

Annual Report for fiscal year 2010-2011



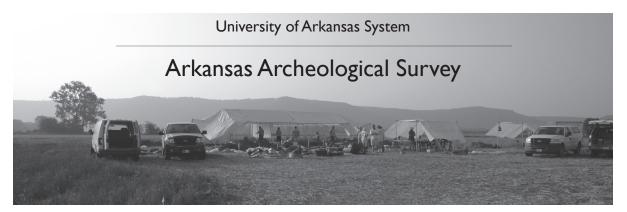
Jared Pebworth displays a pottery sherd recovered during excavations at 3YE25 as part of the Survey's NEH-funded project "American Indian Art, Ritual, and Social Interaction in the Central Arkansas River Valley."



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The 2011 Annual Report was compiled and edited by Deborah Sabo. Layout, design and cover by Deborah Sabo. Cover photo: Excavated house floor at the Carden Bottoms site, 3YE25.



Annual Report for Fiscal Year 2010–2011 INTRODUCTION

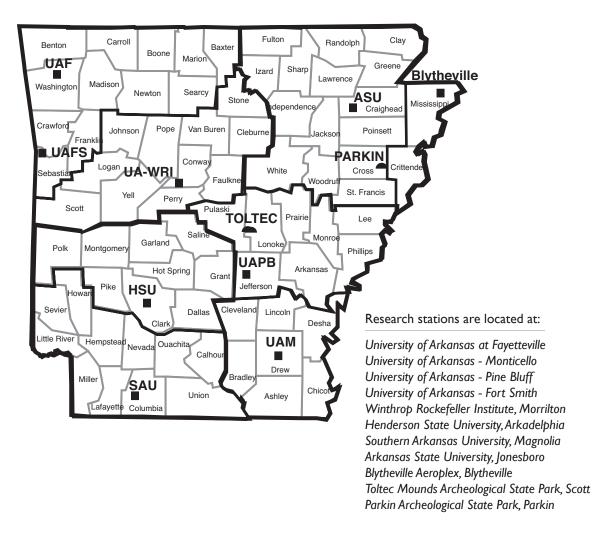
The Arkansas Archeological Survey is a part of the University of Arkansas System. Our mission is to study and protect archeological sites in Arkansas, to preserve and manage information and collections from those sites, and to communicate what we learn to the people of Arkansas. Cooperative agreements 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 Collection 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.

Arkansas Archeological Survey Research Stations



The Arkansas Archeological Survey has 42 employees statewide. Eleven research stations are staffed by professional archeologists who provide appropriate services to their hosts: teaching, student advising, committee work, museum support, and other campus service in the case of the universities; data collection and analysis for public interpretation, exhibit development for the Visitor Information Centers, and public contact in the case of the parks. At Blytheville, Survey personnel are working closely with community leaders to help develop area heritage tourism. At WRI the station is emphasizing research and public education in cooperation with the Institute's mission. Staff at the coordinating office in Fayetteville support the stations and contribute to research and education across the state. All station archeologists and other Survey staff members are available to the public, providing information about prehistoric and historic archeology, American Indians, and early settlers of Arkansas to schools, civic groups, and many types of local, state, national, and international organizations. For contact information, see page 101.

The Director's Pages: Highlights for 2010–2011

Dr. Thomas J. Green

Ince 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 six 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. Some of our accomplishments and challenges in 2010–2011 are outlined below.

News and Accomplishments for 2010–2011

Training Program at Historic Washington State Park

The 2011 joint Arkansas Archeological Society and Survey Training Program was held within the antebellum town of Washington, Arkansas (3HE236), and hosted by Historic Washington State Park and the Pioneer Washington Restoration Foundation, Inc. Dr. Jamie Brandon, station archeologist at Southern Arkansas University in Magnolia, directed the excavations and research design. There were 94 registered participants from all over Arkansas and around the country. Twenty-three staff consisted mainly of Survey archeologists, but also qualified Society members and other professionals. The dig focused on Block 6 in the previously unexplored mercantile district of the town, adding new archeological insight to a crucial aspect of Washington's history—its role as a thriving commercial center in the 1830s-1880s. Thousands of nineteenth century artifacts were recovered, many of which pointed directly to merchant activity: rolls of sheet copper to be cut and sold, a variety of types of scale weights, and coins to be used in these economic transactions. Another important and unexpected feature was a brick cistern with associated drain and filter box.

Dr. Jamie Brandon, station archeologist at SAU, directed the excavations at the Training Program. Photo by Tony Caver.



The town of Washington was founded in 1824 on America's western frontier, and was a thriving county seat and commercial center in a region of farms and plantations. The town was near the southern end of the old Southwest Trail. It served as the Confederate capital of Arkansas for two years during the Civil War, managed to escape destruction, and continued to thrive in the decade following the war, but its influence and population declined when it was bypassed by the railroad.

This was the first return of a Training Program to Historic Washington since 1984. The Society held four previous Training Programs there in the 1980s. The archeology assists the Park's long-term program of historic interpretation. Visitors to the Park were able to view the ongoing excavations and ask questions about the process of archeology and the finds that were being uncovered. Details about the excavations are on pages 61–62 and 95–96 of this Report.



Brick cistern with drain and charcoal-filled filter box, excavated during the Training Program at Historic Washington State Park. Photo by Jamie Brandon.

Prairie Grove Project

In cooperation with Arkansas Department of Parks and Tourism the Survey conducted extensive geophysical, archeological, and archival research at Prairie Grove Battlefield State Park. The goal of this project was to find the remains of houses and other buildings burned during the battle, and the locations of the original road and burial pits. By using the latest geophysical remote sensing equipment we can map disturbances in the ground that indicate the presence of buried features on this important Civil War landscape. The work was performed as an Interagency Agreement between the Survey and the Arkansas Department of Parks and Tourism, which had received grant funding from the National Park Service's American Battlefield Protection Program. The information will enhance interpretation of the battle as it is known from historical records, and will help insure preservation of battlefield features in conjunction with future development. Targeted features were the Borden farmstead, burial trenches, Ada Post Office, Cane Hill/Fayetteville Road, and the Morton and Rogers family homesteads. Dr. Jami Lockhart and Jerry Hilliard were co-principal investigators for the project, which engaged a number of Survey archeologists (Michael Evans, Jared Pebworth, Aden Jenkins, Devin Pettigrew, Tim Mulvihill, Duncan McKinnon, and John Samuelsen), graduate students from UAF, and several volunteers. Lockhart directed geophysical remote sensing surveys and Hilliard directed excavations. The Survey was also responsible for historical archival research, to be integrated with fieldwork results, and production of GIS maps and databases.



Aden Jenkins laying out a grid for geophysical survey east of the Borden House at Prairie Grove Battlefield State Park.

Archaeological Conservancy Secures Two Sites in Arkansas

Parkin Archeological State Park exists today thanks to the Archaeological Conservancy having purchased the Parkin site. The Archeological Conservancy, a nonprofit organization dedicated to preserving significant archeological sites in North America through purchase of the properties, has obtained the Sloan site (3GE94), a Dalton Period site (ca. 8500 B.C.) in northeastern Arkansas that was excavated in the 1970s by the Survey's former ASU station archeologist Dan Morse (with help from the Sloan family). It is one of the most important Dalton sites in the continent, and is recognized as the oldest cemetery in North America. A brief article appeared in the spring 2011 issue of the Conservancy's magazine *American Archaeology* (Vol. 15, No. 1).

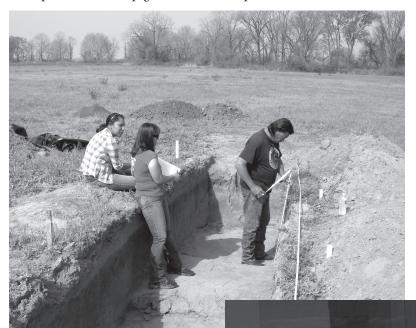
In 2005 the Conservancy acquired the Cavanaugh Mound (3SB3) located in the City of Fort Smith. The Survey has worked steadily over several years to help with conservation efforts at the site, a large platform mound surrounded by residential and commercial development. Tim Mulvihill, our archeologist at the UAFS research station, and Dr. Jami Lockhart, our director of GIS and geophysical research, have performed remote sensing surveys on the mound surface. Regular brush clearing and tree-removal projects with the help of Ark-Homa Chapter volunteers have helped clear the way for surveying, and a large-scale profiling project is planned on one side of the mound that has been damaged over the years by construction and erosion (see page 48 of this Report for news on Tim Mulvihill's latest efforts).

53rd Caddo Conference Hosted by the Survey and UAFS

The Arkansas Archeological Survey and the University of Arkansas - Fort Smith jointly sponsored the 53rd Caddo Conference, held March 25–26, 2011 at the Smith-Pendergraft Center on the UAFS campus. The Caddo Conference uniquely brings together professional scholars, avocational archeologists, and members of the descendant community to discuss current research and participate in cultural events. Research on the history, culture, language, arts, and environment within the traditional Caddo homeland may be presented at the Conference. Survey archeologists and their students presented seven papers. Tim Mulvihill, the Survey's research archeologist for the UAFS station, and state archeologist Ann Early worked with others to organize the Conference. Tim Mulvihill led a Sunday morning field trip. George Sabo, research archeologist for UAF, obtained a grant from the Arkansas Humanities Council to support the Caddo Culture Club's travel to the Conference for a public performance of traditional dances. Beta Analytic, Inc. provided additional support for the 2011 Conference. Approximately 90 people attended the conference.

NEH-Funded "American Indian Art, Ritual, and Social Interaction in the Central Arkansas River Valley" Completes Its Second Year

In June 2009 the Survey was awarded a \$240,000 grant from the Collaborative Research Program of the National Endowment for the Humanities for a three-year study of American Indian art, ritual, and social interaction in central Arkansas. The project is a unique collaboration between the Survey, graduate students at the University of Arkansas Department of Anthropology, and members of the Caddo, Osage, and Quapaw Nations. It has been designated a "We the People" project by NEH. Principal investigators are Dr. George Sabo III (UAF research station archeologist) and Dr. Jami Lockart (director of archaeogeophysical research), along with Dr. Andrea Hunter (Tribal Preservation Officer for the Osage Nation). One aspect of the project is to provide scientific archeological context for the UA Museum Facility's collection of ceramic vessels from the Carden Bottoms area in the Central Arkansas River Valley (CARV). Though generally recognized as one of the most significant collections of pre-Colombian artworks in the United States, these artifacts were not professionally excavated, so their research potential could never be fully realized. New excavations will provide the needed links between sites and museum specimens. The project also builds on previous six years of studying rock art in the area, much of which portrays motifs similar to those found on decorated pottery. Details of the second year's accomplishments are on pages 30–32 of this Report.



Members of the Osage Nation took part in excavations at 3YE25 as part of the Survey's NEH-supported CARV Project. From left to right: Sonnie Clahchischiligi observes while Trini Hadden and Martin Miles document a trench profile. The Osage participants posted thoughts about their experience on the tribe's historic preservation website (see page 36 for a link).

Bobby Gonzalez, NAGPRA Coordinator for the Caddo Nation, records data on Carden Bottoms pottery vessels in the collections of the Gilcrease Museum in Tulsa, Oklahoma as part of the CARV Project.



David Jeane (left) and Marion Haynes at the 2011 Training Program at Historic Washington State Park. Photo by Tony Caver.

Personnel Changes at the Survey — Retirements

David Jeane retired from his position as the Survey's assistant archeologist for the research station on the Southern Arkansas University campus in Magnolia. David R. Jeane (M.S., Northeast Louisiana University, 1976) first joined the Survey in 1997 as station assistant at SAU. During a previous 25-year career with the Louisiana Department of Health and Hospitals, Jeane maintained an active role in Arkansas and Louisiana archeology as a member of several organizations. His interests have ranged widely, from South American mummies—he has traveled to South America, where he did research on desiccated human remains—to 17th and 18th century English ceramics. For much of his career in Arkansas, he worked closely with long-time SAU station archeologist Frank Schambach (who retired in 2006) on the archeology of the Caddo, but Jeane has also always maintained a strong interest in the historical archeology of southwest Arkansas. His years of service include a strong record of interaction with the public and performance in the Survey's mission area of promoting archeology via public education. He is a past president (1982–83) of the Arkansas Archeological Society and regular participant at the Society's Training Program and annual meeting. This service is continuing in retirement, as David has agreed to chair the Archeological Research Fund Committee, which evaluates yearly grant proposals and assigns awards from the Society's ARF fund. David Jeane has contributed to significant archeological fieldwork and research efforts in Arkansas too numerous to list. His wry humor, friendship, and expertise are much appreciated by all his colleagues, who look forward to his continued involvement in Arkansas archeology—at a somewhat more relaxed pace—for years to come.

Marion Haynes retired from his position as the Survey's assistant archeologist for the research station located on the decommissioned Eaker air base in Blytheville. Marion Haynes first joined the Survey in 1999. A lifelong resident of the Blytheville area, he attended Southern Baptist College and the College of the Ozarks before returning to family farm operations in northern Mississippi County. Over many years he volunteered with Survey archeologists to record and preserve sites in the county, and assisted U.S. Geological Survey studies of the New Madrid Seismic Zone. From 1995–1997 he worked for Mid-Continental Research Associates, a private firm, on archeological survey within the Eaker air base property. As assistant at the Blytheville station, Marion put his experience with field observation in the New Madrid Zone to good use. His expertise in recognizing and studying earthquake effects helped advance one of the station's primary long-term research projects—to work with geologists and seismologists studying the seismically volatile area, integrating dated archeological sites into models that help show the frequency and periodicity of ancient earthquakes. From a purely archeological point of view, these explorations also revealed how ancient earthquakes disturbed the archeological sites. Marion Haynes was appointed by Arkansas Governors Huckabee and Beebe to the Arkansas Governor's Earthquake Advisory Council. This year Marion Haynes appeared in a YouTube video "Earthquake Features: Historic Evidence" by the Center for Earthquake Research and Information (www.youtube.com/watch?v=0fACj3206uQ). He has also been a frequent and popular visitor to local public schools, helping to bring archeology and the culture of Arkansas's American Indian tribes into the classroom.

Personnel Changes — New Station Assistants

The Survey hired a new assistant for the station at Arkansas State University for the fiscal year 2010–2011. Also, during the year, three additional station assistant positions were open, two due to the retirement of David Jeane (SAU) and Marion Haynes (BLY). Searches were mounted and three assistants were hired to begin shortly after June 2011 at SAU, HSU, and Blytheville.

Arkansas State University Research Station

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, Panamerican Consultants, Inc., and the Arkansas Archeological Survey—he is a former assistant at the UAM research station (2004–2007). He left the Survey in 2007 to enter the Ph.D. program in Anthropology at Southern Illinois University, Carbondale. Scott has been 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 in September of 2010.



Southern Arkansas University Research Station

Carl G. Drexler (M.A., University of Nebraska, 2004) has worked for the National Park Service, Colonial Williamsburg Foundation, and U.S. Army Engineer Research and Development Center as a historical archeologist, and is a doctoral candidate at the College of William and Mary. His research focuses on the archeology of conflict, spatial analysis, memory, and aerial remote sensing. He has field experience in Arkansas, New Mexico, Nebraska, Virginia, Kansas, Missouri, Illinois, Indiana, Mexico, the British Virgin Islands, and Cuba. At the Survey, he hopes to concentrate on Civil War sites such as Dooley's Ferry and the battlefield at Wallace's Ferry.



Henderson State University Research Station

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 Dr. Mark Williams, Ms. 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, Ms. 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.



Blytheville Research Station

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. At the Survey, she is delving 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.



Personnel Changes — New Station Archeologist

Toltec Mounds Archeological State Park Research Station

Following a full year without a research archeologist, the Survey hired Dr. Elizabeth Horton as station archeologist at The Toltec Mounds research station. Dr. Horton was hired after a national search, and was one of three candidates interviewed. She had spent the previous year at the coordinating office in Fayetteville in a post-doctoral research position, working on textile and fiber assemblages in the University of Arkansas Museum Collections. Horton had begun her interest in these collections as part of her dissertation research at the University of Washington in St. Louis. The Survey had a particular need and desire to hire a paleoethnobotanist, and Dr. Horton brings this expertise to the organization. More information on Dr. Horton's resume, and her plans for the station, are found in the Toltec Mounds chapter of this Report (pp. 24–25). A summary of her post-doctoral research follows.

Focus: Elizabeth Horton, Post-Doctoral Research at Arkansas Archeological Survey, Fayetteville



Dr. Elizabeth Horton and UA anthropology graduate student Duncan McKinnon examine preserved basketry in the UA Museum Collection as part of the Spiro Perishables Project (see below).

Elizabeth Horton

Horton completed her doctoral research for Washington University in St. Louis in May of 2010 and accepted a postdoctoral research position with the Arkansas Archeological Survey in August of 2010. At the Survey she continued her studies of fabric technology and plant fiber use in the Pre-Columbian Southeast in general and Arkansas in particular. Her focus was on two separate but related assemblages: the Ozark Bluffshelter Collections and the Spiro Collections, both curated at the University of Arkansas Museum Collections Facility. In the course of the project, she assisted curator Mary Suter in identifying and researching the provenience of textiles and basketry in the UA Museum collection. Horton's interest in fabric and fiber technology led her to carry out analysis of dry, well-preserved perishable materials curated at several other institutions in Arkansas, and a private collection of materials recovered in the 1960s. These studies included rockshelter assemblages at the Bella Vista Historical Museum and the Gregory Collection at Arkansas Tech in Russellville.

Horton's responsibilities also included providing Survey archeologists at the research stations with assistance and advice in analysis and recovery of macrobotanical materials from archeological sites in Arkansas. In addition, she established a comparative collection and facility for the analysis of macrobotanicals. She undertook analysis of the substantial amount of recovered macrobotanical remains from the Isgrig site (3PU15) as well as analysis of special samples, such as the in situ blocks from the Bruce Catt site (3CY91) and the selection of radiocarbon samples from a number of different sites and collections for other Survey personnel.

The primary focus of the postdoctoral position, however, was continuation of a long-term research project begun in 2009 in collaboration with George Sabo, station archeologist at the University of Arkansas in Fayetteville. Horton applied for and was hired as the Station Archeologist at the Arkansas Archeological Survey's Toltec Mounds State Park Research Station in March of 2011 and started her new position in July of 2011.

Ozark Bluffshelters Collection: Analysis of Perishable Materials

Through a unique combination of environmental and geological factors, the Ozark Plateau has yielded the most substantial archeological assemblages of Pre-Columbian dry preserved organic material in the entire Southeast. The UA Museum Collections Facility's Dellinger Ozark Bluffshelter Collection formed the basis of Elizabeth Horton's dissertation, *The Ties That Bind: Fabric Production and Fiber Use in the Ozark Plateau*. This rich record of both day-to-day existence and ritual activity of the Pre-Columbian peoples of the Ozark Plateau includes materials as diverse as arrow shafts to shoes, burden baskets to snare triggers, feather robes to coiled baskets (unique to the archeological record of the southeastern United States), and even a rare trade item from much farther west—a fragment of Pre-Columbian cotton cloth. Horton's dissertation work provided the first substantial chronology of fabric technology and styles and identified the vital importance of a select number of key plant fiber resources used by Ozark Plateau peoples, including *Eryngium yuccifolium* or rattlesnake master, which accounted for nearly 75 per cent of all fiber use in the collection.

As a continuation of her dissertation research into the technological and stylistic attributes of Pre-Columbian fabrics, such as rivercane baskets and finely woven plant fiber textiles, Horton traveled to several local institutions, including the Bella Vista Historical Museum and Arkansas Tech Museum, as well as the collections facility at Northwestern Louisiana State University, in order to analyze additional perishable materials, from 3000+ year old shoes recovered from rockshelters in Newton County to finely woven rivercane basket fragments from the Caddo site of Mounds Plantation, Louisiana. She also arranged for the long-term loan to the Arkansas Archeological Survey of a private collection of perishable artifacts recovered in the 1950s and 1960s in order to include these materials into her study. In addition, she was involved in the

identification and accessioning of bluffshelter materials and other perishable archeological and ethnographic materials transferred to the Arkansas Archeological Survey from the Little Rock Museum of Discovery.

Horton's current fabric production and fiber use research is focused on understanding changes in plant fiber use that occurred in the late Pre-Columbian period (post AD 1000), and shifts and elaborations in rivercane basket technologies and styles. The broader goal is to understand the relationship between social changes that occurred during this period, such as a shift toward intensive farming, and changes in material culture such as fabric technology and fiber use. Of particular interest is the possibility of Pre-Columbian management of rivercane, and broader questions about human and environmental factors in canebreak development and decline in the southeastern United States. Horton continues her efforts to understand subtle variations in *Eryngium yuccifolium* cell morphology identified in her dissertation as it relates to documented use of this plant throughout the southeastern United States. This research, in all its aspects, will remain a long-term focus and is related to several other projects, including the Spiro Perishable Project.

The Spiro Perishable Project

The Spiro Perishable Project, in collaboration with Dr. George Sabo (UAF station archeologist) and with the support of the Caddo Nation of Oklahoma, is focused on examining basketry and fabrics from the world-famous Spiro Ceremonial Center that are curated in the University of Arkansas Museum Collection. The project so far has emphasized

At right: decorated double-woven basket lid from the Spiro site.



Graphic representation of the design woven into the same basket lid. The shaded diagonal represents dyed red cane peels.

a specific class of double-woven lidded baskets that were looted out of the Craig Mound at Spiro, along with their contents and other associated materials, by the so-called Pocola Mining Company in the 1930s. The items were acquired at that time by UA Museum Director Samuel C. Dellinger. There are fragments of fourteen double-woven lidded baskets in the UA Museum Collection, accompanied by many other artifacts. Prior to our study, only one of these baskets had been carefully examined and reported in the literature. Our ongoing study has already produced significant new insights, though much work remains to be completed.

When the Pocola miners tunneled their way deep into the main cone of the four-lobed Craig Mound and entered an unusual central cavity, they—and soon, antiquarians and artifact collectors across the country—were amazed at the rich trove of materials that had been carefully arranged in what has come

to be known as the Great Mortuary. Through painstaking analysis conducted over several decades, Professor James A. Brown (Northwestern University) has determined that the Great Mortuary's contents were arranged in a specific order to symbolically represent fundamental elements of early fifteenth-century Spiroan cosmology. According to Brown, the Spiroan community in creating this arrangement attempted to bring the power of ancestral lineages to bear on events affecting the then-living descendants. The double-woven lidded baskets, along with their contents and other associated items, played an important role in that ritual quest, as we are now beginning to understand.

What we have been able to determine through very careful examination of UA Museum specimens is that each basket lid displays a unique design carefully woven into the outer surface. The weaving technique employed to produce these designs is different from the techniques used to produce local Spiroan basketry. Further, each basket (consisting of a twill-weave bottom along with the uniquely decorated lid) contained a variety of regalia and related ceremonial objects including copper hair ornaments, woven fabric and cordage, shell beads and other ornaments, carved wooden antler tines (elements of ceremonial headdresses), tobacco pipes, copper- and stone-bladed celts and axes, and so forth. We interpret these items as regalia representing ancestral and possibly mythic heroes. Consonant with the individual lid designs, each basket contains a different assemblage of regalia. Furthermore, several of the baskets were placed in the Great Mortuary with bundled copper sheets (some bearing embossed designs) set on top of them.

