville.
- 2012 Review of *From Chicaza to Chickasaw: The European Invasion and the Transformation of the Mississippian World, 1540–1715*, By Robbie Ethridge. *Journal of Interdisciplinary History* 43(1):115–116.
- Morrow, Juliet E.
- 2011 An Extinct Cervid Antler from Arkansas. *Field Notes* 358:3–4.
- 2011 The Sloan Site. *The Encyclopedia of Arkansas History & Culture*. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=3696>.
- 2011 Review of *First Peoples in a New World* by David J. Meltzer. *Journal of the Iowa Archaeological Society* 54:47–50.
- 2012 Recent Research into the Mississippian Period Occupation at Kreb's Place (3CG53), Craighead County, Arkansas. *Field Notes* 366:9–11.
- Perttula, Timothy K., **Mary Beth Trubitt,** and Jeffrey S. Girard
- 2011 The Use of Shell-Tempered Pottery in the Caddo Area of the Southeastern United States. *Southeastern Archaeology* 30(2):242–267.
- Porter, Larry
- 2011 The Chism House Restoration Project. *Field Notes* 362:3–5.
- Rathgeber, Michelle
- 2011 A Pair of Clay Pipes from Barton Ranch, 3CT18. *Field Notes* 363:10–11.
- 2012 Blytheville's Open Lab Days. *Field Notes* 366:13.
- Sabo, George III
- 2012 The Teran Map and Caddo Cosmology. In *The Archaeology of the Caddo*, edited by Timothy K. Perttula and Chester P. Walker, pp. 431–477. University of Nebraska Press, Lincoln.
- 2012 Review of *From Chicaza to Chickasaw: The European Invasion and Transformation of the Mississippian World, 1540–1715*, by Robbie Ethridge. *The Journal of Southern History*, Vol. LXXVIII, No. 2, pp. 426–427.
- Sabo, George III, Mary Beth Trubitt, Tim Mulvihill,** Phil Cross, and Stacey Halfmoon
- 2011 Caddo Dance Performance as Public Education. Online article at [http://arkarcheology.uark.edu/indiansofarkansas/index.html?pageName=Caddo Dance](http://arkarcheology.uark.edu/indiansofarkansas/index.html?pageName=Caddo+Dance).
- Schambach, Frank, Melissa Zabecki, D. Glen Akridge, and **John Samuelsen**
- 2011 Determining the Cultural Affiliation of Detached Crania and Mandibles at the Crenshaw Site, Miller County, Arkansas. Draft Report for NAGPRA Grant 05-06-GP-412. Arkansas Archeological Survey, Fayetteville.
- Trubitt, Mary Beth
- 2011 Archeology at HSU: The Jones Mill Archeological Project. Online article at <http://www.hsu.edu/pictures.aspx?id=14983>.

- 2011 Ancient Indian Foodways: A View from the Jones Mill Archeological Site. *The Record (Journal of the Garland County Historical Society)* 52:127–137.
- 2011 Cultural Resources Survey of DeGray Lake Reregulation Pool Access, Clark County, Arkansas. Limited distribution report prepared for Arkansas Game & Fish Commission under ARPA Permit DACW38-4-11-30 by the Arkansas Archeological Survey's Henderson State University Research Station, Arkadelphia.
- 2012 Caddo in the Saline River Valley of Arkansas: The Borderlands Project and the Hughes Site. In *The Archaeology of the Caddo*, edited by Timothy K. Perttula and Chester P. Walker, pp. 288–312. University of Nebraska Press, Lincoln.
- 2012 Topographic Mapping of a Caddo Mound in Clark County. *Field Notes* 364:9–11.
- 2012 A Memorial Note. *Caddo Archeology Journal* 22:4–8.
- 2012 Report on the 53rd Annual Caddo Conference. *Caddo Archeology Journal* 22:143–152.
- Trubitt, Mary Beth, and Vanessa N. Hanvey
- 2012 A Cultural Resources Survey of Arkadelphia's Ouachita Bluff Property, Clark County, Arkansas. Limited distribution report prepared for the City of Arkadelphia by the Arkansas Archeological Survey Henderson State University Research Station, Arkadelphia.