David Halperin, a volunteer high school student working with Horton and Sabo (and who is now attending Grinnell College in Iowa), contributed an important component of this study by reconstructing several of the copper sheet bundles from small fragments (a result of the careless handling of the Pocola miners). The bundles consisted of multiple copper sheets separated by cane splint lattices and then covered and tied in leather wrappings. Some of the wrappings had leather thongs enabling the bundles to be carried or suspended. Similar leather-wrapped copper plate bundles were kept by some historic Southeastern Indians as sacred objects used only in certain religious ceremonies. Accordingly, we are interpreting the double-woven lidded basket and copper bundle assemblages from Spiro as sacred bundles, perhaps associated with specific lineages or religious cults, that were brought to Spiro specifically for inclusion with the Great Mortuary cosmogram. Our findings thus add important new information to Professor Brown's cosmographic reconstruction, and offer fascinating insights into the religious beliefs of fifteenth-century Spiroans.

Horton and Sabo are currently preparing a report on these findings that will appear in an edited volume on prehistoric Southeastern Indian regalia and sacred bundles. Additional project activities include examination of similar specimens housed in other museum collections in the United States, and trace element analysis of selected examples to determine where the baskets were made.

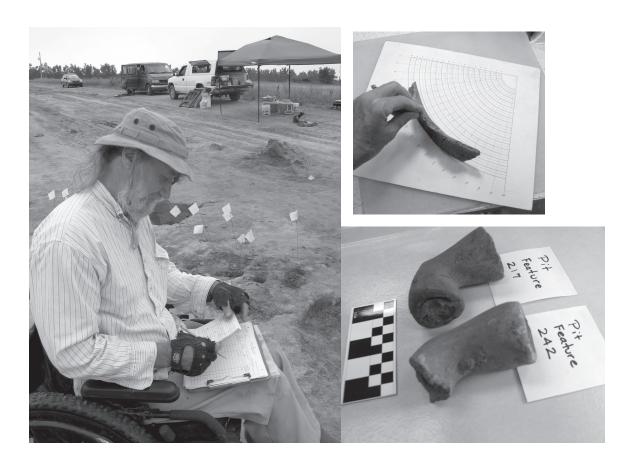
3PU15 Isgrig Macrobotanical Analysis

With the cooperation of landowners, the Survey has been excavating at Isgrig, a late prehistoric/protohistoric site near the Little Rock Port Industrial Park in Pulaski County, for the past few years. Horton is in the process of identifying the carbonized plant remains. Preliminary results raise intriguing questions about the food pathways of the occupants of this site. The samples are extraordinarily heavy in maize with a substantial quantity of nearly intact cobs. A high frequency of maize is not unusual for a late Pre-Columbian site, but the nearly total absence of other domesticated foodstuffs, such as amaranth was unexpected. In addition, the only ostensibly wild foodstuff present (aside from the nearly ubiquitous use

of nuts—hickory and walnut) is an unusually high frequency of grape seeds. Continued analysis will focus on the study of intact maize cobs; attempts to identify a very common, but as yet unknown, weed seed present in a significant number of samples which may have some relation to the farming practices of the Isgrig occupants; and the final statistical analysis to clarify the relationship between maize and grape consumption in comparison to other foodstuffs and the distribution of these remains across the site.

Salvage Archeology & Working with Landowners: Bruce Catt

Excavations by Julie Morrow (ASU station archeologist) at the Bruce Catt site (3CY91), with other Survey staff and numerous volunteers, represent one of many successful Survey projects in cooperation with landowners. The team worked to salvage archeological features at the Mississippian village site ahead of land-leveling for agriculture. Below, volunteer Robert Taylor manages site records in the field; a ceramic rim sherd fragment is measured in the lab; and two clay pipes are compared. A page on the Survey's website (http://arkarcheology.uark.edu/indiansofarkansas/index.html?pageName=Bruce%20Catt) describes the project.



Student Employment

The Survey continues to be able to provide part-time employment for university students. A work-study student from University of Arkansas - Fayetteville is a part-time assistant in the Survey registrar's office. Also at the coordinating office in Fayetteville, several graduate students in the Anthropology Department at the UAF campus are employed at the Survey on grant funds, and Duncan McKinnon currently holds the Survey graduate assistantship. The research station at Henderson State University employed an HSU student as a lab assistant this year.

Contributions to Higher Education in Arkansas

- UAF station archeologist Dr. George Sabo III serves as assistant director of the interdisciplinary **Environmental Dynamics** Ph.D. Program in the Fulbright College of Arts and Sciences, University of Arkansas.
- Survey archeologists taught 21 college classes and internships to 496 undergraduate and graduate students at seven university campuses in Arkansas (UAF, UAPB, UAM, UAFS, ASU, HSU, SAU) during the 2010–11 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 35 thesis or dissertation committee positions for UAF graduate students in Anthropology and Environmental Dynamics.
- 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 qualified students at UAF and HSU.
- 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

- The Survey distributes a **Teacher Packet** containing information, activities, and lesson ideas for classroom use by Arkansas school teachers in printed form, as a CD-ROM, and as downloadable files available on our website.
- 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 in 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 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.
- · Among the unique and creative educational activities that Survey archeologists were involved with this year:
 - UAM staff helped to lead a tour of Toltec Mounds Archeological State Park for students from the Cathedral School in Little Rock.
 - Jeff Mitchem worked with EAST Lab students and faculty from Valley View High School in Jonesboro, who
 produced a virtual tour of the Parkin Archeological State Park Visitor Center.
 - 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



Haas Hall Academy senior David Halperin (left), project principal investigator Dr. George Sabo (center), and Survey archeologist Aden Jenkins (right) examine the screens at the Carden Bottoms site, 3YE25. David volunteered at the UA Museum and worked with Dr. Sabo and post-doctoral researcher Elizabeth Horton on the Spiro Perishables Project and the CARV Project during previous years.

Archeological Society Training Program, and at the Carden Bottoms site as part of the NEH-funded Central Arkansas River Valley Project.

- WRI staff participated in Project Dig with Gifted and Talented students from Bigelow East End and Perryville
 Upper Elementary 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. Students visit the station, and the archeologists offer relevant projects, such as local cemetery preservation, that allow teachers to bring critical thinking concepts and hands-on learning opportunities directly from the community into the classroom.
- 82 pupils and staff from Eastside Elementary School in Rogers **toured the Survey** coordinating office. Several staff members gave presentations on different areas of the Survey's program. The students observed our artifact processing lab, the registrar's office, Museum Collections Facility, computer lab, and an outdoor demonstration of experimental archeology with replicas of ancient technology.
- Students visiting the UAF campus for **University Days** observed first-hand the extent and variety of research collections, how they are cataloged and cared for, and some of the ways in which scientists are using the collections during a tour of the University Museum Collections Facility.
- Juliet Morrow served as a judge in the Earth & Atmospheric Sciences category of the **Northeast Arkansas Science Fair** on the ASU campus.
- Survey archeologists assisted with **Scouting archaeology merit badges**.

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 86 public lectures and other presentations by Survey staff reached audiences of more than 2791.
- Survey staff have contributed about 40 articles to the Butler Center Library's Encyclopedia of Arkansas History and Culture project.
- 94 members of the Arkansas Archeological Society attended our jointly managed annual Training Program for amateur archeologists. The 2011 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, 776 visits per month, with a year-end total of 9322.
- We maintain **two educational interactive websites:** *Indians of Arkansas* received 5000 visits per month and *Rock Art in Arkansas* received 1400 visits per month.
- Dr. Claudine Payne (Blytheville) serves as Vice-Chair on the Delta Gateway Museum Commission.
- Marion Haynes (Blytheville) continued his appointment to the Arkansas Governor's Earthquake Advisory Council.
- Dr. 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.
- Over 1000 copies of various leaflets and flyers produced by the Survey about Arkansas archeology and history were sent out in response to requests for information from members of the public.

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
 - 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
- The Survey posts "Guidelines for Fieldwork and Report Writing in Arkansas," an appendix to the Arkansas *State Plan*, on its website for access by agency and private firm archeologists.

Grants, Honors & Awards

- Dr. Leslie C. "Skip" Stewart-Abernathy, archeologist at the Winthrop Rockefeller Institute research station, received a Lifetime Achievement Award from the Arkansas Historical Association.
- Mary Kwas's book Digging for History at Old Washington (2009, UA Press) received the 2010 Ned Shank Award for Outstanding Preservation Publication.
- \$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: Dr. George Sabo III (UAF), Dr. Jami Lockhart (CSP), and Dr. Andrea Hunter (Osage Nation). Designated a "We the People" project by NEH.
- \$425,456 from Arkansas Highway and Transportation Department for the AMASDA Online Project (ongoing multi-year project, awarded 2007) (Registrar, CSP, UAF). Extension through June 2011.
- \$19,847 from Arkansas Natural and Cultural Resources Council for "Aiding Interpretation at Parkin Archeological State Park" to help support excavations for rebuilding part of the palisade.
- \$1500 from Arkansas Humanities Council (matched by the Survey) to support public performance of traditional dances by the Caddo Culture Club during the 53rd Caddo Conference at University of Arkansas Fort Smith.
- Archeological Research Fund Awards from the Arkansas Archeological Society to Dr. Mary Beth Trubitt (\$595) for an AMS radiocarbon date for site 3HS60 and to Dr. Julie Morrow (\$1450) for macrobotanical analysis of specimens from Mississippian sites in northeast Arkansas.

Scientific Achievements & Archeological Mission

- Survey professional staff authored or coauthored **29 publications and reports**, and presented **32 papers at professional meetings** in 2010–2011.
- 827 new archeological sites were recorded, bringing the total number of sites in Arkansas site files to 45,486.
- 105 new archeological projects were entered in the database, bringing the projects total to 6141.
- The Survey registrar facilitated 216 requests for information from the Arkansas site files by students, researchers, and project managers; 175 researchers visited the office to use the site records.

- Our sponsored research program administered new grants and contracts with budgets totaling \$212,433.
- The Survey logged over **9949 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 (see pp. 33, 80–81, 86).

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 plus 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 Historic 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.



UAFS archeology students excavate at the Drennen-Scott House (see pg. 47).

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.

The State Archeologist

Dr. Ann M. Early

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.

2010–2011 Activities

Ann M. Early (Ph.D., University of Massachusetts - Amherst, 1973) 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. Dr. 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.

Teaching & Higher Education

Dr. Ann Early is Research Associate Professor of Anthropology at the University of Arkansas, Fayetteville.

- Early supervised Roger Cain in the Hester Davis Internship, summer 2010. Roger's project involves collecting information about the historic Cherokees in Arkansas.
- Early served on three Ph.D. committees for UAF graduate students, as Chair for one.

Professional Service

- Boards, Commissions & Organizations. Board member of the Arkansas Humanities Council and chair of the Council's Nominations Committee; Secretary of the Arkansas State Review Board for Historic Preservation; President of the Southeastern Archaeological Conference; Vice President of the National Association of State Archeologists.
- Caddo Conference. As president and Local Arrangements Coordinator, Early worked on planning and preparations for the 2011 Caddo Conference, which was held in Fort Smith, co-sponsored by the Arkansas Archeological Survey and the University of Arkansas Fort Smith.
- Early contributed a review article for the journal Human Ecology.

Records & Collections Management / Review of Projects

- Projects and Permit Reviews. Early reviewed 15 Corps of Engineers permit applications. She reviewed Section 106-generated comments from the State Historic Preservation Office and Arkansas Clearinghouse grant proposal lists with respect to archeological sites. She also reviewed archeological reports by private contracting firms and federal agency archeologists for work carried out in Arkansas She responded to approximately 147 situations requiring advice to historic preservation professionals, federal or state land managers and agency officials, contract archeologists, Tribal historic preservation officers and other Indian Nation representatives, and scholars inside and outside Arkansas. Nine requests involved historic cemeteries.
- Guidelines. Revised the guidelines for Survey procedures regarding human bones.
- Legislation. Facilitated amendment to the Burial Protection Act in 2011 Arkansas Legislature.

- **Permissions Requests.** Early handled requests for permission to quote from, (re)publish, or use photographs from Survey publications, archives, and records.
- **Site Forms.** Early submitted dozens of site record forms for GLO sites and historic cemeteries to the Survey Registrar.
- Museum of Discovery Collections. Last year Early negotiated the transfer of archeological and American Indian ethnographic collections from the Museum of Discovery in Little Rock to the Arkansas Archeological Survey. This year she worked (with assistance of UAF anthropology student Eric Welker and anthropology graduate student Joann de Maio) to catalog and inventory the thousands of de-accessioned items. Many objects were loaned to Tribal museums for exhibit.

Public Archeology

- Public Assistance. Early responded to approximately 132 requests for information and/or assistance from the
 public (individuals or organizations) concerning archeology. Responses ranged from artifact identifications to
 extended periods of assistance requiring research and help from other professionals. Thirty-five requests concerned historic cemeteries.
- American Indian Tribes. Early coordinates activities to identify, secure, and repatriate Native American human
 remains that may be uncovered and/or brought to the attention of authorities in various circumstances. She
 provides information on Arkansas's State Burial Law and the federal NAGPRA requirements to local law enforcement and others when needed, and maintains communication with Tribal representatives.
 - Early participated in consultations with Tribal representatives participating in the Survey's NEH grantfunded Central Arkansas River Valley (CARV) project to develop a Memorandum of Agreement on procedures should human remains be encountered during excavations.
 - · Participated in consultations with, and advised the Quapaw Nation's Tribal Historic Preservation Officer.
 - Assisted the Quapaw Cultural Club in mounting exhibits at The Quapaw Tribal Museum: loaned objects, wrote identifying tags, packed items from Museum of Discovery collections.
- Arkansas Archeological Society. Early advised the Society on their Stewardship Program and managed Survey
 participation in the Program. She assisted with preparations for the annual Training Program, and taught a Stewards Workshop and Beginner's Orientation at the Training Program. She also attended the Annual Meeting in
 Hot Springs, where she helped with various activities.
- Presentations & Programs. Early presented papers at the annual meeting of the Oklahoma Anthropological Society in McAlester, OK, the Southeastern Archaeological Conference in Lexington, KY, the Caddo Conference in Fort Smith, AR; public talks were presented at the Newton County Library, the Cemetery Preservation Fair in Little Rock, AR, the Calhoun County Genealogical Society in Camden, and the African American Cemeteries Conference at Historic Washington State Park in Washington, AR.

Research Projects

- Early worked on a variety of research and writing projects, including the following:
 - research on Caddo ceramics in the Central Arkansas River Valley (CARV project)
 - · study of Caddo finewares—developing a "design grammar" to interpret the meaning of the designs
 - writing on several book chapter projects
 - research on the Cherokees and Choctaws in Arkansas in the historic period
 - Foreword for Society for American Archaeology monograph on antiquities trafficking and scholarship
 - Biography of Hester A. Davis for Springer Press Encyclopedia of Cultural Resource Management
 - reviewed articles for the Butler Center's online Encyclopedia of Arkansas History & Culture

Toltec Mounds Archeological State Park

Station Archeologist, undergoing search during FY 2010–2011 Marilyn Whitlow, Station Assistant Mallory Bader, AmeriCorps Intern

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 today, along with remnants of the embankment. Most of the mounds were square, flat-topped earthen structures built by carrying basket-loads of dirt. Several of the mounds were arranged around an open plaza and aligned according to astronomical observations. The two largest were built in stages, and stand today at 39 and 49 feet high. The site had a small permanent population of religious and political leaders and their families, but most Plum Bayou people lived in scattered villages and hamlets in the surrounding countryside, only gathering at the site for religious and community activities. The Plum Bayou people grew a variety of native domesticated crops, harvested nuts, hunted, and fished.

News & Research

New Beginnings at the Toltec Station

In July of 2010, Elizabeth Horton accepted the position of station archeologist for the Toltec Mounds research station. Although the station had been without an archeologist for FY 2010–2011, station assistant Marilyn Whitlow and intern Mallory Bader maintained station records and continued with the processing and cataloging of materials excavated at the Training Program and other projects in 2010, as well as items donated to the station during this period. They also continued to hold lab work days for Arkansas Archeological Society volunteers and assisted State Park staff when needed.

With Horton's arrival, she has not only been able to continue to provide much needed assistance to the state park and resume the vital role that station archeologists have in cultural resource management, but has also established the Arkansas Archeological Survey's first formal paleoethnobotanical laboratory and comparative collection at the Toltec Mounds State Park Station.

Horton will continue to offer analytical assistance and training to Arkansas Archeological Survey staff as well as students and other professional archeologists and researchers throughout the state in paleoethnobotanical studies. She will also continue to expand her research into pre-Columbian plant use in Arkansas, especially in the fascinating, but poorly understood field of technological use of plants for textiles and basketry. She has also been able to provide the Toltec Mounds State Park interpreters with additional material and training for improving and expanding the educational programs and services they offer to the public.

Though her tenure in this position began in July (just after the present fiscal year), Horton has already assisted in the initiation and completion of two critical preservation projects at Toltec Mounds State Park. The first was a multi-agency erosion control project to stabilize Mound P that brought together Arkansas Archeological Survey staff, State Park staff, the Arkansas Game and Fish Commission's Stream Team, and volunteers from the Arkansas Archeological Society, Stream Team, and the Arkansas Master Naturalists program. The second project was finalization of the removal of the last standing modern structure on the Toltec Mounds site—the old superintendent's quarters on Mound D.

Toltec Mounds Station Personnel

Elizabeth Horton (Ph.D., Washington University in St. Louis, 2011) came to the Survey in 2010 as a postdoctoral researcher at the coordinating office in Fayetteville, and began the position as station archeologist 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.

Professional Service 2010–2011

- Horton assisted the University of Arkansas Museum Collections with identification of archeological perishable items, and with the accession process for perishables transferred to the Survey and the UA Museum.
- Horton was a panel member for a student-organized session at the Southeastern Archaeological Conference.

Public Service & Outreach 2010–2011

- Horton served as moderator for the Southeastern Basketry Session at the Louisiana Folk Life Festival, "The Tribes Remain: Contemporary Southeastern Indian Cultures," Nachitoches,.
- Horton was an invited speaker in the Cahokia Mounds State Park Winter Lecture Series, Cahokia Mounds UNESCO World Heritage Site, IL (audience 30).

Service to Arkansas Archeological Society 2010–2011

- Horton gave public talks at Chapter meetings of the Central Mississippi Valley Chapter (Jonesboro), the Arkansas River Valley Chapter (Russellville), the Ko-ko-çi Chapter (Fayetteville), and the Ark-Homa Chapter (Fort Smith) (combined audiences 70).
- Horton taught the Basic Excavation seminar during the 2011 Training Program at Historic Washington State Park.
- Horton assisted several Society members with independent research projects.
- The station hosted meetings of the Society's Executive Committee.
- · Whitlow and Bader hosted lab days for volunteers.

Volunteer Hours 2010-2011

• Volunteers contributed 191 hours to station projects.

Parkin Archeological State Park

Dr. Jeffrey M. Mitchem, Station Archeologist E. Faye Futch, Station Assistant

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.

News & Research

Writing excavation reports and handling curation of artifacts from the Parkin site occupy the bulk of the Parkin research station staff's time. The staff are also involved in various activities promoting archeology to the public, as part of the Parkin Archeological State Park program, or as part of the Survey's general mission to serve the public interest by providing educational opportunities and sharing our expertise with those who want to know more about Arkansas archeology.

EAST Lab Virtual Tour Project

Students from Valley View High School in Jonesboro, under the direction of teacher Trent Saracini, traveled to Parkin Archeological State Park in early 2011 to create a virtual tour of the archeological site and the Visitor Information Center. As part of the Arkansas Environmental and Spatial Technology (EAST) Initiative, the students used state-of-the-art photographic and GIS technology to complete the project. In addition to the students' extensive filming on the site and in the building, Dr. Mitchem was interviewed on camera, talking about the Parkin site and specific artifacts.

Using a turntable system, several of the Parkin headpots were photographed in 360 degree fashion so that they could be viewed from any angle. Photographs of specific artifacts were also taken in both curation areas. One of the products of the project was an animated virtual tour of the Parkin site as it was when it was occupied centuries ago.

Richard's Bridge Mapping Project

In February, personnel from the Blytheville and University of Arkansas - Fort Smith research stations joined Dr. Mitchem to create a detailed topographic map of the

Richard's Bridge site in Crittenden County. Richard's Bridge is a Parkin phase site that was probably a subject town of Casqui (the Parkin site). Using the Survey's robotic total station, UAFS station archeologist Tim Mulvihill was able to complete a detailed map in a single day. A long term goal of the Parkin research station is to complete maps of all known Parkin phase sites as they exist today. Mapping is a first step in carrying out more in-depth research on these sites.

Upon completing the Richard's Bridge map, the team carried out surface survey and mapping of the landowners' adjacent property, locating several additional areas of archeological interest. One of the most intriguing finds was two Woodland-period (A.D. 400–700) mounds in an area where Woodland occupation is poorly understood. The landowners have invited us to conduct additional research in the future.

The "Peetie Wheatstraw" Project

Parkin Station personnel were contacted by Rev. Eddie Bunch of Carlisle to help locate the grave site of Peetie Wheatstraw, an early twentieth-century blues musician born William Bunch. While he is buried in the Morning Star Missionary Baptist Church cemetery in Cotton Plant, the exact location of his grave is unknown. Dr. Mitchem and Ms. Futch visited the cemetery, but explained to Rev. Bunch that there was no way we could identify the correct grave. Rev. Bunch explained that an Arkansas Delta Music Trail Interpretive Marker was to be placed at the cemetery in honor of "Peetie Wheatstraw, the Devil's Son-in-Law" in the near future.

Station personnel also accompanied Rev. Bunch to the ruins of a relative's house, the future location of a museum



Valley View High School EAST student Ania Welman explaining her photographic setup to Dr. Jeff Mitchem in the open curation area at Parkin Archeological State Park.

honoring Peetie Wheatstraw and other local blues musicians. With support from the Sonny Boy Blues Society and other private and government entities, the museum will draw significant attention to the rich culture of blues music in northeast Arkansas. On behalf of the Survey, Ms. Futch attended the dedication ceremony of the Interpretive Marker in June.

Station Operation

Interaction with the general public is a major aim of the Parkin research station. Station personnel meet 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 Parkin station personnel the chance to highlight the value of archeology, as well as to explain how uncontrolled digging destroys irreplaceable information about the past. 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.

While keeping up with the Parkin site research is a full-time job, Dr. Mitchem also continues to pursue other research interests. Dr. Mitchem has expertise in the analysis of Spanish trade beads, and conducts research on archeological bead assemblages from Florida and other New World areas. Writers, fellow archeologists, television producers, and artifact collectors contact him for advice or artifact identification on the Soto expedition and associated Spanish artifacts. Recently, he has begun 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 Soto expedition, and many of the Spanish artifacts are similar. He also 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, Ms. 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.



The dedication ceremony for the Arkansas Delta Music Trail Interpretive Marker for William Bunch aka "Peetie Wheatstraw." Left to right: Tom Fuquay (Little Rock attorney), Chuck Roscopf (Sonny Boy Blues Society), Elizabeth Wiedower (Arkansas Delta Rural Heritage Development Initiative), Dr. David H. Evans, Jr. (Recording Artist, University of Memphis), Jewel Bunch, and E. Faye Futch (Arkansas Archeological Survey).

Parkin Station Personnel

Jeffrey M. Mitchem (Ph.D., University of Florida, 1989) is Research Station Archeologist for Parkin Archeological State Park with the Survey 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.

Grants, Honors & Awards

• \$19,847.00 from Arkansas Natural and Cultural Resources Council for "Aiding Interpretation at Parkin Archeological State Park" to help support excavations for rebuilding part of the palisade.

Teaching & Higher Education

 Mitchem advised a University of Minnesota student on working with collections from the Cherry Valley Mounds in Cross County, Arkansas

Professional Service

- Mitchem served on the Survey's Personnel Committee.
- Mitchem is a member of the Editorial Review Board of the Florida Anthropological Society (*The Florida Anthropologist*), the Advisory Board for the Alliance for Weedon Island Archaeological Research and Education, St. Petersburg, Florida, and the Scholarly Advisory Committee of the Bead Museum in Glendale, Arizona.
- Mitchem was a consultant for exhibits under development at The Mound House, Ft. Myers, Florida and the Elliott Museum, Stuart, Florida.
- Mitchem served as peer reviewer for *The Florida Anthropologist* and *Southeastern Archaeology*.

Public Service & Outreach

- African American Cemetery Preservation Initiative. Mitchem advised the Reneau Cemetery (Woodruff
 County) preservation group, and the Forrest City and Scott Bond Cemetery Associations (St. Francis County).
 He served as humanities scholar on an Arkansas Humanities Council grant to the Reneau Cemetery group.
 Mitchem and Ms. Futch visited Morning Star Cemetery near Cotton Plant (Woodruff County) to discuss efforts
 to locate the grave of blues musician Peetie Wheatstraw.
- Programs & Presentations. Mitchem assisted an "Artifact ID Day" at the Survey's Blytheville research station.
- Public Schools. Mitchem worked with faculty and students from Valley View High School (Jonesboro) EAST
 Laboratory in production of a virtual tour of the Parkin Visitor Information Center and the Parkin archeological site.
- Media Events. 1) Mitchem participated in a visit to Parkin by "Mr. Pish," a dog that visits various places and "writes" about them in educational books and electronic media for children. 2) Mitchem developed a Facebook page for the Parkin Archeological site to disseminate information and research results using social media. 3) Mitchem wrote articles on the history of Parkin Archeological State Park and the Parkin site for a book being published by the Cross County Historical Society.

Service to the Arkansas Department of Parks and Tourism

- Planning & Development. 1) Mitchem and Futch worked closely with Park personnel in the development and installation of an exhibit on the Pacaha province; they contributed to script development, aided selection and borrowing of artifacts, and helped with design and layout of the exhibit case. 2) Mitchem and a park interpreter traveled to Cahokia to examine palisade reconstructions there and discuss them with Cahokia National Monument personnel, as part of preparation for the palisade reconstruction project at Parkin. 3) Mitchem consulted with Gustav's Library (a reprint company) on producing C. B. Moore posters and cards for sale at the Park's VIC gift shop.
- **Programs & Presentations**. Mitchem gave a talk at the park to students and professors from University of Memphis on an archeological/geological field trip (audience 23). Mitchem joined other professionals in two "Artifact ID Days" at the Park (attendance 37). Mitchem hosted 4-H children working in the Parkin station laboratory.

Volunteer Hours

• Volunteers contributed 41 hours to station projects in the field and laboratory.

University of Arkansas, Fayetteville

Dr. George Sabo III, Station Archeologist Jerry E. Hilliard, Research Associate Leslie C. Walker, Graduate Assistant

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 now 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.

News & Research

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 Sabo, Dr. Jami J. Lockhart (AAS), and Dr. Andrea Hunter (Osage Nation), the project has been designated an NEH "We the People" undertaking—a special initiative to encourage and strengthen the teaching, study, and understanding of American History and culture 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.

In addition to Sabo and Lockhart, several members of the Survey staff are involved in the project, including Dr. Ann Early (state archeologist), Michael Evans (CO), David Jeane (SAU station assistant), Aden Jenkins (CO), Jerry Hilliard (UAF station assistant) Timothy Mulvihill (UAFS station archeologist), Jared Pebworth (CO), Larry Porter (WRI station assistant), Deborah Sabo (CO), John

Samuelsen (CO), Dr. Leslie C. Stewart-Abernathy (WRI station archeologist), and Deborah Weddle (CO). University of Arkansas graduate students Duncan McKinnon, Leslie Walker, and Adam and Rebecca Wiewel are also involved.

Our project team undertook four sets of activities this year: continuation of collection documentation at museums holding Carden Bottoms collections; archeogeophysical surveying of archeological sites in the Carden Bottoms to detect buried cultural features; excavation of buried cultural features including houses and refuse pits; and laboratory processing and analysis of excavated materials and information collected at other institutions.

The Gilcrease Museum in Tulsa, Oklahoma has a large collection of ceramic vessels and other artifacts from our Carden Bottoms study area, collected between 1930 and 1950 by Arkansas judge Harry J. Lemley and acquired by the Gilcrease after his death in 1965. Several members of our project team, including Robert Cast and Bobby Gonzalez of the Caddo Nation, began inventorying this material in August, 2010. We made several additional trips to the Gilcrease during the fall of 2010 and spring of 2011. We documented and photographed 310 vessels and more than a thousand bone, ceramic, shell, and stone implements, tools, and ornaments, along with a variety of European trade goods. We are grateful to Gilcrease Mu-



Duncan McKinnon (Arkansas Archeological Survey graduate assistant) and Kenneth Palmer (volunteer from the Osage Nation) work to define the edge of a prehistoric house at 3YE25 in the Central Arkansas River Valley.

seum curator Eric Singleton for the wonderful assistance he provided during our visits. Early, Sabo, and Walker, assisted once again by Haas Hall Academy volunteer David Halperin, also continued to document and photograph Carden Bottoms vessels in the University of Arkansas Museum collection.

John Samuelsen created digital databases (that are now part of the Survey's AMASDA computer database system) for storing project artifact information, and Sabo and Walker are taking the primary responsibility for data entry. One of the most interesting things about the museum collections we are examining is that they represent the material cultural traditions not only of the Central Arkansas River Valley but also of the adjacent Central Mississippi Valley and Ouachita/Red River regions, as well as examples of "hybrid" productions involving locally manufactured versions of artifact styles from the adjacent regions. As such, these collections represent a significant body of information on art, ritual, and social interaction in the Carden Bottoms.

Archeogeophysical surveying this year concentrated on expanding coverage across large areas of 3YE25, one of the major Carden Bottoms sites. Two sets of activities were conducted under the direction of Dr. Jami J. Lockhart. The first activity involved a broad-scale, low resolution

gradiometer survey of the entire 3YE25 area, measuring approximately 7.5 hectares. The purpose of this survey was to create a map of buried cultural features that could be used to plot the location of points where National Resource Conservation Service (NRCS) foresters could avoid disturbances while planting tree seedlings across the site, which has been taken out of agricultural production to be maintained as a hardwood forest preserve. We georeferenced the gradiometry data to our site grid system, then used Geographic Information System applications to create a four-meter buffer around all magnetic anomalies that could represent buried cultural features. Next, we plotted 300 locations for tree planting in areas falling outside of our buffer zones. Tree planting by NRCS field staff involved driving a truck-mounted soil auger across the site, stopping at each flagged point to drill a hole, approximately 10 cm wide and 1 m deep. The drilling left a ring of back dirt around each hole. A few days later, small seedlings were planted in each hole. Dr. Skip Stewart-Abernathy, of the Survey's research station at the University of Arkansas Winthrop Rockefeller Institute on Petit Jean Mountain, conducted a walk-over survey of the site to examine the drilled holes and back dirt for evidence of buried cultural materials. His circuit across the site enabled him to examine directly or from a short distance

all 300 holes. He observed no cultural features in the tree hole profiles and no artifacts in the surrounding back dirt. From these observations we conclude that the drilled tree holes avoided most if not all high density artifact areas and inflicted no significant damage to any buried cultural materials at the site.

The second activity involved follow-up high resolution gradiometer, electrical resistance, electromagnetic conductivity, magnetic susceptibility, and ground penetrating radar surveys. Our goal here was to identify specific kinds of archeological features for subsequent excavations, particularly houses and refuse pits. With the assistance of Dr. Scott Hammerstedt of the Oklahoma Archeological Survey, our team was able to conduct archeogeophysical surveys across thirty-eight 20 x 20 m grid units located on the eastern, western, and central portions of the site. A single well-defined house pattern and associated refuse pit complex was identified in a 4 x 4 grid unit survey on the eastern side of the site. We identified at least 16 additional house patterns, with more refuse pit associations, in the western and central parts of the site where we surveyed a larger area comprising 32 contiguous grid units. A most interesting discovery made there is that the houses appear to be arranged in two separate neighborhoods, one consisting of ten houses—all oriented to cardinal directions—arranged in three linear rows while the other neighborhood consists of at least six houses spaced around a central open area. We excavated three of these houses, as summarized next.

Our third activity this year involved the excavation of selected house and refuse pit complexes identified by the archeogeophysical surveys conducted at 3YE25. Our project crew was assisted by several members of the Koko-çi and Arkansas River Valley chapters of the Arkansas Archeological Society, Dr. Scott Hammerstedt and Dr. Amanda Regnier of the Oklahoma Archeological Survey, and members of the Osage Nation of Oklahoma. Summaries of the experiences of our Osage partners are available at this website: www.osagetribe.com/historicpreservation/news story.aspx?news id=2278.

We excavated three house structures, one located on the eastern end of the site and two located on the western end. We also excavated several refuse pits associated with the houses. The house excavations provided a wealth of information on Carden Bottoms architecture and settlement patterning. All three of the houses are similar in size (approximately 8 m square), with a square floor plan. Walls consisted of posts roughly 20 cm in diameter, spaced 30–50 cm apart. Four stout roof support posts were evenly spaced in a square pattern around a central hearth. Interior posts suggest that benches extended out from the interior walls, which probably were covered with woven mats, sheets of bark, or other perishable materials, as we ob-

served no significant accumulations of clay daub. All three of the houses were extraordinarily well built, and they appear to have been constructed following a common plan. The resulting architecture is very much like that exhibited among houses built at and around the Spiro site in eastern Oklahoma. At the time these houses were abandoned, major structural elements were removed and the remains of at least two of the houses were set afire. The debris was buried under a layer of clay-rich dirt while the remains were still smoldering.

Artifacts and other items found on the house floors and in the excavated refuse pits will contribute much insight into the organization of the communities occupying the site. The ceramic and other artifacts we found match the materials documented in the museum collections, most of which were dug out of cemetery areas during the early 20th century. Archeologists have always wondered whether the unusually mixed artifact assemblages (representing multiple material culture traditions) actually came from the attributed Carden Bottoms locality; our excavation of residential areas of the site provide compelling evidence that this is indeed the case. We also collected well-preserved samples of animal bone and carbonized food plant remains, which will enable us to reconstruct community subsistence patterns.

Our fourth project activity this year involved the cleaning, cataloging, inventorying, and analysis of materials retrieved from the excavations. In addition to the materials we excavated this year, we are also studying artifacts excavated from 3YE347 (a portion of the Carden Bottoms site across the road and directly adjacent to 3YE25) during the 2009 Arkansas Archeological Society training program directed by Dr. Skip Stewart-Abernathy. Nearly all of the excavated materials have been cleaned, cataloged, and sorted into preliminary analytic categories, and the inventory data are being entered into the project databases, where they will be available to all project participants for our ongoing analyses.

Additional excavations are planned to help us better understand the relationships among the separate neighborhoods of houses at the Carden Bottoms site. That information, along with our analysis of other materials collected at the site, will help us answer questions concerning the multiethnic organization of the Carden Bottoms community and the cultural processes that brought Caddo, Osage, Quapaw, and Tunica ethnicities into the historic era.

A final project activity involved a consultation meeting held May 25–27, 2011, at the University of Arkansas Winthrop Rockefeller Institute on Petit Jean Mountain. The meeting was attended by all Survey members involved in the project, along with several representatives of the Caddo and Osage nations (bad travel conditions prevented our Quapaw partners from attending). The gathering

provided a valuable opportunity for the exchange of ideas and alternative perspectives on the role of archeology in studying American Indian history. Highlights of the meeting included visits to Petit Jean Mountain rock art sites and the ongoing excavations in the Carden Bottoms.

Arkansas History Book

The University of Arkansas Press will publish a second edition of the award-winning book *Arkansas: A Narrative History,* by Jeannie M. Whayne, Thomas A. DeBlack, George Sabo III, and Morris S. Arnold. The new edition is scheduled for release in Spring 2012. During the current year, Sabo rewrote several book chapters and contributed to a new chapter that will appear in the upcoming edition.

Arkansas Rock Art

Sabo worked with project editor Deborah Sabo to finalize the book manuscript for submission to the University of Alabama Press. The manuscript offers a new perspective on Arkansas rock art in the context of the cultural experiences of American Indian communities living in northern Arkansas during late prehistoric times. The Arkansas Rock Art project was funded by grants from the Arkansas Humanities Council and the National Endowment for the Humanities.

Spiro Shell Art

The Mississippian Iconography Workgroup met again this year, during May 2011, 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 workshop 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.

Sabo has participated in this group for several years, working with Professors James A. Brown (Northwestern University), Alex Barker (University of Missouri), and Robert L. Hall (University of Illinois-Chicago) on the iconography of shell engravings from the Spiro Ceremonial Center in eastern Oklahoma. The group is completing a long-term study of mythic scenes engraved on large marine shell cups and circular pendants, investigating the relationship of these scenes to events associated with

the construction of an early 15th-century cosmogram in the Great Mortuary chamber within the Craig Mound at Spiro. The study provides fascinating insights into religious views and ceremonial practices of Southeastern Indians in the centuries immediately preceding their first encounters with European explorers and colonists. The group is presently working on a coauthored book that presents the results of their study.

AMASDA Online

In 2006 the Survey was awarded \$425,000 by the Arkansas Highway and Transportation Department to create an online access system for our AMASDA archeological site and project databases.

Sabo serves as one of the project's principal investigators, and this year devoted a portion of his time to updating the Study Units database containing summary information for time periods, cultural phases, historic activity periods, and other recognized archeological manifestations across the state. The Study Units database enables users to select a region and time period of interest to generate a list of recognized cultural manifestations. This list provides access to study unit definitions, identification of key sites and diagnostic artifacts, radiocarbon dates, relevant bibliographic citations, and photographic images of key sites and artifacts.

Additional information on this project is provided in the Registrar's Office section of the Survey's Annual Report.

Collection Documentation Projects

Hilliard continued the process of inventorying UAF collections from years past. In addition, Sabo arranged for the Survey to accept the Charles Bartlett Collection, important in that it includes Charles Bartlett's excavated artifacts from the Tom's Brook Site, 3JO1. Another important collection examined this year is that of Mr. Gene Waters. Hilliard, Dr. Elizabeth Horton, Jared Pebworth, and Aden Jenkins visited Mr. Waters, who graciously allowed Dr. Horton to analyze perishable materials collected from Ozark bluff shelters. Sabo and Hilliard also retrieved archives from a University storage shed that were donated to the Survey by the no-longer existing Northwest Arkansas Archeological Society. These materials are now located in the Survey building where they await inventory.

UAF Station Personnel

George Sabo III (Ph.D., Michigan State University, 1981) is Research Station Archeologist for UAF with the Survey 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 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-ci 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 graduate student assistant. 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 Vallley." Her Ph.D. research is focused on the interrelationship between social and cultural change and its representation in art objects during the protohistoric period.

Grants, Honors & Awards

- \$240,000 from National Endowment for the Humanities for "American Indian Art, Ritual, and Social Interaction in the Central Arkansas River Valley," designated a "We the People" project by NEH. Project co-principal investigator, Dr. George Sabo III. Project team members, Jerry E. Hilliard, Leslie Walker.
- \$1500 from Arkansas Humanities Council (matched by the Survey) to support a public performance of traditional dances by the Caddo Culture Club during the 53rd Annual Caddo Conference at The University of Arkansas Fort Smith in March.

Teaching & Higher Education

- Anthropology Department. Sabo taught ANTH 3263/5263, Indians of Arkansas and the South at UAF (Spring 2011, 22 students in 3263, 5 students in 5263). He was a member of 9 Anthropology Ph.D. committees, chairing 3 of them.
- Environmental Dynamics. Sabo represents the Anthropology Department and serves as Assistant Director of the Environmental Dynamics interdisciplinary Ph.D. program in the Fulbright College of Arts and Sciences. He chaired one Ph.D. committee in the ENDY program.
- Student Research Support. Hilliard provides research and training opportunities for Anthropology graduate students, including site survey, excavation, and lab analysis instruction and support that is often a key element of successful thesis and dissertation projects. The UAF station began a detailed mapping project of Breckenridge Shelter (3CR2) in support of Trevor Seekamp, a UA graduate student working under the supervision of Dr. Marvin Kay. Breckenridge is owned by the U.S. Army Corps of Engineers and the work is being conducted under an ARPA permit obtained by Survey Director Dr. Thomas Green.

Professional Service

Caddo Conference. Sabo assisted Mary Beth Trubitt and Tim Mulvihill in organizing the 53rd Annual Caddo
Conference, held March 25–26, 2011 at the University of Arkansas - Forth Smith. Sabo applied for and received
a \$1500 grant from Arkansas Humanities Council to support the Caddo Culture Club's public performance of
traditional dances during the conference. Grant funds were matched by the Survey.

Caddo Heritage Museum. Sabo continued his service on the Caddo Heritage Museum Board of Trustees,
assisting the Caddo Nation with development of policies, programs, and exhibits for their museum, located on
the tribal complex near Binger, Oklahoma. A highlight of the year was the opening on September 16, 2010 of
an exhibit on Caddo cultural history at the Oklahoma History Center in Oklahoma City. The exhibit will be on
display for three years.

Public Service & Outreach

- African American Cemetery Preservation Initiative. Hilliard serves as secretary of the Northwest Arkansas
 African American Heritage Association. He continued assisting the group in their efforts to preserve Baldwin
 Cemetery. Sabo prepared a final report on an Arkansas Humanities Council grant received by the Association.
- Arkansas State Parks. 1) Beginning in December 2010, Hilliard has been directing the *Cultural Resource Studies at Prairie Grove Battlefield State Park project* funded by American Battlefield Protection Program Grant (GA-2255-10-01) and Arkansas State Parks and Tourism. He is working with other Survey personnel (Dr. Jami Lockhart and archeologists Mike Evans, Tim Mulvihill, Jared Pebworth, Aden Jenkins, and Devin Pettigrew) in the survey of various target areas instrumental in the battle but largely forgotten, their specific locations lost after almost 150 years. The team has discovered two house places that were burned during the battle or the day after. The Ada Post Office, the Fayetteville Road, the Hugh Rogers House, and the Borden House barn also have been located. State-of-the-art mapping, geophysical survey, and traditional archeological methods have being implemented in this ongoing project which will carry through to the end of the 2011 calendar year.
 - 2) Sabo assisted *Lake Fort Smith State Park* ranger Christina Welch in developing an exhibit on excavations at the nearby Woodland Period Copperhead site for the March 2011 Archeology Month program.
 - 3) At the request of Steve Chyrchel and Arkansas State Parks, Jerry Hilliard, Mike Evans, Jared Pebworth, and Aden Jenkins aided *Hobbs State Park* personnel in interpreting the garden wall and gate at the home of Peter Van Winkle. Mapping and archeological testing revealed evidence of the first (ca. 1870) gate leading to the garden terrace
- Presentations & Programs. Hilliard gave public presentations at the White County Historical Society, Shiloh Museum in Springdale (with Jared Pebworth), and Prairie Grove State Park (combined audiences, 99). Sabo gave presentations at Shiloh Museum in Springdale, The University of Arkansas at Monticello (in connection with the Lewis and Clark exhibit from Chicago's Newberry Library), Buffalo River Partners in Harrison, Lake Fort Smith State Park, an Arkansas Master Naturalists workshop at Bull Shoals State Park, and the Oklahoma History Center (combined audiences, 195).
- Other Public Outreach. 1) Hilliard consulted with the City of Bentonville and the Benton County Historical Association regarding the Bentonville Sabbath School (3BE926), a building that served as the first school in Benton County. He and other Survey archeologists (Jared Pebworth, Michael Evans, and Aden Jenkins) conducted limited excavations around the building, documenting a well and providing information on construction of an additional building adjacent to the standing structure. This work aided the City and the Historical Association in efforts to preserve remaining elements of the historic site.
- 2) At the request of private landowners, Hilliard recorded sites (3WA1571–1475) in the vicinity of Cane Hill that were part of an extant post-bellum black community, and a pioneer farmstead complex (3WA1476) in the rural West Fork area.
- 3) Sabo continued to maintain the *Indians of Arkansas* website, updating general content based on ongoing research of Arkansas Archeological Survey staff. A new section on Current Research was added this year, with pages on Mary Beth Trubitt's Ancient Foodways project; Juliet Morrow's excavations at the Bruce Catt site; Larry Porter's excavations at 3LO226; a study of modern Caddo dance conducted by Sabo, Trubitt, and Tim Mulvihill of the Survey along with Phil Cross and Stacey Halfmoon of the Caddo Culture Club; and the ongoing activities of the NEH-funded Carden Bottoms project.

Service to the Arkansas Archeological Society

Ko-ko-çi Chapter. The Chapter met monthly during the academic year. Individual members assisted in the
documentation of collections. Notably, Jim Rees continued to work on the 1932 Edens Bluff site (3BE6) collection.

- Training & Certification Program. Hilliard reviewed two Certification Program participant reports.
- **Programs & Presentations.** Hilliard and Sabo each presented programs at meetings of the Ark-Homa (Fort Smith) and Ko-ko-çi Chapters (combined audiences, 80).

Volunteer Hours

- Volunteers contributed approximately 964 hours to station research projects in the field and lab.
- Volunteers from the Osage Nation who contributed to the NEH-funded fieldwork at 3YE25 wrote about their experience at www.osagetribe.com/historicpreservation/news_story.aspx?news_id=2278.



"Aerial" photography captures the pattern of features that reveal the outline of a prehistoric house floor at the Carden Bottoms site (3YE25) during NEH-funded excavations as part of the Central Arkansas River Valley Project.

University of Arkansas at Monticello

Dr. Marvin D. Jeter, Station Archeologist Jessica Howe, Station Assistant

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.

News & Research

The Taylor Site (3DR2)

Jeter directed the 1991–92 Survey-Society Training Programs at this site, which once featured four mounds. Two were tested during the excavations, which also revealed intensive pre-mound occupations. Immense amounts of material were recovered, and the usual limitations of funding and other obligations have meant that analysis and writing-up of results proceeded at a frustratingly gradual and intermittent, often interrupted, pace. Nevertheless, progress is being made.

In August 2009, Jeter submitted a proposal to the Arkansas Archeological Society's Archeological Research Fund (ARF), requesting support for analyses of charred corncobs and other plant materials from Mound 3 at the Taylor site and C-14 dates on them. The Society could only afford to partially fund this project, and granted \$1250 in September 2009.

Jeter arranged for analysis of a sample of the cobs by BrieAnna Langlie, a Ph.D. candidate at Washington University in St. Louis, working under Dr. Gayle Fritz. Ms. Langlie completed her draft report in August 2010, suggesting that the cobs were basically of the "Midwest 12-row" variety.