Appendix 2. Papers, Symposia & Workshops by Survey Staff during 2011–2012*

Austin, Robert J., **Jeffrey M. Mitchem**, and Brent R. Weisman

- 2011 Refining the Tampa Bay Late Prehistoric Radiocarbon Chronology. 68th Southeastern Archaeological Conference, Jacksonville, Florida.

Brandon, Jamie C.

- 2011 Merchants on the Cotton Frontier: Archaeology of Block 6, Historic Washington, Arkansas. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.
- 2012 Reversing the Narrative of Hillbilly History: Historical Archaeology in the Arkansas Ozarks. Paper presented at the Annual Meeting of the SHA Conference on Historical and Underwater Archaeology, Baltimore, MD.

Carlson-Drexler, Carl G.

- 2012 Surviving on the Confederate Home Front: Soldiers and Civilians in Southwest Arkansas. Paper presented at the Annual Meeting of the SHA Conference on Historical and Underwater Archaeology, Baltimore, MD.

Early, Ann M.

- 2011 Do Pots Speak? A New Way of Thinking about Pottery. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith, AR.
- 2011 Historic Indian Ceramic Traditions (panel member). Colonial and Post-Colonial Ceramics Conference, Natchez, MS.
- 2012 Progress Report on the Documentation of Caddo Pottery in the Central Arkansas River Valley. Paper presented at the 54th Caddo Conference, Natchitoches, LA.
- 2012 Tribal Conflict and Dispossession of Indian Land Rights in Territorial Arkansas. Paper presented at the 71st Annual Conference of the Arkansas Historical Association, Fayetteville, AR.
- 2012 Caddo Pottery in Carden Bottoms Assemblages: Forging Social Relations through the Display of Mutually Understood Design and Symbolism. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Etchieson, Meeks, and Mary Beth Trubitt

- 2012 Taking It to the River: Arkansas Novaculite Quarrying and Archaic Period Tool Production. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

* Survey authors are shown in boldface for works co-authored with non-Survey colleagues

Green, Thomas, and George Sabo III

- 2012 Distance Learning at the Arkansas Archeological Survey. Poster presentation at the University of Arkansas System Distance Learning Symposium – *Getting to Know You*, University of Arkansas at Little Rock.

Hanvey, Vanessa N., Jessica R. Howe, Bob Scott, and Jami Lockhart

- 2012 The Borderlands Project: A Closer Look at the Transitional Zone between the Caddo and Mississippian Cultural Regions. Paper presented at the 54th Caddo Conference, Natchitoches, LA.

Hilliard, Jerry E.

- 2012 Carden Bottoms Phase Houses. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

House, John H.

- 2011 Native American Ceramics at the Wallace Bottom Site, Southeastern Arkansas. Paper presented at the Colonial and Post-Colonial Ceramics of the Mississippi Delta Conference, Natchez, MS (read by Mary Farmer).
- 2012 Regional Variation in Mississippian Effigies in Eastern Arkansas. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.
- 2012 Time, Plants, and People at a Prehistoric Native American Archeological Site in Central Arkansas. Sigma Xi Central Arkansas Chapter Spring Banquet, Little Rock.

Jeter, Marvin D.

- 2011 Lewis R. Binford's Preview of the New Processual Archaeology at the 1961 SEAC Meeting. Paper presented at the 68th Southeastern Archaeological Conference, Jacksonville, FL.
- 2011 The Mangum Site, a "Plaquemine Necropolis" in Southwest Mississippi with "Southern Cult" Connections. Paper presented at the 68th Southeastern Archaeological Conference, Jacksonville, FL.
- 2012 Discussant remarks at session on "Caddoan and Lower Mississippi Valley Interaction." The 54th Caddo Conference, Natchitoches, LA.

Jeter, Marvin D., and Katherine R. Mickelson

- 2012 A Terminal Poverty Point Period Mound in Southeast Arkansas: The Lake Enterprise Mound. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Lockhart, Jami J.