In early October 2010, Jeter submitted one of the cobs to Beta Analytic of Miami, Florida, for AMS radiocarbon dating. He had expected a date of "about AD 1200" and the gratifying result, received on October 30, had a central intercept of cal. AD 1210, with a 1-sigma range of cal. 1160–1230.

All results based on the ARF funding (and other analysis so far completed) will be reported in a forthcoming conference paper and planned journal article(s).

During 2010 Jeter also succeeded in getting the numerous freshwater mussel shells from (mostly pre-mound) deposits at the Taylor site analyzed, as part of a larger project (see below).

During January and early February of 2011, Jeter arranged for Tim Mulvihill of the Survey's UAFS Station, and UAM assistant Jessica Howe, with help from Bob Scott, ASU station assistant, to map the two previously unmapped Taylor mounds (Mounds 1 and 2) with the Total Station. Mulvihill later sent preliminary versions of his topographic contour maps of the two mounds, and their locations vis-a-vis each other and other landmarks on the site. Jeter tied these maps in with his 1990s opticaltransit and hand-drawn map of the rest of the site. Using Mulvihill's maps of Mounds 1 and 2, Jeter corresponded with Cameron Lacquement of the University of Alabama, author of a recent American Antiquity article on accurate estimations of mound volumes. Lacquement was able to calculate preliminary estimates of the Taylor mound volumes.

Mussel Shell Research

Jeter had long been aware that the UAM station curation facilities contained a huge collection of wonderfully preserved mussel shells from a large pit at the Tillar Farms site (3DR30)—recovered during salvage excavations by



Dr. Jeter (third from left) with a group of his UAM students on a field trip to Toltec Mounds Archeological State Park.

previous station personnel in 1973 but never analyzed. About a decade ago, he got Dr. Evan Peacock, a leading expert on archeological shells, interested in this collection, and about five years ago, sent them to Peacock's lab at Mississippi State University. During the past year, Peacock finally had enough time, and a capable graduate assistant, Ms. Amy Moe-Hoffman, and in mid-2011 they completed analysis of the shells, identifying well over 7000 specimens representing 42 species.

Meanwhile, Jeter's former research assistant Bob Scott (now Survey assistant at the ASU research station) had gained expertise in shell analysis, and Jeter arranged for him to analyze the shells from the Taylor site, which is not far from Tillar Farms. Scott also completed his analysis in mid-2011, identifying well over 4000 specimens representing 29 species (virtually all of which were also present at Tillar Farms).

The four coauthored a paper that was presented at the 2010 Southeastern Archaeological Conference in Lexington, Kentucky, comparing the Baytown period (ca. AD 600s) Taylor assemblage and the Protohistoric (ca. 1500s) collection from Tillar Farms to modern-day shell surveys along Bayou Bartholemew in Arkansas and Louisiana.

Research on Tillar Complex

Jeter conferred on several occasions with his former assistant Bob Scott, who is planning a Ph.D. dissertation (at Southern Illinois University) on selected aspects of this late prehistoric to protohistoric group of sites in and near northeastern Drew County, best known from old collec-

tions of mortuary ceramics but very poorly known with regard to habitation sites. They decided to focus on the Open Lake site (3DR166).

In late March, Jessica Howe, assisted by Dr. John House of the UAPB Station and two SE Arkansas Tunican Chapter Society members, Don Bragg and Ricky Cater, conducted systematic shovel testing at the Open Lake site. Howe was able to verify its horizontal extent (more or less as suggested by Jeter's 1980s controlled surface collections), and the previously unknown fact that it has some remaining undisturbed midden deposits, and possible features below the plow zone. Further work is planned at this site, along with surveys to record and test undocumented habitation sites of this complex.

The Hood Site (3DR263)

This important small Protohistoric/Mississippian site was excavated in 2003 as part of the "Interstate Connector" contract project; the contract firm has not yet completed its final report. They had returned the artifact collections and some accompanying documents to the landowners, who live a few miles northwest of Monticello. In August, after consultations with Jeter, they agreed to donate the collections and notes to the Survey's UAM Station. Jessica Howe went through the collections, and set aside the most interesting decorated potsherds and arrow points, which Jeter took to the SEAC meeting to show to his Lower Mississippi Survey colleagues, Drs. Ian Brown of the University of Alabama, and T. R. Kidder of Washington University in St. Louis, both of whom provided useful comparative

comments. In particular, Kidder has worked with similar materials in northeast Louisiana. This collection is a very significant addition to our database.

Lake Enterprise Mound (3AS379)

This site is "the oldest known mound in Arkansas," dating (in its earlier stages) around 1200 BC and apparently is related to the decline of the famous Poverty Point culture, centered in nearby northeast Louisiana. During August and September of 2010, Jeter arranged for Lee Arco, a Ph.D. candidate at Washington University in St. Louis and Poverty Point geoarcheologist, to conduct microstratigraphic analyses of two soil columns Jeter had taken from the Lake Enterprise mound's slopes. A report is expected in 2011.

The Sheppard Site (3AS437)

In late October, the Ashley County Sheriff's Department contacted the UAM research station about a possible crime scene near an old oxbow lake on the Bartholomew meander belt, where land-leveling had disturbed human skeletal remains. Jeter and Howe visited the site immediately and determined that it was probably a prehistoric burial situation, and the skeletal remains (especially teeth) looked like Woodland period specimens.

Jessica Howe and Arkansas Archeological Society member Don Bragg then excavated the remnants of several pit features near the burial. They recovered good samples of prehistoric ceramics, plus some lithics, animal bone, and mussel shells. Jeter determined that the pottery closely resembles material from the Sumner Lane site (3AS213) a few miles to the south, which he had investigated in 1979, and the Middle Woodland "Paxton complex" of the Lower Yazoo Basin in Mississippi; it may date around AD 200.

The skeletal material was sent to the Survey Registrar in Fayetteville so that appropriate measures may be taken, and the animal bone and shell to Bob Scott at the ASU Station in Jonesboro. Analyses of these materials, plus comparison with Sumner Lane and other related sites, will add significantly to our knowledge of the Marksville period in southeast Arkansas.

Publication Updates

Jeter was invited to present a paper at a 2008 conference on Indian "Adoption, Captivity and Slavery" at the British Museum in London. He subsequently contributed a chapter to an edited volume based on the conference. The book was recently accepted for publication by Palgrave Macmillan and is slated to appear in 2012.

Jeter also completed a long chapter on the relations of the protohistoric (ca. 1600) Oliver site in northwest Mississippi to Goldsmith Oliver 2 (3PU306) and other sites in and near Arkansas, for inclusion in a forthcoming two-volume report on Oliver edited by John Connaway of the Mississippi Department of Archives and History. Publication is likely in 2012.

Bayou Bartholomew/Taylor House

Jeter met with Dr. Curtis Merrell of the Bayou Bartholomew Alliance, other interested regional leaders and historical society officials, and Chuck Dovish of AETN to plan an hour-long program on the Bayou, its resources, and its peoples over the past 5000 years for broadcast on public television and distribution via DVD. Jeter provided basic archeological and some geological information to the group. Howe was instrumental in arranging a visit by an architect to the historic Taylor House (see next page, and photo below).



UAM station archeologists met with Tunican Chapter and Drew County Historical Society members and Little Rock architect Tommy Jameson at the 1840s Taylor House on Bayou Bartholomew in February 2011 to discuss preservation possibilities. Pictured (left to right): LaWanda Gray (TC, DCHS), Dr. Merrell (TC, DCHS, and Bayou Bartholomew Alliance), Tommy Jameson, Marvin Jeter, Tommy Gray (TC, DCHS), and Connie Mullis (DCHS). Photo by Jessica Howe.

UAM Station Personnel

Marvin D. Jeter (Ph.D., Arizona State University, 1977) is Research Station Archeologist for UAM with the Survey 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.

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.

Teaching & Higher Education

- Jeter taught ANTH 2213, North American Indians (11 students) and ANTH 2233, Arkansas Regional Archeology (14 students, 1 auditor) for the School of Social and Behavioral Sciences at UAM during Spring 2011.
- Howe presented guest lectures in both of Jeter's Spring 2011 semester classes.
- Jeter led field trips to regional sites for Dr. Brett Hill and his archeology students from Hendrix College.
- Jeter serves on the UAM Museum Committee.
- Jeter read and commented on drafts of Howe's Master's thesis for SIU Carbondale, and assisted Bob Scott (SIU Carbondale) with developing his Ph.D. dissertation proposal on the Tillar Complex of southeast Arkansas

Public Service & Outreach

- Archeological Site Conservation. Jeter continued working with Dr. Curtis Merrell of the Bayou Bartholomew
 Alliance regarding acquisition of the two-story Taylor Log House (c. 1844) for conservation/preservation
 purposes. Jeter and Dr. Merrell provided on-site guidance to a professional surveyor, who surveyed and provided
 legal descriptions for the house and adjacent grounds, including the small 19th century Taylor family cemetery
 and locations of numerous former outbuildings. Also surveyed were the nearby African-American Cypress Grove
 Cemetery, which includes some damaged Mosaic Templars of America tombstones and possibly the unmarked
 graves of plantation slaves.
- African American Cemetery Preservation Initiative. Howe served as humanities scholar for grant applications for Shady Grove Cemetery and Campground Cemetery.
- **Public Schools.** Howe gave a presentation on archeology at the Monticello Intermediate School, assisted with a field trip to Toltec Mounds Archeological State Park for 3rd graders at the Cathedral School in Little Rock, and gave a presentation on American Indians to a Cub Scout pack.

Service to the Arkansas Archeological Society

- Tunican Chapter. Jeter and Howe work with the Southeast Arkansas Tunican Chapter of the Society. Jeter advises members on projects and activities and serves as Corresponding Secretary and Program Chair. Howe serves as Treasurer and assists with event planning. Howe organized a volunteer lab day. Jeter publicizes Chapter programs, helps organize various outings and events, and provides information for the electronic newsletter, which is edited by Chapter member Hope Bragg.
- **Presentations & Programs.** Jeter presented a program at a Tunican Chapter meeting (audience 25). Howe organized an "outreach" program in cooperation with the Drew County Historical Society, providing an exhibit of artifacts, and co-presenting the program with Mrs. Connie Mullis of DCHS (audience 40).
- Training & Certification Program. Howe worked as a field supervisor during the annual Training Program at Historic Washington State Park. Jeter taught the Arkansas Archeology seminar during the Training Program.

Volunteer Hours

• Volunteers contributed 95 hours to station projects in the lab and field.

University of Arkansas at Pine Bluff

Dr. John House, Station Archeologist
Mary V. Farmer, Station Assistant (HALF-TIME)

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 B.C., 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.

News & Research

Menard Locality

The southern tip of the Little Prairie in Arkansas County has long been believed to correspond to the late seventeenth-century Quapaw village of Osotouy and the location of the first Arkansas Post, established by Henri de Tonti in 1686. Since 1997 the Menard locality has been a principal focus of research for the UAPB station. In 1997 and 1998, the Arkansas Archeological Survey and Arkansas Archeological Society excavated at the Menard-Hodges site and associated archeological sites in the locality in conjunction with the annual Society/Survey training program. In 1997 the U.S. Congress authorized and funded the creation of an Osotouy unit of Arkansas Post National Memorial, encompassing the Archaeological Conservancy's Menard-Hodges archeological preserve and the outlying Lake Dumond site.

The 1997–98 work at Menard-Hodges and Lake Dumond included collection of hundreds of bulk samples of sediment that were processed by water flotation. In many cases, entire cultural feature contents were floated. Until renovation work began, House continued size-grading and sorting flotation heavy fractions from the 1997 excavations in the Plaza at Menard-Hodges and standard procedures for size-grading heavy fractions were developed by House in consultation with Gayle Fritz of Washington University in St. Louis. In tandem with size-grading and sorting of flotation heavy fraction from the Menard-Hodges Plaza, House continued coding Plaza specimens for database entry.

Wallace Bottom

In 1998, a Society/Survey team discovered the Wallace Bottom site in the floodplain adjacent to the Menard-Hodges site on a tract recently acquired by White River National Wildlife Refuge. The collection made at that time includes specimens of both Native American and French Colonial material culture. The assemblages appeared to date to the early Colonial period, corresponding to the interval between the Marquette-Joliet voyage of 1673 and the destruction of the French Arkansas Post in 1749.

Following the 1998 discovery, the UAPB station carried out field studies at Wallace Bottom in 2001, 2002, 2003, 2004, and 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 so far 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 2010–2011 fiscal year, House worked on preparing an article, "Native American Material Culture at the Wallace Bottom Site, Southeast Arkansas," to be submitted for publication in a regional journal. Analyses conducted in conjunction with preparing the article include measuring and photographing cuprous metal (copper, brass, or bronze) artifacts and systematic study of nearly 100 whole or fragmentary

arrow points. Jared Pebworth at the Survey coordinating office in Fayetteville assisted in the latter effort by identifying the sources of stone used in manufacturing the arrow points.

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 2010–2011. 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 on Fourche Island in the Arkansas River floodplain south of Little Rock. Portions of that 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, including surface reconnaissance, archaeogeophysical remote sensing, and sustained excavations, was directed by House and carried out with the assistance of numerous Arkansas Archeological Society members and other volunteers. Fall 2008 excavations 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. This work involved 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 to use 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.

In 2010–2011, the emphasis shifted from the field to the laboratory. House and Farmer, at times assisted by volunteers, continued washing and labeling of specimens from the fieldwork that ended in May and preparing both specimens and records for long-term curation. Other tasks included preparing selected specimens for externally funded special analyses (see below) and water-screening bags of soil from features. In October, House prepared photographic documentation of the 28 pottery vessels excavated at both the Welspun Tract (17 vessels) and Isgrig South

(11 vessels). House participated with UAF Anthropology Department colleagues in correspondence with Philip Mc-Mahon and Anna Evart at Edinburgh University, Scotland on prospects for their conducting further analyses of Isgrig human remains for their Master's research. (This project was postponed because of difficulties in securing funding from Edinburgh University.)

Remains from as many as 20 human individuals, from both the Welspun Tract and Isgrig South, were transferred to the Osteology Laboratory, Department of Anthropology, University of Arkansas, Fayetteville where they were analyzed by Andrew M. LoPinto and Kathryn M. Koziol under the direction of Professor Jerome C. Rose. Domains of analysis included age and sex demographics and dental and skeletal pathology. It was determined that the skeletal individuals ranged in age from young children, through adolescents, to adults, some of whom appear to have reached advanced age. While poor preservation prevented sex determination in many cases, three individuals were determined to be female, and four male. Observed dental pathologies included caries, an abscess, mild to moderate wearing-away of enamel from abrasive material in food, and irregularities in enamel formation suggestive of episodes of severe illness or malnutrition during childhood or adolescence. Instances of skeletal pathology observed in various individuals include indicators of dietary deficiency and, in one case, acute and chronic bone infection.

Dr. Elizabeth Horton, paleoethnobotonist at the Arkansas Archeological Survey coordinating office in Fayetteville (now station archeologist at Toltec Mounds) analyzed twelve samples of charred plant material from nine cultural features plus samples from an area believed to be a living surface on the Welspun Tract. Dominant species in most samples were acorn and hickory shell and maize. Additional plant food resources present in many specimens included black walnut, grape, and persimmon.

Five samples of charred organic material from the Welspun Tract were submitted to Beta Analytic for Accelerator Mass Spectroscopy (AMS) radiocarbon dating from the Isgrig site (3PU15). Three of the dated samples consisted of charred residues on three pottery vessels from graves in a discrete cemetery. The calibrated calendar date ranges for the samples from graves fall between the mid-1400s and early 1600s. Pottery vessels and other artifacts accompanying the burials support assigning these graves to the mid-1400s. The two remaining samples are from a former land surface that was subsequently buried in prehistoric times. Results from dating these samples support assigning occupation of the buried surface to the end of the 1400s or later.

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



Rachel Stout-Evans (Natural Resources Conservation Service, Greenville, Mississippi) examines sediments in a stratigraphic cut in a suspected Indian mound near Helena, Arkansas.

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

Mound Testing at Helena

In 2010, Helena residents notified the Survey of a mound-like feature in a wooded area on Crowleys Ridge within the city limits of Helena. It was noted that the size and shape of the feature is similar to the 2000-year-old Hopewell culture burial mounds at nearby Helena Crossing, excavated in 1960 by James Ford of the American Museum of Natural History, New York.

House returned to the site on a snowy day in January, accompanied by UAM station assistant Jessica Howe, Missississippi Department of Archives and History archeologist (and Helena native) John Connoway, Rachel Stout-Evans and Willie Terry from Natural Resources Conservation Service, Greenville, Mississippi, and landowner Leonard Notto. The team cleared a profile on the face of a road cut and used a soil probe and soil auger to examine the soils composing the feature. These proved to be natural

wind-laid silts dating to the Ice Age rather than a prehistoric cultural fill deposit. These negative results allow us to eliminate the Notto Mound as we attempt to identify and preserve possible yet unrecorded Hopewellian mounds in the Helena vicinity.

Later in the day House, Howe, Connoway, Stout-Evans, and Terry visited a wooded area on the ridge near Helena Crossing to confirm the former location of Ford's Mound C and to determine whether any portions of the mound remain after Ford's thoroughgoing 1960 excavation. Bucket auger tests and examination of a shallow profile on the side of an old trench-like feature (perhaps a vestige of Ford's 1960 excavation) yielded negative evidence in all locations but one. At that location, the auger tests revealed a shallow layer of possible mound fill just above the natural subsoil.

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, which is located on Main Street in Jacksonville.

In conjunction with the 2010 Society/Survey training program, Mr. Wilson permitted the Site Survey Seminar, under the direction of UAM station assistant Jessica Howe, to carry out controlled surface collection and shovel testing on one of these sites. Following up on the seminar, House visited Mr. Wilson at his home in July to photograph select artifacts and discuss prospects for updating the exhibit and augmenting its interpretation of prehistoric lifeways in the environs of Jacksonville. Continuing discussion and consultation with the Central Arkansas Library and a professional museum exhibit preparator resulted in agreement that House would take charge of the process of updating the exhibit.

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

DeVall's Bluff Civil War Archeology

In April, House, joined by station assistant Mary Farmer and volunteer Diana Moxley, traveled to DeValls Bluff in Prairie County to update the Survey's files for two Civil War area archeological sites. After the fall of Little Rock to the Union in 1863, the fledgling river port on the White River became a major staging area and supply way station for Union troops operating to the west. An 1864 US Army Engineers map of the DeVall's Bluff environs depicts fortifications and other military facilities created at the time. After confirming the present ownership of the property, House and Moxley visited the Cavalry Depot site 3PR37, located on a high river bluff south of DeVall's Bluff. Civil War era artifacts collected from a cultivated food plot included fragments of dark green glass bottles, hand-forged iron nails, and a lead minié ball.

Detailed comparison of the present-day topography with that depicted on the 1864 engineers map indicated that, while a substantial portion of the Cavalry Depot site has been destroyed by river meandering and bank collapse, much of the site still remains. House, Farmer, and Moxley returned to DeVall's Bluff a second time in April to visit Fort Lincoln (Fort A) on the outskirts of town. They updated the original Fort Lincoln site form, prepared by Skip Stewart-Abernathy in 1987, with a sketch map and further observations of the landscape surrounding the Civil War era structure.

Other

In March, House joined UAM station assistant Jessica Howe in conducting systematic shovel testing at the Open Lake site (3DR166) on Bayou Bartholomew in Drew County. This work was carried out in collaboration with Robert Scott's doctoral research at Southern Illinois University, Carbondale.



John House meets with the UAPB station's Board of Advisors at the station (in cramped quarters during renovations on campus) for the station's annual review.

UAPB Station Personnel

John H. House (Ph.D., Southern Illinois University at Carbondale, 1991) is Research Station Archeologist for UAPB with the Survey 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 UAPB. 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.

Teaching & Higher Education

- House taught SOCI 2330, Introduction to Anthropology, in the Department of Social and Behavioral Sciences at UAPB during Fall 2010 (44 students) and Spring 2011 (42 students).
- House gave a presentation "New Archeological Discoveries at the Crossroads of Arkansas" at the annual UAPB Student-Faculty Research Forum.
- House is a member of Robert Scott's doctoral committee at the Department of Anthropology, Southern Illinois University, Carbondale.

Professional Service

• House provided peer review for the journal Southeastern Archaelogy.

Public Service & Outreach

- African American Cemetery Preservation Initiative. House continued his contributions to the Arkansas Humanities Council's historical cemetery documentation and preservation grants program by visiting and preparing site forms for cemeteries and serving as Humanities Scholar on funded projects. He was a special guest this year at Belmont Missionary Baptist Church's annual Memorial Day observance and service (Belmont Cemetery, 3JE483). Others visited and/or studied: McEwen Cemetery 3AR226 and Mount Adams Cemetery in Arkansas County; Watts Cemetery 3JE250, Belmont Cemetery 3JE483, Hudson Cemetery 3JE490, and Coleman Chapel Cemetery 3JE491 in Jefferson County; Garrett Grove Cemetery 3LE451 and Walnut Grove Cemetery 3LE452 in Lee County; Magnolia Cemetery 3PH480 in Phillips County; and Bullock-Hatchett Cemetery 3PU815, Hickman-New Dora Cemetery 3PU542, Thomas Cemetery 3PU717, and Grimmett Cemetery 3PU822 in Pulaski County.
- Assistance to Museums. House is a member of the Pine Bluff-Jefferson County Historical Museum's acquisitions committee; he worked with the committee this year on documentation of pottery vessels and other objects from a local private collection currently on display at the museum. He presented a program at the museum during Archeology Month.
- Programs & Presentations. House gave talks at the University of Monroe Museum of Natural History in Monroe, Louisiana (25), the Bluff City Chapter of Federally Employed Women at Jefferson Laboratories in Jefferson City (30), the Pine Bluff-Jefferson County Historical Museum (30), and led a walking tour at Arkansas Post National Memorial (15). (Combined audiences 101).
- National Park Service. House directed a cultural resources survey and wrote a report for a microwave tower to be installed in the maintenance and residence area at Arkansas National Post Memorial. In April he led a walking tour highlighting archeology that has taken place at the Post since the 1950s.
- **Consultations.** House consulted with the Quapaw Tribe of Oklahoma, The Natural Resources Conservation Service, and Arkansas Highway and Transportation Department on various projects involving archeology.
- Workshops. In February 2011, House participated in a Natural Resources Conservation Service-sponsored remote sensing applications workshop hosted by the University of Arkansas at Pine Bluff School of Agriculture. The workshop was led by Wes Tuttle of NRCS National Soil Survey Center, Wilkesboro, North Carolina.

Service to the Arkansas Archeological Society

- **Programs & Presentations**. House gave a talk at a monthly meeting of the Ko-ko-çi Chapter in Fayetteville (audience 20).
- Training & Certification Program. House taught the Basic Excavation seminar during the 2011 Training Program at Historic Washington State Park. He presented an evening lecture to participants and visitors at the Training Program (audience 40). House advised Society member Chester Shaw on a research project as part of the Certification Program. Farmer assisted the Lab Supervisor at the Training Program.

Volunteer Hours

• Volunteers contributed 48 hours to station research projects in the field and laboratory.

University of Arkansas at Fort Smith

Mr. Timothy S. Mulvihill, Station Archeologist

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.

News & Research

Drennen-Scott Historic Site Project

Archeological research at the Drennen-Scott Historic Site (3CW1050) continued this year, mainly as part of hands-on student learning at the University of Arkansas - Fort Smith. Students in the Introduction to Archeology classes during the fall and spring semesters participated in fieldwork at the site under the supervision of Tim Mulvihill as part of their course work. The fieldwork concentrated on the backyard of the property near a previously discovered outbuilding foundation. The corner of another

previously unidentified building foundation was discovered during the current round of work. Each successive session of fieldwork at the site provides important clues to the activities that took place on the property during the time it was occupied by the Drennen and Scott families.

The Drennen-Scott Historic Site dedication was held May 10, 2011 and the property is now open for public visitation. Two excavation units were left open for viewing at the dedication ceremony and Mulvihill was available to answer questions from those attending.



UAFS students excavating at Drennen-Scott.

Mapping and Scanning Projects

Two new mapping projects were completed during the year by the UAFS Research Station one in southeastern Arkansas and one in northeastern Arkansas. At the request of Dr. Marvin Jeter of the Survey's UAM research station, Mulvihill traveled to Drew County to make a digital map of the Taylor Mounds site (3DR2). This project was also used as an opportunity to update UAM station assistant Jessica Howe and ASU station assistant Robert Scott, who helped with the mapping, on the operation of the total station. At about the same time, at the request of Dr. Jeffrey Mitchem of the Parkin research station, Mulvihill traveled to Crittenden County to collect data for a contour map of the Richard's Bridge site (3CT11/22). While there, he also mapped the newly recorded Hood Cemetery Mounds site.

Work continued on gathering data for a new digital map of the Eaker site (3MS105) in Mississippi County. Part of this work took place while setting out a new 20 x 20 meter grid of wood stakes for a geophysical survey of the site. At this time, more data were collected at the nearby Pemiscot Bayou so that it could be included in the map. A draft of the map was completed in the spring of 2011 and sent to the Blytheville station archeologist.

Mulvihill also assisted with a geophysical survey of the Chism House property in Logan County and completed partial mapping of the Prairie Grove Battlefield State Park as part of a larger project. He also visited the rock art site 3JO72 and scanned the cave with the Topcon Imaging Station.

Cavanaugh Mound Project

During March of 2011, Mulvihill organized several days of brush and tree removal at the Cavanaugh Mound site (3SB3) in Fort Smith. Members of the Ark-Homa Chapter of the Arkansas Archeological Society and other community volunteers helped with the work. In 2005, the site had been acquired by The Archaeological Conservancy, a national non-profit organization that acquires and preserves significant archeological sites. It is located in south Fort Smith and has survived the city expanding around it with relatively little disturbance. However, during the 1970s a large portion of the eastern side of the mound was removed, leaving a steep vertical face that has been eroding ever since. The goal of the current project is to clear the mound of brush and trees so that it can be stabilized, and to record the eroding east face of the mound in order to learn more about the mound construction. Good progress was made on the brush and tree removal this year and the top was cleared completely except for a



Tim Mulvihill using the Topcon Imaging Station to scan a rock art site.

few large trees near the eroding edge. A partial geophysical survey of the mound was conducted on March 28 by Dr. Jami Lockhart (the Survey's archaeogeophysical specialist) and Mulvihill, with the assistance of Society member Bob Dalton. Preliminary results indicate a possible platform stage within the mound, but further geophysical survey is needed when conditions permit.

Pruitt Site (3LO769) Investigations

Pruitt site investigations continued mostly in the form of lab work—washing and sorting the artifacts excavated over the last several years. The faunal material from this multicomponent (Woodland and Mississippian) habitation site was sorted out and sent to a specialist, Dr. Lucretia S. Kelly, for analysis. A report was received from Dr. Kelly in June 2011. Mulvihill's investigations at the site have been ongoing since 2007 with cooperation of the landowner, and financial support for radiocarbon dating from the Arkansas Archeological Society's Archeological Research Fund.



Tim Mulvihill and Dr. Jami Lockhart using ground penetrating radar at the Cavanaugh Mound in Fort Smith.

Station Personnel

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.

Teaching & Higher Education

- Mulvihill taught ANTH 2203, Introduction to Archaeology, at UAFS, Fall 2010 (24 students).
- Mulvihill taught the fieldwork portion of ANTH 2203, Introduction to Archaeology (taught by Lorna Beard) at UAFS, Spring 2011 (25 students).
- Mulvihill delivered a guest lecture on archeological dating to the Spring 2011 ANTH 2203, Introduction to Archaeology class at UAFS (25 students).
- Mulvihill coordinated ANTH 490v, Special Topics in Archaeology at UAFS (1 student).

Professional Service

• Mulvihill helped with arrangements for the 53rd Caddo Conference, held at University of Arkansas - Fort Smith March 25–26, 2011.

Public Service & Outreach

- **Programs & Presentations**. Mulvihill taught a mini-class on Arkansas Prehistory for the Lifelong Learning Institute at the University of Arkansas Fort Smith (16 participants). He gave a talk at the Tahlequah Chapter of the Oklahoma Anthropological Society (audience 16).
- **Consultations**. Mulvihill met with John Riggs, archeologist for the Natural Resources Conservation Service, about possible land-leveling at the Kibler site (3CW77).
- **Public Archeology.** Mulvihill provided artifact identifications for 20 members of the public and visited three sites in response to citizen requests.
- **Public Schools**. Mulvihill gave 8 presentations on archeology as a career at Alma Middle School's Career Day (120 students).

Service to the Arkansas Archeological Society

- Ark-Homa Chapter. Mulvihill and the UAFS station continued to assist the Ark-Homa Chapter by making arrangements for monthly meetings, inviting guest speakers, and providing information to UAFS for press releases.
 Mulvihill served as Treasurer for the Chapter. The station hosted monthly meetings and provided lab and fieldwork opportunities.
- Training & Certification Program. Mulvihill was a field supervisor for the 2011 Training Program at Historic Washington State Park.

Volunteer Hours

• Volunteers contributed 56 hours to station research projects in the field and lab.

Winthrop Rockefeller Institute, Morrilton

Dr. Leslie (Skip) Stewart-Abernathy, Station Archeologist Larry Porter, Station Assistant Theresa Johnson, Station Assistant (HALF-TIME) Carlos Ochoa, AmeriCorps Intern (1 July–15 September 2010)

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.

News & Research

Petit Jean Mountain Survey

The WRI station and the Arkansas River Valley Chapter of the Arkansas Archeological Society continued various projects on Petit Jean Mountain and vicinity, including documentation visits and study of rock art sites and historic farmsteads. The report of Total Station mapping at the site of Civilian Conservation Corps Camp No. 1781 in the State Park was passed to State Parks Planning for use in developing exhibitry on the CCC camp. Led by Stewart-Abernathy, Chapter members mapped and photographed the ca. 1900 Milton-Norton-Martin place, the oldest surviving in situ unrestored house atop Petit Jean Mountain. The team recorded the house, the barn, the hog barn, the collapsed smokehouse, collapsed chicken house, and a large pile of tongue and groove interior siding that was salvaged from the house but is now rotting. Fieldwork also recorded perimeter measurements on the barn, hog barn, and the collapsed outbuildings, and detailed measurements of the house interior and exterior.

Sibley Chute Wrecks, 3DE279 and 3DE280

In November 2010 staff of the USACE, Vicksburg District, observed wreckage in Sibley Chute at the lower end of White River, a channel of the Mississippi on the Arkansas side opposite Rosedale, Mississippi. Stewart-Abernathy was alerted to the situation in mid-December

2010 when the Arkansas Commissioner of State Lands (hereafter COSL) became interested and actual ownership of the wrecks again came into question. Stewart-Abernathy organized and led an "expedition" to the site, with participants that included Larry Porter, Jessica Howe of the Survey's UAM station, Andy Zawecki of Historic Arkansas Museum, and members of the Arkansas Archeological Society. Boats and drivers were provided by Mike Hutson and the Montgomery Island Hunting Club.

The visit, on 17 February 2011, confirmed that one of the wrecks was probably a steamboat (3DE279) whose bow starboard quarter is appearing out of the bank as the Chute is cutting into an outside bend. Documentary research suggests it might be the *Victor*, a steam towboat used in the logging industry. On 23 February, 1907, "while dislodging grounded barges at Sibley Chute, it was struck by a swinging barge, causing the steamer to list, fill with water, and sink. Total loss: value, \$14,000; no insurance. No lives lost" (Source: Annual Report of Inspector Supervisor of Steamboat Inspection – 1907 fiscal year ended June 30, 1908. Fourth Supervising District. Local District of Memphis, Tenn.).

Just downstream was perhaps an even more significant discovery, a flatboat (3DE280). It is only the second seen by archeologists in spite of the thousands lost during the 1800s. It is classified as a flatboat because the sides and



Skip Stewart-Abernathy examines wreckage at the Sibley Chute site.

stern are vertical and made of horizontal boards fastened to upright frames with wooden pegs. Present at the Sibley Chute flatboat are the upsloping scow bow, part of one transverse bulkhead, and part of one side, possibly the starboard side if the vertical wall is indeed a stern, and still unseen is the vertical stern. The flatboat is actually sitting a few feet lower in the bank than the steamboat. Both are pointed more-or-less upstream. It is not possible to date the flatboat at this point, although it is carrying a bit of coal. Flatboats were used throughout the 1800s and even into the early 1900s.

The only other archeological flatboat was documented by Mark Wagner of Southern Illinois University, on the Ohio River. The field crew named it *America*. All that was present there were floor frames and hull planking. With the addition of the Sibley Chute flatboat, we now have a good idea of the nature of the sides and transverse bulkheads on these vessels as well.

Stewart-Abernathy and Howe prepared site forms for the two vessels, assigning separate site numbers, though they are contiguous. Stewart-Abernathy participated in a follow-up meeting with COSL staff and others in which COSL readily accepted ownership of the two wrecks. Stewart-Abernathy also presented a paper ("Steamboat and Flatboat: The Sibley Chute Wrecks, 3DE279 and 3DE280") at the annual meeting of the Lower Mississippi River Conservation Commission in Memphis in August 2011. The LRMCC meeting had been scheduled for June but was postponed due to the fight against of the recordbreaking 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 will continue to be monitored.

Cherokee in Arkansas

Fieldwork on the Cherokee presence in Arkansas was minimal this year. Stewart-Abernathy went to the Oklahoma Historical Society archives in Oklahoma City in September and spent three days making digital photographs of a variety of materials on Old Settler Cherokee.

He assisted Tammie Evans, a graduate student at Arkansas Tech, in her research on the Dwight Mission to the Cherokee, and on an entry about nearby Norristown for the Butler Center's online *Encyclopedia of Arkansas*.

NEH Central Arkansas River Valley Project

Fieldwork continued at 3YE25 in Carden Bottoms, led by George Sabo (UAF station archeologist and one of the project's principal investigators). Stewart-Abernathy provided limited excavation assistance, logistical help such as loans of equipment, and monitored the site between field sessions. He also checked the site before and after tree planting which saved time and travel for the Fayetteville team. Porter participated as a valued crew member and local liaison in every phase of the approximately eight weeks of fieldwork this year.

Stewart-Abernathy also served as on-site co-host for the project's Native American partners who came to WRI in May for two days of briefings and site visits. He gave an illustrated presentation on "Native American Rock Art in Arkansas, with Some Insights from Carden Bottom" to Osage and Caddo elders during the visit and escorted them on a driving tour of Petit Jean Mountain.

Apple Farmstead, Yell County

Stewart-Abernathy has driven by the log and frame house in Old Neeley on Hwy 155 for two decades, and finally led a documentation effort by the ARV Chapter in September. The key feature is a one-room log structure with square notching, that since about 1920 has been incorporated as the south pen of a wire-nailed frame "dogtrot." A three-room shed ell extends across the back or west facade, with ghost evidence of a front porch on the east facade that was centered on the central hall but did not extend all the way from corner to corner. The whole exterior is sheathed with vertical board and batten. Three teams carried out total station mapping, documented the perimeter of the house, the frame smokehouse and frame storm cellar, and created a schematic plan of the house interior.

Logan County Projects

Porter continued to monitor ongoing catastrophic erosion at 3LO226, an important Woodland period site, making surface collections and incorporating new findings into his working report of 2009 emergency excavations and other data sources. He assisted the USACE Little Rock District archeologist with collecting human remains dislodged by floodwaters. The Survey provided funding for

analysis of faunal material from the 2009 fieldwork. Porter is preparing follow-up presentations on the site incorporating the faunal analysis and other new information.

Porter continues to be involved in documenting restoration of the Chism House, a two-story central open passage (dogtrot) log house built by the Chism family in the 1840s in Chismville. The property owner undertook a plan to have the house rebuilt, using as many of the original logs and timbers as possible. Porter has been invited to observe and photograph the process. He also arranged and directed remote sensing and test excavations at the site.

Another long-term Logan County project of Porter's is archival research, field documentation, and excavation at the Widow Logan site (3LO696), an antebellum farmstead representing early settlement in the county. He gave a tour of historic sites associated with the Logan family to some Logan descendants, and presented a program on this research to the Booneville Rotary Club.

Porter submitted material for the Survey website on 3LO226 and the Chism site projects. He has also continued to assist UAFS station archeologist Tim Mulvihill with excavations at the Pruitt site (3LO769), and mapping of the Logan Eddy Mound site (3LO208).

Arkansas Stoneware Industry

Stewart-Abernathy took advantage of fieldwork being carried out under contract on kiln sites as part of a highway widening project in Benton (Saline County). This was near the heart of the Arkansas stoneware industry in the late 1800s and early 1900s. Stewart-Abernathy and Carlos Ochoa visited the Howe site (3SA340) during the completion of mitigation excavations by Drew Buchner of Panamerican, Inc. The miracles of modern technology (email via smartphone) enabled Stewart-Abernathy and Ochoa to share on-site field photos with Arkansas pottery scholar Beverly Watkins (now a minister at Sherwood United Methodist) and Bill Worthen and Swannee Bennett of Historic Arkansas Museum, in exchange for historical photos provided by Watson, the latter in turn transmitted to Buchner. After the fieldwork was completed, Stewart-Abernathy visited the area again and with permission made study collections of wasters and kiln furniture from Howe (3SA340) and the Hyten Eagle Pottery waster dump (3SA341).

Station Personnel

Leslie Stewart-Abernathy (Ph.D., Brown University, 1981) is Research Station Archeologist for WRI with the Survey 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 station moved to WRI. He is a graduate of Jonesboro High School and Arkansas State University. His specialities 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 station assistant at ATU (now WRI) in 1991. That same year she also took on a part-time position as education coordinator at the ATU Museum of Prehistory and History.

Lary 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 ATU (now WRI). 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.

Grants, Honors & Awards

• Stewart-Abernathy received a Lifetime Achievement Award from the Arkansas Historical Association.

Teaching & Higher Education

Stewart-Abernathy served as Chair of one Ph.D. committee and as member of one M.A. committee for students
in the Department of Anthropology, University of Arkansas. He was an outside faculty member on the M.S.
committee for one student in the Biological Sciences Department at Arkansas Tech University; this student was
awarded his degree in May 2011.

Professional Service

- Stewart-Abernathy served as editor of the proceedings of the South Central Historical Archeology Conference, published online at www.arkansasarcheology.org/SCHAC.html.
- Stewart-Abernathy hosted Dr. Mark Howell, an ethnomusicologist and director of the Winterville Mounds site
 in Mississippi, on a research visit to Petit Jean Mountain, where he investigated "acoustic archeology" by making
 audio recordings of conch shell "trumpets" and cane flutes played inside the Rock House and Indian Cave sites.

Public Service & Outreach

- Assistance to Agencies and Individuals. Stewart-Abernathy and/or Porter assisted the State Historic Preservation Officer, the Arkansas Highway & Transportation Department, Ozark-St. Francis and Ouachita National Forests, Milner and Associates, and Arkansas State Parks (especially Petit Jean State Park) on various matters related to archeology. Stewart-Abernathy consulted with architect Tommy Jamieson about possible future restoration work at the Taylor House (3DE26)
- African American Cemetery Preservation Initiative. The station continued its contributions to several cemetery preservation projects. Carlos Ochoa provided a total station map to St. John Cemetery (Conway County) in time for that Association's annual meeting. Stewart-Abernathy accepted records of Pine Bluff's African American Perry Funeral Home from an anonymous donor and forwarded them to a local archive. Stewart-Abernathy helped host Jim Leach, Chair of NEH on a visit to Bold Pilgrim Cemetery. Other cemeteries studied include Pleasant Grove (Van Buren County). Stewart-Abernathy also was an invited speaker at a cemetery workshop in May (audience 53).
- Programs & Presentations. Stewart-Abernathy gave talks to the Perry County History and Genealogical So-

ciety (20), the Senior Citizens Center in Dardanelle (35), the Morning Downtown Rotary Club in Russellville (35), the Pope County Historical Association in Russellville (25), Heritage Seekers in North Little Rock (25), Winterville Mounds State Historic Site near Greeneville, Mississippi (25), two presentations in the WRI Picture the Past Film & Lecture series (28), Petit Jean State Park, for Archeology Month (31), and William Hamilton Learning Academy at Historic Arkansas Museum (32). Porter gave a talk to the Booneville Rotary Club (30). (Combined audiences 286)

Service to Winthrop Rockefeller Institute

- Winthrop P. Rockefeller Exhibit. Stewart-Abernathy is developing an exhibit on the 10 years of service, from 1996–2006, as Lieutenant Governor by Winthrop P. Rockefeller, continuing the story of the Rockefeller legacy at WRI. The exhibit will partly reconstruct Rockefeller's office as it existed in Suite 270 at the Arkansas State Capitol, and will also include two glass cases (donated by Arkansas Tech University) with rotating displays on various topics related to his career. Activities this year included meetings with WRI maintenance and Programs staff, interviews with former Rockefeller staff members, discussions with Capitol Historian David Ware, and consultation with the Rockefeller family. Terry Johnson has nearly completed an inventory of objects for the exhibit, which will open in 2012 as part of the centennial of Gov. Winthrop Rockefeller's birth.
- "Picture the Past" Film & Lecture Series. Stewart-Abernathy worked with WRI Program Coordinators Joe
 Foster and then Jill Bayles to organize and host this series of films and related lectures by guest experts. Commentators this season included wood conservator and boat builder Andy Zawecki of the Historic Arkansas Museum,
 historian Dr. Ken Barnes of UCA, English professor Dr. Susan Poznar of ATU, and Michael Swanda, Chief of
 Environmental Branch, USACE New Orleans District.
- Workshops at the Teaching Barn. Stewart-Abernathy and Don Higgins co-taught a day-long Master Naturalists workshop (38 participants). Arkansas Archeological Society Seminars held during the year were Advanced Lab, taught by David Jeane (SAU) and Dr. Claudine Payne (Blytheville), and Lab Photography, taught by Leslie Walker (UAF). Stewart-Abernathy gave a presentation on local archeology as part of a meeting of partners, including representatives from American Indian Tribes, in the NEH-funded Central Arkansas River Valley Project.
- Project Dig. The station worked with WRI Program Coordinator Jill Bayles to continue Project Dig (see www.interact-simulations.com) with two schools in Perry County, Bigelow East End and Perryville Upper Elementary Schools. After a presentation on the concept of culture at each place by Stewart-Abernathy, upper elementary Gifted and Talented students at each school "invented" a culture, complete with alphabet, value systems, and clay artifacts. The artifacts were brought to WRI, broken, and scattered across four 2x2 m units chalked on the floor at the Teaching Barn. Each class then recovered the other's artifacts using controlled surface collection techniques, returned to their own school, and used archeological principles to "reconstruct" the culture of the people whose artifacts they had found. At the concluding Project Dig Symposium on 8 December 2010, each school presented the results of their analyses. About 35 students, 2 teachers, and 10 parents participated. Project Dig continued in Fall 2011.
- Programs & Presentations. Porter led a tour of Petit Jean rock art sites for participants in the Oxford American Summit for Ambitious Writers. Stewart-Abernathy served as host during the "Bountiful Arkansas" event on 17 July 2010 (500+ visitors to the Teaching Barn and Heritage Farmstead).

Service to the Arkansas Archeological Society

- Arkansas River Valley Chapter. The station hosts the ARV Chapter, with 11 monthly meetings. Johnson is
 Secretary/Treasurer, handles press relations, and prepares a quarterly newsletter. WRI marketing staff assists
 greatly with public relations. Stewart-Abernathy is program chair, recruiting speakers and setting up monthly lab/
 fieldwork days. Porter assisted HSU station archeologist Mary Beth Trubitt, Ouachita National Forest Archeologist Meeks Etchieson, and Ouachita Chapter members in fieldwork at 3YE948. Station staff provided assistance
 to several Chapter members working on research or outreach projects.
- Training & Certification Program. Stewart-Abernathy assisted at the Training Program at Historic Washington State Park, where he has previously conducted a good deal of research. He taught the Historic Ceramics seminar during the Program, with UAF graduate student Katie Cleek assisting. He gave two evening lectures at the Training Program (audiences 90 & 200). Porter worked as a Field Supervisor at the Training Program.
- Two Arkansas Archeological Society Seminars were held during the year at the WRI station: Advanced Lab,

- taught by David Jeane (SAU) and Dr. Claudine Payne (Blytheville), and Lab Photography, taught by Leslie Walker (UAF).
- **Programs & Presentations.** Stewart-Abernathy supervised a booth by the ARV Chapter on archeological perspectives on farming and food gathering during the "Bountiful Arkansas" event at WRI. He gave two presentations to the ARV Chapter (combined audience 20). Porter gave two presentations to the Chapter (combined audience 20).
- Archeology Month. An Open House at WRI hosted by station staff and the ARV Chapter incorporated displays on Larry Porter's work at 3LO226 and the Chism House. There were games, including spear-throwing with atlatls, and Ben Swadley (Society Vice President and Superintendant at Parkin Archeological State Park) taught the basics of making stone arrowheads (about 120 attendees).

Volunteer Hours

 Volunteers contributed 310 hours to station activities, including lab and field research projects, and special outreach events.

Henderson State University, Arkadelphia

Dr. Mary Beth Trubitt, Station Archeologist Amanda Brock, Station Assistant (through June 2011) Elizabeth Sorensen (part-time student assistant, Sept–Dec 2010)

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.

News & Research

Novaculite Tool Production and Exchange in the Ouachita Mountains

Investigating the use of Arkansas novaculite as a key rock resource in the Ouachita Mountains, especially during the Archaic period, has been a major research focus for the AAS/HSU station. Since the procurement, use, and exchange of novaculite by Indians in the past took place at different places on the landscape, this research theme ties together many of our various sites and projects.

Two Arkansas Training Program excavations in 2007 and 2008 at the Jones Mill site (3HS28) contributed a great deal to this theme. This National Register site, in Hot Spring County, was occupied for an extended time, across several cultural periods, by Indians who quarried novaculite from nearby outcrops and worked it into tools. Were the tools solely for their own use, or were they also for trade, and how might patterns of extraction and networks for trade have changed over time? The project seeks to answer such questions.