- 2012 Remote Sensing and GIS in the Central Arkansas River Valley Project. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Lockhart, Jami J., and George Sabo III

- 2011 Remote Sensing, GIS, and Archeology in the Central Arkansas River Valley Project. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.
- 2011 The Role of GIS in Cultural Resource Management and Archeology in the Central Arkansas River Valley. Paper presented at the Arkansas GIS Users Forum Conference, Bentonville, AR.

Mitchem, Jeffrey M.

- 2012 A Bead Assemblage from the Smith Mound (8LL36) at the Pineland Site Complex in Lee County. 64th Annual Meeting of the Florida Anthropological Society, Tallahassee.
- 2012 Decoration and Vessel Form in Parkin Phase Ceramics. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Morrow, Juliet E.

- 2012 Mississippian Period Site Investigations in the Western Lowlands of Northeast Arkansas. Paper presented at the Midsouth Archaeological Conference, Tunica, MS.

Morrow, Juliet E., Stuart Fiedel, Marcel Kornfeld, Moye Rutledge, Don Johnson, and W. Ray Wood

- 2012 Pre-Clovis in Texas? A Critical Assessment of the "Buttermilk Creek Complex." Paper presented at the Annual Meeting of the Missouri Archaeological Society, St. Louis, MO.
- 2012 Pre-Clovis in Texas? A Critical Assessment of the "Buttermilk Creek Complex." Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Mulvihill, Timothy

- 2011 Archeological Excavations at the Drennen-Scott Historic Site. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.

Payne, Claudine

- 2012 Defining the Nodena Art Style. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Payne, Claudine, Jami J. Lockhart, Tim Mulvihill, and Marion Haynes

- 2011 Geophysical Investigations at the Mississippian Eaker Site. Poster presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.

- 2011 Geophysical Investigations at the Mississippian Eaker Site. Poster presented at the 68th Southeastern Archeological Conference, Jacksonville, FL.

Porter, Larry

- 2011 Trying To Save What's Left: Test Excavations at 3LO226. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.

- 2011 The Widow Logan Site: An Antebellum Farmstead in Logan County, Arkansas. Paper presented at the 13th South Central Historical Archeology Conference, Greenville, MS.

Riggs, John, Julie Morrow, Robert Scott, and Shaun McGaha

- 2011 3WO345: A Large, Rich Mississippian Trash Pit Near Cache River. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.

Sabo, George III

- 2012 Time and the Cosmos in Spiroan Art. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

- 2012 Organizer & Chair of Symposium "The Carden Bottoms Project: Indians and Archeologists Studying the Protohistoric Past" at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Samuelson, John R.

- 2012 AMS and Radiocarbon Dating of the Crenshaw Site (3MI6). Paper presented at the 54th Caddo Conference, Natchitoches, LA.

Stewart-Abernathy, Leslie C. "Skip"

- 2011 Strangers in the Arkansas Uplands. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.

- 2011 A Rat Boat? A Squash Boat? No, a Flatboat: Chaos and Disaster in Sibley Chute, Arkansas (Barely). Paper presented at the 13th South Central Historical Archeology Conference, Greenville, MS.

- 2011 An Overview of Archeology at Lakeport, 3CH90. Presented to Lakeport Plantation Tour Participants at the 13th South Central Historical Archeology Conference, Greenville, MS.

Trubitt, Mary Beth

- 2011 A Fresh Look at an Old Site: Re-analyzing Hedges. Paper presented at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.

- 2012 Hedges, a Late Caddo Mound Site on the Ouachita River. Paper presented at the 54th Caddo Conference, Natchitoches, LA.

- 2012 "Tweakers 'n' Diggers": Media Coverage of Looting and the Drug Connection. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Trubitt, Mary Beth, and Vanessa N. Hanvey

- 2011 Were You in Basic Excavation at the 2008 Jones Mill Dig? Here's What We Learned from Trench 5. Poster presentation at the Annual Meeting of the Arkansas Archeological Society, Fort Smith.

- 2011 Reconstructing the Novaculite Reduction Sequence at Jones Mill, Arkansas. Poster presentation at the 68th Southeastern Archaeological Conference, Jacksonville, FL.

Walker, Leslie

- 2012 Art, Agency and Cultural Transformation at the Dawn of Protohistoric Arkansas. Paper presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Photo Identifications & Credits

Banner images used in this report are as follows:

- Cover Carved bone chess piece recovered at Historic Washington, June 2012. Photo by Jamie Brandon.
- Title Page Bob Campbell, Arkansas Archeological Society volunteer, working at Historic Washington State Park, 2012 Training Program. Photo by Jamie Brandon.
- p. 1 View of excavations at Carden Bottoms, 2009 Training Program. Photo by Leslie Walker.
- p. 2 Building foundation at Block 6, Historic Washington, 2012 Training Program. Photo by Jamie Brandon.
- p. 10 Mounds A & B at Toltec Mounds Archeological State Park, viewed from Mound Lake, winter 2011. Photo by Elizabeth Horton.
- p. 16 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. 22 Jared Pebworth and Aden Jenkins, Survey field archeologists, working at the Breckenridge Shelter (3CR2) in June 2012. Photo by Jerry Hilliard.
- p. 30 Marvin Jeter (UAM station archeologist) with Chuck Dovish (producer) and Chuck Durham (cameraman) from AETN filming atop the Lake Enterprise Mound (3AS379) for a documentary on the history, resources, and cultures of Bayou Bartholomew. Photo by Jessica Howe.
- p. 36 Reconstructed pottery vessels from the Isgrig site (3PU15) in the lab at the UAPB research station. Photo by Mary Farmer.
- p. 42 Larry Porter (WRI station assistant) and Phil Hayden (volunteer) excavating at the Drennen-Scott House in Van Buren, a historic property owned by UAfS. Photo by Tim Mulvihill.
- p. 46 Larry Porter working with school children during Project Dig at the Winthrop Rockefeller Institute. Photo by Leslie C. “Skip” Stewart-Abernathy.
- p. 50 Survey colleagues and volunteers (Don Bragg, Jessica Howe, Vanessa Hanvey, and Chester Shaw) carry out test excavations at 3SA19 as part of the Borderlands Project. Photo by Mary Beth Trubitt.
- p. 56 Brick foundation pier and bottle at Historic Washington, Block 6, 2012 Training Program excavations. Photo by Jamie Brandon.
- p. 62 Survey colleague Bob Lafferty (CRM archeologist) pointing to a small ancient earthquake feature called a dike at archeological site 3PO1253. Photo by Juliet Morrow.
- p. 68 Michelle Rathgaber and volunteer Lora Anderson sifting for artifacts during test excavations at the Manley-Usrey site (3MS106). Photo by Claudine Payne.
- p. 74 Shown left-to-right: State Archeologist Ann Early, Grinnell College student volunteer David Halperin, UAF Ph.D. student and Survey employee Leslie Walker, and UAF station archeologist George Sabo III working on the ceramic artifact database for AMASDA. Photo by Jane Kellett.
- p. 76 Leslie Walker and Teka McGlothlin (UAF anthropology students and Survey employees) work on site record forms in the Survey Registrar’s office. Photo by Jane Kellett.
- p. 84 Shown left-to-right: Survey field archeologists Jared Pebworth, Aden Jenkins, and Michael Evans at the Breckenridge Shelter (3CR2). Photo by Jerry Hilliard.
- p. 87 Graphic illustrations of a Caddo ceramic vessel from Carden Bottoms in the UA Museum Collections (top) and a shell gorget from the Greenbrier site in northeast Arkansas. By Jane Kellett.
- p. 88 The Computer Lab at the Survey coordinating office in Fayetteville. Photo by Deborah Sabo.
- p. 94 Survey education specialist Mary Kwas (at left) leads a tour for Park Interpreters during a Certification Workshop at Historic Washington State Park.
- p. 96 Tools of the editor’s trade. Photo by Deborah Sabo.
- p. 98 Participants in the 2012 Training Program at Historic Washington State Park. Photo by Debra Morse.