Work on the Jones Mill Archeological Project this year continued in the lab with artifact analysis and excavation interpretation, leading to several presentations and a journal article by Mary Beth Trubitt. Henderson State University student Elizabeth Sorensen scanned field records, sorted and cataloged flotation samples, and readied parts of the collection for curation. Amanda Brock updated the computerized artifact catalogs.

Lab cataloging of artifacts from 3HS195, another site excavated as part of the 2007 Society Training Program, was completed this year by Brock and Sorensen, with volunteer help from the Ouachita Chapter of the Arkansas

Archeological Society. 3HS195 had a Middle Archaic occupation dated to about 6000 years ago. The Training Program had uncovered a number of "rock cluster" features that might have been from heat treatment of novaculite, or from cooking fires. Brock created a computerized artifact catalog and readied the collection for analysis.

A cultural resources survey was conducted near archeological site 3CL31 at Lake DeGray by Trubitt with assistance from Brock and a student. This project was undertaken because Middle Archaic period occupation had been noted for 3CL31. Trubitt prepared a report of findings for the Arkansas Game and Fish Commission and the U.S. Army Corps of Engineers.

Jones Mill Foodways

The Jones Mill Foodways Project, funded by the Arkansas Humanities Council, concluded this year with the results of specialized floral and faunal analysis from the Archaic and Caddo components at 3HS28 by Kathryn Parker and Lucretia Kelly. Findings were reported at professional conferences and in a journal article coauthored by Trubitt, Parker, and Kelly. Trubitt also presented a series of public talks, which attracted newspaper coverage.

The specialists identified a variety of nutshells from the Middle Archaic period occupation at Jones Mill (6000–4300 BC), some mussel shells, and a few burned animal bones. There were notched pebbles among the artifacts used as weights for fish nets. All this indicates an economy based on collecting wild foods.

In the Mississippian period (ca. AD 1450) Caddo Indians lived in a more stable community at the site. They continued to hunt, fish, and collect nuts, but now they also cultivated maize and starchy native seed plants that were domesticated locally.

The project has a page on the Survey's website (http://arkarcheology.uark.edu/indiansofarkansas/index. httml?pageName=Ancient%20Foodways), and there is a forthcoming article in a local historical society journal.

Ancient Caddo Lifeways on the Caddo, Ouachita, and Saline Rivers

Understanding Caddo Indian societies and lifeways—from mound building and community patterning to pottery use and exchange—at archeological sites in the AAS/HSU station area is another important research theme. One project, investigating the appearance of shell tempering in Caddo pottery, was completed with a journal article coauthored by Trubitt, Tim Perttula, and Jeff Girard that will appear in a future issue of *Southeastern Archaeology*.

Work continued on the Borderlands Project that has focused research attention on the Saline River–Moro Bayou region. Brock and Trubitt visited and recorded several new sites in Grant and Saline counties. With Survey funding, Lucretia Kelly analyzed a sample of animal bone excavated from the Hughes site (3SA11) in 2002, and her report will be incorporated into the final site publication. A discussion of ceramics from this site forms a chapter written by Trubitt that will appear in an edited volume on Caddo archaeology. Trubitt is currently writing a book manuscript that presents results of the excavations at

Hughes (3SA11), a Caddo mound site on the Saline River, with comparisons to Hedges (3HS60), a Caddo mound site on the Ouachita River where earlier excavations also uncovered burned structures. Trubitt obtained grant funding from the Arkansas Archeological Society's Archeological Research Fund to get a new radiocarbon date on 3HS60. As part of this project, Trubitt, assisted by Brock and lab volunteers, began a reanalysis of artifacts excavated in 1973–1974 from 3HS60.

Several small field projects this year focused on Caddo sites with mounds. A Natural Resources Conservation Service (NRCS) project in Dallas County led to collaborative fieldwork at 3DA673 that included remote sensing led by Dr. Jami Lock-

hart, mapping of the mound and vicinity by Trubitt and NRCS archeologist John Riggs, and soil coring and limited test excavations at the site. Topographic mapping of a similar mound in Clark County was done by Trubitt and Meeks Etchieson (Ouachita National Forest Archeologist



Ouachita Baptist University student Lida Lee assisted Dr. Trubitt with test excavations at DeGray Lake in March 2011, as part of an ARPA-permitted survey in advance of a construction project. Archaic period artifacts indicate that this area has been a favorite fishing spot since about 6000 BC.



Dr. Trubitt gives a talk about the Jones Mill Foodways Project (research funded by Arkansas Humanities Council and Arkansas Archeological Society grants) to the Ouachita Chapter of the Arkansas Archeological Society and Arkansas Archeological Society member). The field investigations at these sites led to a paper by Trubitt at the spring 2011 Caddo Conference, focusing on the distribution of two-stage mounds in the Caddo area in southwestern Arkansas, and questions about mound function, and community patterning.

Trubitt compiled recent bibliographic information from Arkansas for the updated edition of the *Caddo Bibliography* (edited by T. K. Perttula, A. M. Early, L. E. Albert, and J. Girard).

Mississippian Period Research

Both Trubitt and Brock continued with research interests into complex Mississippian period societies. Trubitt continued artifact analysis and final report preparation on the Cahokia Palisade Project, and corresponded with colleagues about publication of an edited volume based on a 2010 Society for American Archaeology symposium on Southeastern art and iconography. Brock continued work towards her Master's thesis analyzing excavations at a Mississippian period site in the Lower Mississippi Valley (Woodlyn, 22DS517), including presenting a talk to the Ouachita Chapter.

HSU Station Personnel

Mary Beth Trubitt (Ph.D., Northwestern University, 1996) is Research Station Archeologist for HSU/Arkadelphia with the Survey 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.

Amanda Brock (B.A., University of Memphis, 2004) came to the Survey in May of 2007 after completing graduate coursework in geoarcheology at the University of Memphis. She has prior field experience in several southeastern states. Her area of research in the graduate program at Memphis focuses on the Late Mississippian period in north Mississippi. Amanda Brock left the Survey in June 2011.

Grants, Honors & Awards

- \$595 from the Arkansas Archeological Society's Archeological Research Fund for "Uncovering Caddo History on the Ouachita River: A New Look at Old Excavations," to provide an AMS radiocarbon date for 3HS60.
- Work at the HSU research station was highlighted in an article in the Summer 2010 issue of HSU's Ellis College FORGE magazine.

Teaching & Higher Education

- Trubitt taught ANT 3053/SOC 3063/ANT 5053, World Cultures (38 students) and ANT 3043, North American Indians (39 students) during Spring 2011 for the Department of Sociology and Human Services at HSU.
- Brock taught ANT 3043, North American Indians (30 students) during Fall 2010 as an adjunct faculty member for the Department of Sociology and Human Services at HSU.
- Trubitt supervised students in the station's Archeology Lab, and advised several students about anthropology
 courses and careers.
- The station curates artifacts and records of the Joint Educational Consortium's Hodges Collection.
- Trubitt served on a Departmental search committee for a faculty hire.
- Trubitt created and posted a new page for the research station (<u>www.hsu.edu/interior2.aspx?id=732</u>), and course web pages on the new HSU website.
- Trubitt provided information on research and teaching by the Survey's station to university colleagues as part of assessment and accreditation efforts by HSU and UAF.

Professional Service

- Trubitt serves on the editorial board of Caddo Archeology Journal. She was Program Chair for the 2011 Caddo
 Conference, held in Fort Smith on March 25–26, and began serving as the first president of the new Caddo
 Conference Organization.
- Trubitt began a term on the Society for American Archaeology's Media Relations Committee.
- Trubitt is chair of the Survey's Personnel Committee.
- Trubitt provided peer review for the *Journal of Anthropological Archaeology*.
- Brock volunteered with the Hot Springs Documentary Film Festival, providing assistance with events related to Native American films.

Public Service & Outreach

- African American Cemetery Preservation Initiative. Trubitt gave a presentation at the 5th annual "Memorial in May" Cemetery Preservation Conference in Washington, Arkansas (about 40 attendees). Trubitt and Brock served as humanities scholars on several cemetery preservation grant proposals, recorded cemeteries as archeological sites, and attended meetings and events. Detailed total station maps, with photodocumentation of gravestones, were prepared for three cemeteries: Helms (3CL873), Sparkman Memorial (3DA672), and Richmond Hill (3CL869). Trubitt created a website for the Helms Cemetery project at www.hsu.edu/pictures.aspx?id=13591.
- Federal Agencies. Trubitt gave a talk as part of a Corps of Engineers ARPA training session (15 participants). Trubitt and two students assisted William Hunt (National Park Service-Midwest Archeological Center) with fieldwork as part of a park-wide archeological inventory of Hot Springs National Park.
- **Consultations & Other Public Archeology**. Trubitt visited historic racetrack site 3GA932 and prepared a cultural resources impact report to the Arkansas Historic Preservation Program.
- Programs & Presentations. Trubitt gave talks at the Hot Spring County Historical Society in Malvern (25), the Malvern Lions Club (35), the PEO Chapter in Arkadelphia (20), the Saline County Library in Benton (40), and the Arkadelphia Lions Club (35). Trubitt and Meeks Etchieson (Ouachita National Forest Archeologist) gave a talk at the Garland County Library in Hot Springs (35). Brock gave a talk to the Hot Springs Criterion Club (50). (Combined audiences 240).
- **Public Schools.** Trubitt advised a local high school student on a science project about heat treatment of novaculite. The station facilitated loan of a "teaching box" to several local teachers for school talks. Trubitt gave a talk at Wilson Intermediate School in Malvern (75 students).

Service to the Arkansas Archeological Society

- Ouachita Chapter. Trubitt and Brock participated in Ouachita Chapter activities, including monthly meetings
 and fieldwork. Brock served as one of the Chapter's Members-at-Large for 2010. Trubitt advised a member writing a series of newspaper articles on Indian history, assisted members in assembling a Civil War exhibit for the
 Garland County Library, and participated in fieldwork at 3YE948.
- Training & Certification Program. Trubitt and Brock participated in Spring Break excavations at Historic
 Washington State Park directed by Dr. Jamie Brandon (AAS/SAU), and Trubitt was a field supervisor at the
 Training Program there in June.
- **Programs & Presentations.** Brock assisted at the Registration desk during the 50th Annual Meeting in Hot Springs. Trubitt and Brock each presented a program to the Ouachita Chapter (combined audiences 65).

Volunteer Hours

• Volunteers contributed 710 hours to station research projects in the field and lab.

Southern Arkansas University, Magnolia

Dr. Jamie C. Brandon, Station Archeologist
David R. Jeane, Station Assistant (retired, 2011)
Holli K. Howard, Technical Assistant & Laboratory Manager

The Southern Arkansas University research station is located on the campus in Magnolia, Arkansas, 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.

News & Research

Archeology at Historic Washington State Park

Unlike previous years, the 2010–2011 fiscal year found the AAS-SAU research station staff concentrating most of their efforts on a single project—archeological investigations in the historic town of Washington, Arkansas. The antebellum town of Washington (3HE236) was once the county seat of Hempstead County, the Confederate state capital during the Civil War, and a booming cotton town on the Southwest Trail. It is perhaps the best surviving example of a nineteenth-century town in the Old Southwest.

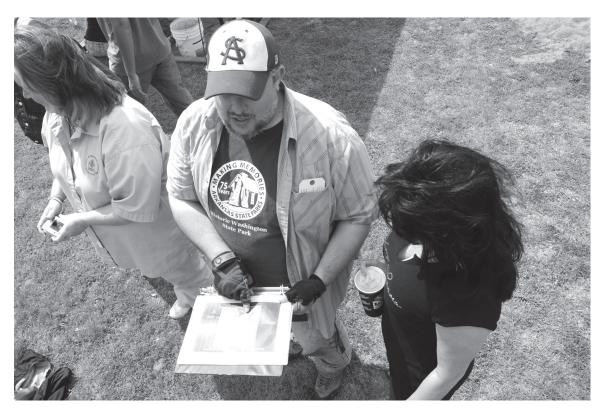
Following a successful University of Arkansas Archeological Field School at the home of early Washington merchant Abraham Block in June of 2010, Dr. Brandon and University of Arkansas graduate student David Markus undertook the processing and analysis of the excavated materials during the fall semester—with Brandon and Markus working together intensively (with the help of Holli Howard and SAU History intern Kevin Clark) on the artifact analysis during portions of September, October, and January. Markus and Brandon also traveled to the HSU research station in Arkadelphia in February to examine the material excavated from the Benjamin House (3CR585), a second mid-nineteenth-century site associated with a Jewish merchant that provided comparative material for the Block research. These data made up the core of Markus' Master's thesis, titled "Of the House of Israel in America: The Archeology of Judaism, Slavery and Assimilation on the Arkansas Frontier." Markus successfully defended in late April, and received his M.A. in August after spending the summer addressing comments from his committee. Markus and Brandon authored a brief Field

Notes article on the work conducted at the Block House. Markus was the junior author on two other articles in Field Notes about archeological work in Washington—one with Brandon about the upcoming summer 2011 excavations on the site (see below) and one with field school student Ashley Applegate about the results of the 2010 summer excavations. Markus also gave talks on the Block House material to the Kadohadacho Chapter of the Arkansas Archeological Society in September and the Jewish Federation of Arkansas in Little Rock in February.

In the fall, Dr. Brandon began laying the groundwork for the 2011 Arkansas Archeological Society Summer Training Program that was held in June in Historic Washington, Arkansas. After negotiations with the Pioneer Washington Restoration Foundation, Dr. Brandon received permission to excavate on what is known as Block 6 in Washington, Arkansas—a property owned by the Foundation, but in the heart of Historic Washington State Park directly across from the 1836 Courthouse.

Block 6 was the center of the commercial district for the town from the 1830s through the traumatic fires of the 1870s and 1880s. While the majority of the past work at Washington has been associated with domestic yards (Sanders and Block) or public space (the 1836 Courthouse) next to standing structures, little work has focused on vacant lots or the commercial spaces that made Washington the important regional service center it was in the early nineteenth century. Our work on Block 6 will go a long way toward remedying this deficit.

In early March AAS-SAU research station staff helped Dr. Jami Lockhart, Duncan McKinnon, and Mike Evans conduct a geophysical survey of Block 6. We covered the



Dr. Jamie Brandon explains the remote sensing and excavations to park visitors during the "Spring Break Dig" on Block 6 at Historic Washington State Park. Photo by Steven Ochs.

entire block with several remote sensing technologies: magnetometery, electrical resistance, ground penetrating radar (GPR), and electromagnetic susceptibility (EM). The results gave us plenty of targets for excavation—including a large (20 m by 20 m) square that appeared to be a structure of some sort and a series of 1830s–1870s store fronts along Franklin Street.

Dr. Brandon followed the remote sensing survey with a "Spring Break Dig" associated with 2011 Arkansas Archeology Month festivities. We are very grateful for the more than 50 volunteers we had during the week-long excavations, but a few deserve to be specially thanked for staying the entire week and/or supervising large numbers of volunteers. Thanks to Anthony Clay Newton, Bob Campbell, Dr. Don Bragg, Lydia Rees, Lydia Saxton, Isaac Saxton, and Addison Ochs for all their hard work.

The "Spring Break Dig" confirmed that there was enough material to warrant a full-scale excavation on Block 6, and in June the Arkansas Archeological Society Summer Training Program (AKA "the Society Dig") returned to Washington, Arkansas for the first time in 27 years.

From our perspective the Society Dig was a big success this year. We learned a great deal in all three (or four depending on how you count them) excavation areas. We discovered that the large square anomaly that showed up

on our remote sensing looks to be a merchant warehouse in operation from the 1830s until the 1870s (Area A). We learned that there are intact foundations of 1830s brick merchant store fronts along Franklin Street/the old Southwest Trail (Area C). We discovered an 1860s cistern serving a building we did not know was there (Area A prime), and we discovered a small cellar to a building with fill dating from the 1830s up through the 1930s in Area B. We had over 100 volunteers and staff out on the dig. Despite the hot, dry conditions we think we had a good time and made some good 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, John House, Robert Scott, Jared Pebworth, Gary Knudsen, and Mary Beth Trubitt; the 2011 "Dig Committee" of David Jeane, Bob Campbell, and Anthony Clay Newton; Mary Ann Goodman and Mary Farmer who supervised the laboratory; and last, but far from least, our esteemed "Supernumerary" Dr. Leslie C. "Skip" Stewart-Abernathy.

The Arkansas Civil War Sesquicentennial

Arkansas's commemoration of the 150th anniversary of the Civil War (2011–2015) is upon us and Dr. Brandon has been serving as vice chairman of the Arkansas Civil



Arkansas Archeological Society volunteer Paul Knapp drawing a unit profile during the summer Training Program at Historic Washington State Park.

War Sesquicentennial Commission since 2007. The SAU station has thus become involved in a number of projects related to the Civil War.

By far, the largest of these undertakings was the Arkansas Civil War documentary project. In March, the Arkansas Educational Television Network (AETN) in partnership with the Arkansas Civil War Sesquicentennial Commission presented an original one-hour program called CW150: Remembering the Civil War in Arkansas. CW150 reflects on the anniversary of the Civil War and its impact on the state a century and a half later. Host Tommy Sanders talks with guests about Arkansas's involvement in the Civil War, why it is relevant in our modern culture, and how it changed the state socially, economically, and politically. Other guests included history professors Drs. Thomas DeBlack and Cherisse Jones-Branch; living historian Josh Williams; and Executive Director of the Arkansas Department of Parks and Tourism Richard Davies. Filmed at the Old State House in Little Rock, CW150 premiered on the cusp of a four-year initiative to commemorate the Civil War in Arkansas.

Dr. Brandon helped kick-off the official Civil War Sesquicentennial in April at the Old State House and spoke at a dedication of a historic marker at the Rondo Cemetery in Miller County. This marker commemorates the moving of the State records from Little Rock, through Washington to Rondo after the fall of Little Rock. Dr. Brandon consulted with the Arkansas Historic Preservation Program and members of the Helena Civil War Interpretation Project about how to identify the boundaries of a Civil War skirmish that occurred along Big Creek near Helena and consulted on and supported new interpretive plans for Helena and Prairie DeAnn battlefield near Prescott, Arkansas. Along with Mark Christ of the Arkansas Historic Preservation Program, Dr. Brandon held a public information meeting about the Arkansas Civil War Sesquicentennial in Camden (Ouachita County) and gave several talks in southwestern Arkansas regarding the commemoration and how local communities can become involved.

Finally, Dr. Brandon has been working with Carl Carlson-Drexler, Ph.D. candidate at the College of Williams and Mary, on his research into Dooley's Ferry (3HE14) on the Red River in southern Hempstead County. This ferry was an important feature of the militarized landscape of the Trans-Mississippi Theater of the Civil War. It thus offers a unique opportunity to study the flow of goods and people engaged in local, regional, and global markets into and out of what was a remote corner of the South during a time of great disruption to the patterns of everyday antebellum life.

Cemetery Preservation Efforts in Southwest Arkansas

The SAU research station continued its involvement in the research and preservation of cemeteries in southwest Arkansas. Dr. Brandon served as the humanities scholar on Arkansas Humanities Council Documentation and Preservation grants, helping local groups concerned with preserving African-American cemeteries. Dr. Brandon also hosted two screenings (one at the Barton Library in El Dorado and one at South Arkansas Community College) of the AETN documentary Silent Storytellers, a film that explores the history, culture, and importance of preserving Arkansas's cemeteries—including the work that the Arkansas Archeological Survey has done to help local communities preserve their endangered cemeteries. Dr. Brandon also visited several cemeteries, including some in the Holly Grove area with Joe Key, a member of the Ouachita Genealogical Society.

Collections Processing and Rehabilitation

SAU research station staff continued various projects to rehabilitate and inventory station collections and work with other collections in the region. In conjunction with the Survey Registrar and the Sponsored Research Program, the SAU research station (especially Holli Howard) worked on rehabilitation, consolidation, and NAGPRA compliance of the archeological collections and support documentation from the Cedar Grove site (3LA97), an important 1980s project in the Red River region. These efforts are a continuation of the process of creating an overall

inventory for the AAS-SAU research station collections begun with the rehabilitation of the Spirit Lake (3LA83) and Fish Lake (3LA287) collections in 2007–2008. Dr. Brandon, along with Ms. Howard, Barbara Farley, Teka McGlothlin, Leslie Walker, and Lela Donat, finished the report on the collection rehabilitations in October.

Additionally, following her pilot project last year, Ms. Howard completed the initiative to digitize the station's entire "analog ceramic database" created by Dr. Frank Schambach during his 38 years of work in the region. This database includes over 5700 images (14 GB) of whole or restored prehistoric ceramic vessels recovered from various sites in southwestern Arkansas. Once these files are made available in digital form, they will be an important tool for regional archeologists and archeologists working on Caddo-related sites throughout the four-state area.

Other Projects

Although the vast majority of the AAS-SAU research station staff's time was devoted to work at Historic Washington State Park, station-affiliated researchers continued to work on other projects. University of Arkansas graduate students Pritam Chowdhury and Duncan McKinnon continued their work with the Ferguson site (Chowdhury) and Battle Mound (McKinnon). McKinnon also served as an adjunct instructor at SAU teaching an advanced topics course—Myths, Symbolism and Moundbuilders (ANTH 4133/4233). This course was the first class in the SAU catalog to bear the "ANTH" prefix (as opposed to the "SOC" prefix).



Survey archeologists Aden Jenkins and Jared Pebworth excavate an 1850s brick cistern during the Training Program at Historic Washington State Park.

SAU Station Personnel

Jamie C. Brandon (Ph.D., University of Texas at Austin, 2004) is Research Station Archeologist for SAU/Magnolia with the Survey and Research Assistant Professor of Anthropology, University of Arkansas—Fayetteville. He has more than 20 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 in seven of those states. Dr. Brandon has worked at all stages of investigation and on sites dating from the Pleistocene to the twentieth century. He has worked with the Arkansas Archeological Survey in various capacities since 1997. His professional interests include historical archeology of the 19th century South, prehistoric and protohistoric cultures of the Mid-South and Trans-Mississippi South, cultural and historical memory, and working with descendant communities.

David R. Jeane (M.S., Northeast Louisiana University, 1976) joined the Survey in 1997 as station assistant at SAU. During his previous 25-year career with the Louisiana Department of Health and Hospitals, Jeane maintained an active role in Arkansas and Louisiana archeology as a member of several organizations. He has also done research on South American mummies and 17th and 18th century English ceramics. David Jeane retired at the end of this year.

Holli K. Howard (B.A., Southern Arkansas University, 2009) has recently joined the Survey as a Technical Assistant and Laboratory Manager for the Cedar Grove collection rehabilitation project and the current fieldwork at Historic Washington State Park. Holli is a native of Ruston, Louisiana but has lived in Hawaii, Virginia, Texas, North Carolina, California, and New Orleans, Louisiana, before coming back to the Ark-La-Tex. Holli worked with the SAU Magale Library and was an intern at the SAU research station in the Fall semester of 2009 before coming on board as Lab Manager. Holli is interested in Victoriana, archival work, and museum studies.

Teaching & Higher Education

- School of Liberal and Performing Arts, SAU. Brandon taught SOC 1003, General Anthropology (45 students), SOC 3143/HIST 3143, Anthropology of North American Indians (45 students), and SOC 4133, Honors Anthropology of Popular Culture (5 students). He also directed two HIST 4923, History/Museum Internships (2 students), providing a structured experience in the work of public history. Brandon provided a guest lecture in Betty McCollum's class on Death and Dying, PHIL 2413.
- University of Arkansas Fayetteville. Brandon served on one M.A. and five Ph.D. committees for graduate students in the Department of Anthropology.
- Other Institutions. Brandon served on the Ph.D. committee for a student at the College of William and Mary.
 Brandon and UAF graduate student David Markus taught workshops on historical artifact analysis at University of Texas at Austin and Texas Archeological Research Laboratory (TARL) to graduate students working in the region.

Professional Service

- Professional Organizations. Brandon is chair of the Society for Historical Archaeology's Academic and Professional Training Committee, the outgoing SHA Continuing Education Coordinator, and chair of the SHA Student Paper Prize sub-committee. He is Associate Editor of Historical Archaeology, the journal of the Society for Historical Archaeology. Brandon also served as Associate Editor for Historical Archaeology for the SAA Archaeological Record, the newsletter of the Society for American Archaeology.
- Conferences. Brandon was a discussant for a session at the 2010 Southeastern Archaeological Conference (Lexington, Kentucky) that examined contributions to historical archeology in the state. The session was organized by two Ph.D. candidates (David Markus and Carl Carlson-Drexler) with whom Brandon works closely. He was organizer and chair of a symposium at the 2011 Society for Historical Archaeology (Austin, Texas), and discussant for another symposium at that conference.
- Brandon is chair of the Survey's Publications Committee.
- Brandon is on the Board of Trustees of the Arkansas Historical Association and Conference Chair for the 2011
 Arkansas Historical Association Conference in Little Rock. He also serves on the Arkansas State Review Board
 for Historic Preservation and the Civil War Sesquicentennial Commission.
- Brandon co-owns and moderates the African-American Archaeology Network listserver; he owns and moderates the Southwest Arkansas Archeology Listserver.

• Consultation. Brandon provided consultation and advisory assistance to Historic Washington State Park, including helping Josh Williams, the Park's Curator, with archeological artifacts for display; the Vicksburg District of the U.S. Army Corps of Engineers; the Federal Emergency Management Agency; the Mosaic Templars Cultural Center in Little Rock; and Panamerican Consultants, Inc. of Memphis, Tennessee.

Public Service & Outreach

- Programs & Presentations. Brandon gave talks to the South Arkansas Historical Association (20), Barton Library in El Dorado (22), Camden Rotary Club (15), South Arkansas Community College (2 talks, combined 65), University of Louisiana-Monroe (36), Columbia County Genealogical Society (15), University of Arkansas Community College at Hope (42), Historic Washington State Park (15), McAlester Chapter of the Oklahoma Archeological Society (15), and the Ouachita Historical Society (55) (combined audiences 300).
- Brandon taught a half-day program on the archeology of Van Winkles' Mill to an Arkansas Master Naturalist's class (59 participants).
- Brandon participated in Arkansas Department of Parks and Tourism's Park Interpreter's workshop at DeGray Lake State Park and conducted outreach activities at the annual Jonquil Festival in Washington, Arkansas.
- Consultation. Brandon provided consultation and advisory services to the Helena Civil War Interpretation Group, the Prairie DeAnn Battlefield Preservation Group, the Arkansas Historic Preservation Program, and Historic Washington State Park.
- African American Cemetery Preservation Initiative. Brandon served as humanities scholar on several
 Arkansas Humanities Council Documentation and Preservation grants. He hosted two screenings of the AETN
 documentary Silent Storytellers, and visited cemeteries in the Holly Grove area.
- Arkansas Civil War Sesquicentennial Commission. Brandon is Vice-Chairman of the Commission (appointed by Arkansas Governor Mike Beebe). He recorded a podcast on "Archeology of the Civil War" available at www.arkansascivilwar150.com/research-education/podcasts/.

Service to the Arkansas Archeological Society

- **Kadohadacho Chapter**. The SAU research station hosted meetings for the Kadohadacho Chapter of the Society. Dr. Brandon wrote, printed, and distributed the monthly *Kadohadacho News*.
- **Programs & Presentations**. Brandon gave talks at monthly meetings of the Ko-ko-çi and Kadohadacho Chapters (combined audiences 60).
- Training & Certification Program. Brandon organized the research design and directed excavations at the 2011
 Training Program at Historic Washington State Park. David Jeane served as "Dig Committee" chair, arranging all
 logistics and non-excavation activities.

Volunteer Hours

 Volunteers contributed 6478 hours to station research projects in the field and laboratory. This total includes the Arkansas Archeological Society/Survey Training Program.

Arkansas State University, Jonesboro

Dr. Juliet Morrow, Station Archeologist Robert Scott, Station Assistant (beginning Sept 2010)

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.

News & Research

Earthquake Archeology—aka Paleoarcheoseismology

For the next three years Dr. Morrow will be working with paleoseismologist Dr. Martitia Tuttle to investigate multicomponent sites (those with Archaic, Woodland, and Mississippian occupations) that have earthquake liquefaction features.

Dr. Tuttle wrote a grant proposal to investigate pre-AD 1400 earthquakes in the New Madrid Seismic Zone (NMSZ) and submitted it to the Nuclear Regulatory Commission. The proposal was funded and Morrow agreed to do the archeological research related to the proposed investigations. She will be digging test units and trenches at sites, taking radiocarbon samples where they are available, and dating earthquake liquefaction features using relative dating (based on artifact attributes) and geochemical dating methods.

The research results will help to reduce uncertainties in the recurrence estimates and source model for large earthquakes in the greater New Madrid region, where seismic hazard is the highest in all of the central and eastern United States. This will be achieved by conducting surveys for paleoliquefaction features in key areas that have not yet been systematically searched, constraining age estimates of previously and newly discovered prehistoric sand blows, improving completeness of the paleoearthquake record for the period 1–5 ka (thousand years ago), and extending the earthquake chronology farther back in time to perhaps 10–12 ka. The results of this research will help to characterize the long-term deformation of the Reelfoot Rift fault system and may have implications for other aulocogens (a "failed rift," a particular kind of continental stress feature)

in intraplate settings (that is, areas not along the edges of major tectonic plates). It will also possibly lead to the discovery of very old archeological sites. This is a good example of interdisciplinary research, where archeology is useful for geology (or more specifically, paleoseismology) and vice versa.

3CY91, the Bruce Catt Site

The Bruce Catt site was excavated in May and June 2010. Julie Morrow water-screened about 50% of the excavated deposits at home during that summer. In September, Robert Scott moved the operation to the lab at ASU. The processing of materials excavated from the Bruce Catt site is now complete and all but eight flotation samples have also been processed. With lots of help from students and other volunteers, Robert Scott inventoried all of the Bruce Catt materials that were screened through ½ inch mesh. The totals for each material category are as follows: 9846 ceramic vessel sherds; 3873 pieces of debitage; 39 mostly Archaic and Woodland projectile points; 2 arrow points; 61 chipped stone tools and tool fragments; 25,510 animal bones; 385 complete and fragmentary mussel shells; and 20.7 kilograms of fired clay daub/burned earth.

Morrow originally thought that the site was predominantly Early Mississippian but there is a Middle Mississippian component present in at least one area of the site. This is based on a radiocarbon date recently obtained on acorn from Feature 216 and a loop handled vessel found in a feature between two wall trenches in the northeastern portion of the excavated area. The presence of Early and Middle Mississippian occupations makes this site similar to Buffalo Head Slough (3GE6) which Morrow excavated



Marion Haynes (of the Survey's Blytheville station) and Julie Morrow at the Eagle Eye site (3PO540), which they visited with Dr. Martitia Tuttle to look at ancient earthquake features called "sand blows." They will do test excavations at the site as part of a grant from the Nuclear Regulatory Commission to study pre-AD 1400 earthquakes in the New Madrid Seismic Zone.

in 1997–98. She looks forward to comparing the sites, as Bruce Catt is in the same drainage (Cache River) but close to the Arkansas-Missouri border, much farther north than Buffalo Head Slough.

Woodruff County Shell Pit (3WO345)

A large shallow prehistoric pit (Feature 1 at 3WO345) in Woodruff County was excavated in 2008 by John Riggs, Shaun McGaha, and Morrow. They water-screened most of the deposit and also processed a 56-liter flotation sample. Based on C-14 assay of carbonized hickory nut shell, the pit dates to the Middle Mississippian period. Over the course of the last year, Robert Scott identified all of the mussel shell from the pit; Morrow identified and quantified all of the faunal remains and the small amount of lithics; Robert and John Riggs examined the pottery. John Riggs presented a paper at the Society for American Archaeology on the results of the excavation.

Feature 1 yielded over 2600 faunal remains and about 66% were identified as mammal, turtle, fish, or bird. Just over 300, about 12% of the total assemblage, were identified to at least family level or to a unique taxa (e.g., small rodent, Bobwhite-sized bird). The element representation suggests that it is likely that this pit contains refuse that was removed from other locations and placed into the pit. Complete elements tend to be of smaller animals.

Though generally well preserved, overall the remains were very fragmentary, suggesting they were highly processed, just what would be expected from house and hearth cleaning. Some bones are burned but there is not a definite pattern, such as would indicate roasting as a cooking method. The burning appears to be random and supports the suggestion that the bones were swept up with hearth refuse. Also, there is no evidence of burned soil at the edge of the pit, nor is the amount of burned bone very great. Taken together, the evidence argues that Feature 1 was probably not a cooking pit.

A wide variety of mammals, birds, fish, and turtles were recovered. None of these was necessarily procured very far from the site, as the faunal taxa collectively suggest a bottomland forest adjacent to a major stream and backwater lake system. The total amount of meat that could be produced from these animal remains is 212 pounds (96 kg), but the within bone nutrients like grease (particularly of deer), and the raw materials usable for tool-making and craftsmanship (bones, skin, fur, feathers) contained within some of the birds and mammals would have been as important as the meat. Also notable is a lack of commensal species that would have become trapped in the pit had it been open long enough. Small animals like toads, shrews, voles, mice, snakes, and even some birds can become entrapped in refuse-filled pits if they are left open for any length of time. There is a single distal humerus of an unidentifiable very small rodent which could represent this natural phenomenon. Evidence suggests that the pit was filled in rather quickly.

Archeologist Bruce Smith in a 1975 publication developed a model of seasonal animal exploitation wherein

he identified the 13 most important categories of animal resources for Mississippian societies in the Central Mississippi Valley. In decreasing order of meat yield, these categories are white-tailed deer, raccoon, fish, migratory waterfowl, turkey, beaver, opossum, rabbits, snapping turtle, domestic dog, squirrels, black bear, and elk. Remarkably, Feature 1 contains 8 of these 13 categories. People living at 3WO345 probably did not have to travel far for animal resources. As modeled by Smith, they probably exploited animals seasonally within their own "territory." The categories in order of meat yield at 3WO345 are as follows: white-tailed deer, beaver, raccoon, turtle, fish, waterfowl/turkey, rabbit, mink, and squirrels.

Analyses similar to those conducted for Feature 1 at 3WO345 are also being conducted on two trash pit features from Kreb's Place, an early Middle Mississippian site for which Morrow has recently obtained two C-14 dates.

Dalton Experiments

The Sloan site (3GE6) is generally considered to be the oldest formal, open air cemetery in the New World. It was the place where a band of Dalton foragers buried their dead in ceremonial fashion about 12,400 years ago. It is one of the most significant sites not only in Arkansas, but in the world. Archeologists around the world who study the Pleistocene to Holocene transition—the end of the Ice Age—are familiar with it. Many of the large Dalton points look as if they may have been freshly made, or at least were freshly re-sharpened, before they were interred with people's loved ones.

Recently Morrow undertook a series of experiments to answer the question "Were the large Dalton points at the Sloan site ever used?" It had been suggested that the points looked pristine and were not "tools" per se but ceremonial items. Morrow's idea was to use a set of Dalton points on a variety of different materials to see what kind of microscopic wear traces, if any, they would obtain from use. From background literature, it is clear that certain materials used for certain lengths of time produce certain wear traces on stone tools. But there are a lot of variables, such as duration of use, worked material, manner of use, and the stone tool material itself. Dalton points are thought to have functioned as both knives and as projectile points. None of the large Dalton points from the Sloan site has impact fractures suggestive of projectile use, so if they have use-wear traces, they would probably indicate signs of a cutting motion.

Local flintknapper Jeff Gatewood made a set of really beautiful Dalton points that were similar to some of the Dalton points from the Sloan site. After Morrow measured and photographed them microscopically, she hafted them securely onto deer antler handles with artificial sinew and glue to help hold the points in place. Don Bragg of the Forest Service in Monticello, Arkansas, bagged a button buck



Dalton points from the Sloan site.

in January which he donated to the experiment. Morrow used one Dalton to simply remove the skin, trying hard not to scrape bone or have the point touch anything other than the hide. She used primarily one edge of the tool to maximize any signs of use that might be left on that edge. This was her first such experiment, and she did not even know if removing one hide would be enough to produce recognizable use wear traces.

A second hafted Dalton knife was used to cut meat off the limbs, again trying not to touch bone with the tool so that the wear traces would be exclusively attributable to cutting meat.

Morrow used a third Dalton point to dismember the deer. This tool was constantly hitting bone, cartilage, and tendons. She raises goats and sometimes has to cull the herd, so in February she used the fourth hafted Dalton point to butcher one of her goats. This activity involved using the Dalton point on both hard (bone), medium (cartilage), and soft (meat) tissues.

All of these Dalton points were used on different materials, but for the same amount of time: 40 minutes. One remaining point was used to simply cut meat for 20 minutes to see if such a short duration of use would produce any wear traces. Using the station's new Olympus SZ61 microscope with an attached camera, Morrow then analyzed the wear traces on her suite of Dalton replicas,

and studied 12 of the large Dalton points from the Sloan site. She found that nearly all of the large Sloan Dalton points that she examined had traces that were comparable to some of the traces identified on the replicated Dalton points used in the experiments.

Morrow is continuing this project by expanding the range of worked materials. Two additional hafted Dalton replicas have been applied to soft wood and hard wood species that were available to Dalton people at the time the Sloan site was being used. During the winter of 2011-2012, with help from her friends who like to deer hunt, Morrow plans to continue using the Dalton point replicas that she already documented as skinning and butchering tools to the point where they will need to be re-sharpened. (Except for the one used to dismember the carcass, they are still sharp.) Ultimately she wants to know how many hours of use are required before re-sharpening is necessary. When the implements have to be re-sharpened again, she will depend on master flintknapper Jeff Gatewood to do this, as he is an expert, he made the original tools, he is familiar with the raw materials, and will be less likely to break one of them. All of the Dalton replicas were made from cherts that were used by Dalton peoples.

After each use and each re-sharpening, replicas must be analyzed and photographed at various powers ranging up to 100x so that any and all wear traces can be documented. Some wear traces, such as those produced by cutting meat, are difficult to see at lower magnifications (e.g., 20-40x).

3CG972

Site 3CG972 was first identified in 1989 by Butch Wilkins, who was an Arkansas Game and Fish officer at the time. Butch is now a state representative and lives in the Jonesboro area. He found an Early Archaic (Dalton) point made of Pitkin chert from the Ozarks at a site on Crowley's Ridge in a wooded area along a fenceline near Ridgepoint subdivision. In 1992 Dan Morse and Butch Wilkins returned to the site and found a few flakes of chert but did not collect them. Morrow learned about the site in 2007 when she came across it on a map. It was marked as a site whose exact location was not known.

During the spring of 2011 Morrow decided to try to relocate the site. E. Sloan Farms granted permission to conduct a survey and to test the site if it were found. Robert Scott and Julie Morrow placed six exploratory shovel tests in the mapped location. One produced a fencing staple, which gave the team hope that they were in the right place. Robert Scott directed students from Morrow's Introduction to Cultural Anthropology and Introduction to Archaeology classes, who shovel tested the landform of the mapped area. Arkansas Archeological Society member Scott Akridge and ASU graduate student Louis Intres also helped out one day.

The students and volunteers who work with Julie Morrow consistently report how much they value these field opportunities. The field and lab work they participate in enables them to gain hands-on experience outside the classroom, which is as important for their understanding of the discipline as are lectures and textbooks. They also learn first-hand that archeology involves numerous physical and mental skills, both in the lab and in the field. Many students acquire a more realistic perspective of archeology once they have done lab and/or field work.

The students and volunteers placed an additional 51 shovel tests across the area but found only one artifact in any of these tests. This one artifact, however, substantiates the presence of an Early Archaic occupation at this landscape position. It is a chipped stone biface fragment that is heavily serrated along the lateral margin. Evidence of a compression fracture indicates it was probably used as a spear tip. Perhaps an Early Archaic period person was hunting up on the ridge 10,000 years ago and the point struck something hard like wood (a tree?) or bone (a deer?). In any case, this small fragment was the only clear evidence of any occupation. The soil profiles of the shovel tests indicate that logging or some other disturbance has destroyed the original soil profile across the landform.

An additional site was recorded in an area planted for a game food plot we drove through to get close to the location of 3CG972. This new site, designated 3CG1244, yielded flakes and shatter from stone tool manufacture but no formal artifacts to help date the site.

ASU Station Personnel

Juliet Morrow (Ph.D., Washington University in St. Louis, 1996) is Research Station Archeologist for ASU/Jonesboro with the Survey 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 in September of 2010.

Grants, Honors & Awards

• \$1450 from the Arkansas Archeological Society's Archeological Research Fund for analysis of macrobotanical specimens (by Dr. Patti Wright) from Mississippian sites.

Teaching & Higher Education

- Teaching. Morrow taught Introduction to Archaeology (16 students) and Introduction to Cultural Anthropology (55 students) for the Department of Criminology, Sociology, Geology and Social Work at ASU. She directed one Ph.D. candidate in ASU's Heritage Studies Program in an Independent Study course ("Archaeological Looting in Arkansas") and one graduate student in the History Department's M.A. program in a History Internship ("Faunal Identification"). Morrow provided a guest lecture on Arkansas archeology for Dr. Paul Sickle's biology course at ASU.
- ASU Museum and Campus. Morrow wrote a proposal for the creation of an Anthropology Minor at Arkansas
 State University. She assisted the ASU Museum with NAGPRA grant matters involving artifacts, human skeletal
 remains, and consultation with Quapaw and Osage representatives. Morrow served as a judge in the Earth and
 Atmospheric Sciences category for the 2011 Northeast Arkansas Science Fair on the ASU campus.

Professional Service

- As a member of the Survey's Personnel Committee, Morrow participated in the search and hiring process for new station archeologists and assistants.
- Morrow provided peer review for the journal *Quaternary International*.
- Morrow reviewed a book for the *Journal of the Iowa Archaeological Society*.
- Consultations. Morrow assisted Arkansas Game and Fish employees and Representative Butch Wilkins with a site management issue at Bono Lake.

Public Service & Outreach

- Programs & Presentations. Julie Morrow gave talks to the Craighead County Historical and Genealogical Society in Jonesboro (70), the Green County Historical and Genealogical Society Heritage Fair in Paragould (50), the Archeological and Geological Society of Memphis (65), and a children's group at the Jonesboro Public Library (60); she assisted at two Artifact Identification Day events at Parkin Archeological State Park (37) (combined audiences 282).
- Museums. Robert Scott organized and managed an artifact identification table and artifact exhibit at the ASU
 Museum's Archeology Day during Arkansas Archeology Month. Julie Morrow edited exhibit text and administered a loan of artifacts to the Cross County Historical Society Museum.

- Media & Site Conservation. Julie Morrow and steady volunteer Robert Taylor were interviewed by Nan Snider for an article in a northeast Arkansas magazine on the Zebree site. Morrow wrote an article on how flooding impacts archeological sites for the *Jonesboro Sun*. She also wrote a summary of research at the Bruce Catt site for the Survey's "Indians in Arkansas" educational website (http://arkarcheology.uark.edu/indiansofarkansas/index.html?pageName=Bruce%20Catt). Morrow assisted the Archaeological Conservancy in its purchase of the Sloan site.
- Cemetery Preservation Initiative. Morrow corresponded with various individuals concerning a cemetery at Weiner and Thomas Cemetery in Little Rock; she interviewed Ronald Coleman about a possible African American cemetery near Trinity in Craighead County; she served as Humanities Scholar for two AHC grants, one for a cemetery in Jackson County, and one for Spencer/Ainsworth Cemetery; she was a consultant on a project attempting to locate the county poor farm cemetery in Haywood County, Tennessee.

Service to the Arkansas Archeological Society

- Central Mississippi Valley Chapter. The station organizes and hosts Chapter meetings from September through May with guest speakers. Throughout the year the station provided opportunities for volunteers who wish to assist with fieldwork and laboratory processing.
- **Programs & Presentations**. Morrow presented programs at monthly meetings of the Ouachita (Hot Springs) and Kadohadacho (Magnolia) Chapters (combined audiences 59).
- Training & Certification Program. Robert Scott taught the Site Survey seminar during the 2011 Training Program at Historic Washington State Park.

Volunteer Hours

• Volunteers contributed 1056 hours to station research projects in the field and laboratory.



A family-friendly archeology event, "Peek Into The Past," with hands-on Native American themed crafts, artifact IDs for visitors, a guided tour, storytelling, and special exhibit, is organized at the ASU Museum during Archeology Month (March) with help from Julie Morrow and the Survey research station.

Blytheville Research Station

Dr. Claudine Payne, Station Archeologist Marion Haynes, Station Assistant (retired, 2011)

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 well over 1000 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.

News & Research

Mississippian Architecture and Community Patterns

Tim Mulvihill (of the UAFS station) and Marion Haynes finished mapping the Eaker site with the new robotic total station. In November, Jami Lockhart (the Survey's archaeogeophysical research specialist) carried out geophysics at Eaker to fill in remaining gaps. In the spring of 2011 Dr. Payne and her team planned a poster for presentation at the 2011 Southeastern Archaeological Conference. The poster pulled together the geophysical investigations over the course of several years and incorporated the final topographic map to illustrate such features as earthquake effects, houses, and a possible plaza at the site. Work also continued on a small report on the 3MS59 site, based on Mulvihill's mapping done earlier in 2010 and a review of the artifacts in the station collection.

Collection Rehabilitation: St. Francis Basin

Claudine Payne finished work on a grant proposal to the National Endowment for the Humanities' "Humanities Collections and Reference Resources" program and submitted it in early July. Funding was requested to support a Collections Manager for three years to put the 1221 Mississippi County accessioned collections in good order and create finding aids for the collections.

Lake Jackson Heirlooms

Earlier in 2010, Claudine Payne presented a paper at the Society for American Archaeology's annual conference in the symposium "James Brown and the Impact of Cahokia in the Mississippian Southeast." She then revised the paper for inclusion in a book based on the symposium. Her chapter, "The Disposal of Heirlooms and the End of Memory at Lake Jackson," addresses the nature of heirlooms in Mississippian society and the issue of curated items buried long after they were made. She finished revisions and submitted the chapter in December.

Monitoring Demolition of a Log Structure

For several years, the station staff have monitored the status of a double-pen log structure at the edge of Blytheville that probably dates to the 1890s. This date would make it one of the oldest structures existing in Blytheville. It had been deteriorating steadily over the years as the roof fell down and the elements took over. This year it was scheduled for demolition with the logs to be used elsewhere. Marion Haynes monitored the demolition and, after removal, dug a backhoe trench east-west across the site. Haynes found no domestic debris, supporting WRI archeologist Skip Stewart-Abernathy's view (he had examined it some years ago) that the structure was used as a barn.

Marine Shell Inventory and Analysis

The station started up a marine shell inventory and sourcing project in collaboration with Parkin station archeologist Jeff Mitchem and Cheryl Claassen. Claassen and her students have two analytical techniques for identifying the constituent elements of marine shell. The Survey loaned Claassen marine shell beads from several sites in eastern Arkansas for nondestructive analysis. The second technique involves destructive analysis which will be limited to a much smaller sample of beads and will be carried out by graduate student Karen Stephens at Appalachian

State University. This work builds on Claassen's earlier analysis of marine shell sources (published in a 1993 American Antiquity article). We hope to add to the extant information and eventually identify the source areas where eastern Arkansas marine shell originated, thus adding to our body of knowledge about the interactions of Mississippian people in northeast Arkansas.

Planning a Symposium for the Society for American Archaeology

The 2012 SAA annual meeting will be in Memphis, so Dr. Payne began planning for a symposium on the Nodena Art Style. The preliminary title is "Precolumbian Ceramic Art in Arkansas and Missouri: Archaeological, Anthropological, and Art Historical Approaches to the Nodena Art Style." The preliminary abstract is as follows:

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 know 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 ce-

ramic sculptures are open to approaches beyond the usual archaeological ceramic analyses. In this symposium, we examine the Nodena art style from multiple perspectives, addressing social issues such as the identities of artists and audience, archaeological concerns such as geographic and temporal boundaries, and design matters such as design execution, motifs, iconography, and affective properties.

Earthquakes and Archeology

Marion Haynes worked with seismologist Martitia Tuttle to prepare earthquake site excavations for documentary filming by National Geographic and for a tour by members of the Seismological Society of America. He also worked with geologist Phyllis Steckel to coordinate her Earthquake Insights tour, and he gave presentations to the participants. Marion made his YouTube debut talking about historic evidence for earthquakes in a video posted by the Center for Earthquake Research and Information. He also provided a tour of an earthquake site to a local KIPP school teacher. At the request of a colleague, Claudine Payne and Marion Haynes each reviewed a chapter in a planned book on the New Madrid earthquakes.



Marion Haynes presenting "Thinking Like an Archeologist" to students at Blytheville Middle School. The station works closely with area schools.

Blytheville Station Personnel

Claudine Payne (Ph.D., University of Florida, 1994) is Research Station Archeologist with the Survey 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 Precolumbian 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.

Marion Haynes joined the Survey in 1999. A lifelong resident of the Blytheville area, he attended Southern Baptist College and the College of the Ozarks before returning to family farm operations in northern Mississippi County. Over many years he volunteered with Survey archeologists to record and preserve sites in the county, and assisted U.S. Geological Survey studies of the New Madrid Seismic Zone. From 1995–1997 he worked for Mid-Continental Research Associates, a private firm, on archeological survey within the Eaker air base property. Marion retired from the Survey June 30, 2011.

Professional Service

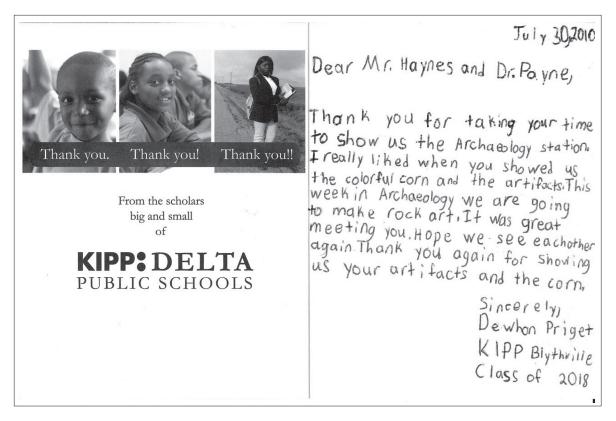
- Payne is a member of the Southeastern Archaeological Conference Public Outreach Committee; the committee reviewed nine grant proposals.
- Payne and Haynes each provided chapter reviews for a colleague's book manuscript.

Public Service & Outreach

- **Programs & Presentations**. The station hosted participants in the Earthquake Insight tour, and Marion Haynes gave a presentation on Archeology and Earthquakes (about 50 participants); Haynes also led a tour of earthquake sites for members of the Seismology Society of America (attendance 50) and gave a talk to participants in the Westminster Village tour to Historic Davidsonville State Park (attendance 15). Payne and Haynes participated in two Artifact ID days at Parkin Archeological State Park (combined audiences 115).
- Public Schools. The station continued collaboration with the new Blytheville KIPP school. Director Maisie Wright wants to bring archeology into the curriculum. Marion Haynes gave a tour of earthquake sites to a KIPP teacher. In July about 60 KIPP 5th graders visited the station and heard presentations by Dr. Payne and Marion Haynes. The two also gave a series of presentations at Blytheville Middle School (about 200 students). Payne presented three sessions of "Archeology as a Career" to 7th and 8th graders at Arkansas Northeastern College's Career Day in Blytheville (attendance 80). (Combined audiences 340.)
- Delta Gateway Museum. As Vice-Chair of the Delta Gateway Museum Commission, Payne worked with the Museum's new Founding Director, Leslie Hester, to research grant opportunities. In September, the Museum was awarded \$4800 from the Arts Council of Mississippi County for "Delta History-to-Go," a project to prepare eight traveling teaching boxes on the planned themes of the Museum, and a workshop for teachers on how to use them. Payne began working on two of the trunks—one on agriculture, including Native American agriculture, and one on Native Americans and archeology. Hester began trunks on the steel industry and on earthquakes. Claudine Payne also worked with the Commission and the Director to get the museum ready to open in future. She helped arrange the acquisition of a donated exhibit originally prepared for the Florida Museum of Natural History and later donated to Parkin Archeological State Park and the Delta Cultural Center. In March, the station and DGM jointly sponsored an Artifact ID Day (about 50 visitors). For this event, Payne and Marion Haynes also prepared a small temporary exhibit on a recently located early-to-mid-19th century farm site.
- Other Outreach & Consultations. Payne advised a local author planning a book on the impact of the de Soto expedition. Marion Haynes appeared in a YouTube video "Earthquake Features: Historic Evidence" by the Center for Earthquake Research and Information; the video (www.youtube.com/watch?v=0fACj3206uQ) was viewed 479 times as of July 2011. Haynes was again appointed by the Governor to the Arkansas Governor's Earthquake Advisory Council.

Service to the Arkansas Archeological Society

• Training & Certification Program. Payne taught an Advanced Lab seminar at WRI on Petit Jean Mountain (7 participants). She taught the Basic Lab seminar during the 2011 Training Program at Historic Washington State Park (11 participants). Marion Haynes provided field supervision and other assistance during the Training Program.



Students from the KIPP School in Blytheville wrote thank you postcards after their visit to the research station in July 2010. The station has been working closely with the school's director Maisie Wright to develop archeology as a unit and learning element within the curriculum.

Sponsored Research Program

Dr. Robert C. Mainfort, Jr., Administrator Kathleen Cande and Randall Guendling, Project Archeologists Michael Evans, Jared Pebworth, and Aden Jenkins, Research Assistants

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 provides service to the University community through teaching, graduate committee membership and advising, and occasional employment opportunities for qualified students as field and laboratory technicians. SRP staff members routinely serve as consultants to various state and federal agencies. The research assistants are invaluable contributors to research projects across the statewide program, contributing to fieldwork at all research stations, and performing various specialized laboratory and computer tasks.

News & Research

Archiving Records and Photographs of the Arkansas Archeological Survey

The Arkansas Archeological Survey has received funding to conduct a complete review of all records associated with approximately 1200 excavation projects. Kathleen Cande will be in charge of the review. These projects have been carried out since the Survey was created in 1967. Many thousands of artifacts have been collected over this period. They are very important; however, they are meaningless without the associated field notes, excavation drawings, site maps, photographs, and analysis sheets. The records provide the context with which to interpret the material remains. The records include more than 60,000 black and white film negatives, at least 60,000 color transparencies, over 284 linear feet of paper records, many dozens of maps and drawings, and an unknown number of digital databases.

Many of these records are now more than 25 years old and some are over 40 years old. Color slides are fading or deteriorating, paper records are becoming brittle and difficult to read. These resources require special preservation treatment. It has always been the Survey's policy to make a duplicate copy of all records generated, and to keep one copy at the appropriate research station and the other at the Survey's coordinating office in Fayetteville. All of these records now need attention.

The goal of this project is to prepare an initial inventory and preliminary assessment of archeological project records at the coordinating office and at each of the 11 research stations around the state. Once this has been done, we will have the information necessary to apply for

additional funding for preservation of the records, which have both statewide and national significance.

To date, comprehensive computerized lists of archeological projects for each research station have been created. The tables list the archeologist who directed each project and whether or not records and photographs were generated as part of the project. The information in these tables will be used as a starting point when visits are made this fall to each of the research stations.

The Survey registrar has determined and requested that valuable project records be scanned as PDFs rather than recorded on microfilm, going forward. PDFs are now the global standard for capturing and reviewing and sharing information for virtually any application on any computer system. Our goal is to create a system for the Survey for long-term records storage and accessibility.

East Arkansas Sites Inventory

Randall Guendling directed this project, funded by Arkansas Natural and Cultural Resources Council (Grant No. 11-002). "Preserving the Prehistoric Heritage of Northeast Arkansas" had two goals: to inventory and evaluate the condition of extensive collections from northeast Arkansas that are curated by the University of Arkansas Museum Collection facility, and to upgrade those collections following the recommendations made by the museum conservator who evaluated collections under previous ANCRC Grant 07-006. Guendling submitted a Final Report for Grant No. 11-002 in July 2011.

Much of the material in the UA Museum Collection was excavated by the Museum in the early 1930s. As part

of the inventory process, data for each object or object class was entered into a computerized database. The collections upgrade phase involves reboxing of collections by museum staff into conservation quality materials purchased with grant funds, and is being implemented as multi-year grant requests.

The first year of the grant (ANCRC Grant 10-008) estimated 386 collections from northeast Arkansas; however, it was soon discovered that many of the collections included in that compilation were from mandated regulatory cultural resource studies and included sites that had been analyzed and the data—though not converted to museum catalog cards—was available in different formats. Thus, a more efficient approach was developed that concentrated on large sites with uncataloged multi-year museum collections. The second year of the grant continued this approach on a county by county basis.

Integral to this project is the upgrading of storage for the curated objects. In many instances, we are finding specimens still in the original acidic paper bags as returned from the field. All the collections will eventually be reboxed, largely through volunteer work, using new acid-free archival-quality containers purchased with grant funds.

The second half of the grant year saw the completion of 66 collections from Mississippi, Crittenden, and Cross counties stored in the Museum Collection facility. An additional 9024 catalog records representing some 10,306 individual objects were generated. One hallmark of east Arkansas archeological collections is the presence of numerous late prehistoric burials and associated ceramic vessels. Although the burials have already been inventoried in response to the Native American Graves Protection and Repatriation Act, this information has not been entered into the master database. It is now being incorporated, along with photo archive data, making the Survey site database more integrated than ever before. We estimate that ANCRC funding has enhanced functionality of the database at a 2:1 or 3:1 ratio for every dollar spent.

New Grants and Contracts in FY 2010-2011

Project No. & Name	Firm or Agency	Budget
I I-07 Prairie Grove Battlefield State ParkI 2-01 Prehistoric Heritage of NE Arkansas (Yr 3)I 2-02 Aiding Interpretation at Parkin Archeological	Arkansas Dept. of Parks & Tourism ANCRC ANCRC	\$101,000.00 \$91,586.00 \$19,847.00
State Park Total		\$212,433.00

^{*}ANCRC = Arkansas Natural and Cultural Resources Council

SRP Personnel

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) joined the Survey in 1987. Her specializations include archeological textile analysis, archival research, collections management, the colonial Southeast, and historical archeology. Ms. Cande also manages and supervises the SRP laboratory.

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

Michael Evans, Jared Pebworth, and Aden Jenkins. Research Assistants, contribute varied skills to SRP, the coordinating office, and station research projects, 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, and conservation of metal artifacts.

SRP Service Activities

Teaching & Higher Education

• Mainfort taught ANTH 4093, The Archaeology of Death, for the Department of Anthropology at UAF (11 students). He served on five graduate student committees in the Anthropology Department.

Professional Service

- Peer reviews. Mainfort provided peer review for International Journal of Historical Archaeology and Southeastern
 Archaeology and for a National Science Foundation grant proposal. He served as external reviewer for a tenure
 promotion case.
- Mainfort serves on the editorial board of Midcontinental Journal of Archaeology.
- Cande serves as current research editor for Arkansas for the *Southeastern Archaeological Conference Newsletter*, and as current research editor for the Gulf States region for the *Society for Historical Archaeology Newsletter*.
- Cande is a member of the Survey's Publications Committee.
- Consultations. Mainfort served as a consultant to the University of Arkansas Museum Collection, Arkansas Department of Parks and Tourism, Department of Arkansas Heritage, and Shiloh Museum of Springdale. Cande served as a consultant to Arkansas Department of Parks and Tourism, Davidsonville Historic State Park, Jacksonport State Park, Old Statehouse Museum, and Pea Ridge National Military Park.

Public Service & Outreach

- Guendling is a permanent member of the Lakeport Plantation Restoration Team.
- Cande serves on the Steering Committee for commemoration of Lawrence County, Arkansas's Bicentennial (2015).
- Arkansas Archeological Society. Mainfort taught the Ceramics seminar during the 2011 Training Program at
 Historic Washington State Park. Jared Pebworth worked as a site supervisor at the Training Program. Aden Jenkins also attended the Training Program and assisted with excavations. Evans, Pebworth, and Jenkins participate
 in many field projects around the state to which Society members contribute, thus helping to train and mentor
 these volunteers.
- **Programs & Presentations**. Kathleen Cande gave a Brown Bag Lunch Lecture at the Old State House Museum during Archeology Month (audience 50).

Computer Services Program

Dr. Jami Lockhart, CSP Coordinator & Director of Archaeogeophysical & GIS Applications Deborah Weddle, Information Technology Support & Internet Applications John Samuelsen, Server Administrator

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.

News & Research

Equipment & Tech Support

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

Comprehensive Backup System

John Samuelsen is responsible for administering the Survey's servers and databases, including AMASDA, on a day-to-day basis. In August 2010, with funding from the American Recovery and Reinvestment Act of 2009 (ARRA), the Survey purchased a server and equipment to provide a duplicate and remote backup system of critical records. The backup system allows the Survey to meet some of the directives assigned to it by the Arkansas State Legislature in Act 39 of 1967 (Section 3), including the goals of securing archeological data and custodianship of information about artifacts, sites, and other archeological results. Servers already in use were refitted with additional equipment to allow for the duplication of backups. The long-term goal is to create a central repository for all information generated by the organization, on behalf of the state of Arkansas. The current system creates daily and weekly backups, with redundancy, as a safeguard against any critical failure. The backup system is also used as file storage for employee documents. This is particularly

important, as staff are located at station offices dispersed across the state, but may need to share and access documents on collaborative projects. Ultimately, the system is designed to accommodate future expansion for storage of the many tens of thousands of large format files, including graphics and maps, anticipated to be generated through archeological projects in Arkansas. A corollary to the upgrades was improved speed and functionality for our educational websites and databases that serve the public.

Database Administration and Grant Participation

AMASDA Online is a project to expand and update our computerized archeological site and information databases and to make them available via the Internet to authorized users. It is funded by a \$425,436 multi-year grant from the Arkansas Highway and Transportation Department. This new system is of enormous benefit to various agencies and departments in Arkansas such as AHTD who must conform with environmental regulations and laws that include impact assessment or protection and management of archeological sites—users are able to do records checks and basic background research on known archeological sites within their project areas without making the trip to Fayetteville, thus saving time and expense. The system was updated this year to allow for download of scanned site file extensions, which contain detailed information about excavations and testing.

A new addition to the system is the beginning stages of a ceramic and artifact database for the state. Work on this project is proceeding with the expertise of Dr. Ann Early, Dr. George Sabo, Leslie Walker, and Dr. Mary Beth Trubitt. Samuelsen contributed by helping to collect geophysical data, for example at the Carden Bottoms site. Material from this area is being used to populate the ceramic portion of the database under construction.

Geographic Information Systems

Lockhart is developing a comprehensive Geographic Information System (GIS) for the Prairie Grove Civil War Battlefield. Digital data layers include historic maps, modern battle interpretations, digital elevation models, and a series of aerial photos beginning in 1941 being used to locate and interpret lost features of the 1862 battle.

Lockhart also continued using GIS for statewide site potential modeling associated with the AMASDA Online project. A statewide environmental similarity model for prehistoric sites has been completed. Individual models based on time period, cultural affiliation, and physiographic region are being developed for research purposes, and for use in combination for land planning applications.

The Survey on the Web

The Survey's main website < www.arkansasarcheology. org > had approximately 9322 visits (averaging 776 per month) in 2010–2011. The site provides information for various audiences:

- a section on state laws relevant to archeological resources
- information on Survey publications about archeology and how to order them
- new this year are free digital versions of out-of-print Survey publications, available as downloadable PDFs
- news about excavations and research projects
- instructions on how to contact our research stations, how to report a site, or to request information
- a downloadable Teacher Packet with information about archeology, American Indians, and early Euroamerican explorations and settlement in Arkansas
- state standards for fieldwork and report writing, providing guidelines for private research firms and agency archeologists

- 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

The CSP also maintains two interactive educational websites. *Indians of Arkansas* http://arkarcheology.uark.edu/indiansofarkansas/index.html is designed for the public and contains both academic and indigenous perspectives on American Indian history. The site received 60,000 unique visits (145,000 hits) in 2010–2011 (5000 unique visits/12,000 hits per month). *Rock Art in Arkansas* http://arkarcheology.uark.edu/rockart/index.html is designed for public education on the prehistoric and historic rock art of Arkansas, with articles, picture gallery, classroom ideas, and a searchable database of images and information. The site had nearly 17,000 unique visits (over 32,000 hits) during the year (1400 unique visits/2700 hits per month).

George Sabo incorporated his website about the NEH-funded Central Arkansas River Valley project into his **Indians of Arkansas** website under a menu head of "Current Research." More information was added to the progress reports on the project. Articles by other Survey staff on current research projects were also added to these pages, for a unified educational interface providing the public with quick access to some of the Survey's most recent and ongoing research in the state.

Service Websites

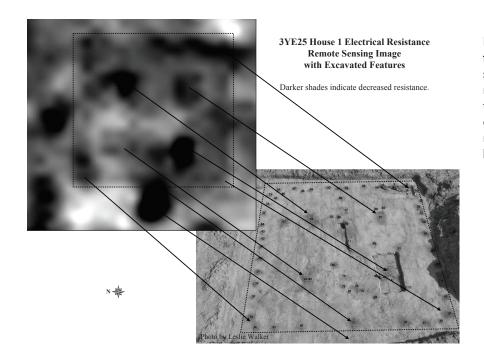
Archeological Parks in the U.S. <www.uark.edu/misc/aras> provides information on parks that interpret archeological sites or feature results of archeological investigation. The site received approximately 4562 visits for the year (average 380 per month). We also host a service website for the South Central Historic Archeology Conference and provide a link to the Arkansas Archeological Society on our homepage.

Archaeogeophysical Research - Dr. Jami Lockhart, Director

The Survey's comprehensive program of archaeogeophysical remote sensing applications is directed by **Dr. 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.

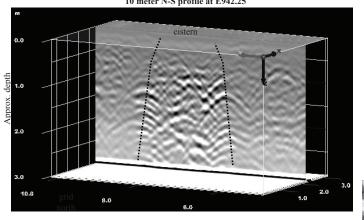
Archaeogeophysical Research Projects, 2010–2011

- Carden Bottoms archeological site (3YE25) near Dardanelle, AR. In 2009, Dr. 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. Coincident with the start of that project, the National Resource Conservation Service requested that the Survey provide an archeological impact assessment associated with planting hundreds of trees at the Carden Bottoms site, creating a long-term conservation area. Remote sensing is being used to analyze intra-site settlement patterns, to accurately locate archeological features for protection, and to pinpoint the excavation of multiple prehistoric structures and other cultural features. See photos on the next page.
- Historic Washington State Park. In March, Lockhart (with Duncan McKinnon, Michael Evans, Dr. Jamie Brandon, and David Jeane) conducted a remote sensing survey using resistivity, conductivity, magnetometry, ground penetrating radar, and magnetic susceptibility to cover all of Block 6 at Historic Washington, AR. Interpretations of the remote sensing images were used to pinpoint archeological features for excavation during the Arkansas Archeological Society's Annual Training Program. The excavations, led by Dr. Jamie Brandon in June, confirmed three historic structures, a brick cistern, and other smaller features. Additional features of the 19th-century frontier commercial block will be explored during the 2012 Training Program. See photos on the next page.
- Prairie Grove Battlefield State Park. Lockhart (with co-principal investigator Jerry Hilliard, and Michael Evans, Jared Pebworth, Aden Jenkins, Devin Pettigrew, Tim Mulvihill, Duncan McKinnon, and John Samuelsen) carried out remote sensing surveys at Prairie Grove Civil War Battlefield as work associated with a \$101,000 National Park Service "American Battlefield Protection" grant to Arkansas State Parks, who in turn contracted with the Survey. The objectives of the project are to locate four houses with out-buildings, a post office, a cellar, a road, and multiple trench burials—features that figured prominently in the December 7, 1862 battle.
- Rio Grande do Sul, Brazil. Lockhart continued his research in support of an interdisciplinary, multicultural research project in the sparsely populated southern Brazilian highlands. Lockhart traveled again to the Rio Grande do Sul region to study a cultural landscape once inhabited by the twelfth to thirteenth-century Taquara/Itarare tradition. Lockhart provided training for site mapping, remote sensing, and geographic information system technology to a Brazilian field school while collecting data to pinpoint prehistoric features for summer and winter excavations.
- Tate's Bluff Mound (3DA673). Lockhart, Dr. Tom Green, Dr. Mary Beth Trubitt, and John Riggs (NRCS)
 performed a remote sensing survey of the Tate's Bluff mound site in Dallas County leading to the discovery of
 archeological features in subsequent excavations.
- Chismville historic site. Lockhart, Larry Porter, Michael Evans, Jared Pebworth, and Aden Jenkins carried out a
 remote sensing survey to guide excavations at the 19th-century Chismville near Booneville, AR. The site includes
 remains of a two-pen log structure that has been owned by five generations of the Williams family, and served as a
 home, voting precinct, hotel, jail, and a hall for weddings and dances.
- Peak Mound site (3PP274). Lockhart, Dr. George Sabo, the Survey's Central Arkansas River Valley archeological research team, and UA students performed a remote sensing survey of the Peak Mound site in Pope County to discover archeological features for future testing.



Remote sensing image from the Carden Bottoms site, showing anomalies representing a prehistoric house floor, and the excavated house floor, as revealed by post hole and hearth features in the soil.

Historic Washington, Block 6, Ground Penetrating Radar 19th Century Cistern profile view to the northeast 10 meter N-S profile at E942.25



Ground penetrating radar signature of a buried 19th-century brick cistern at Historic Washington.

The brick cistern as it was excavated during the June Training Program at Historic Washington State Park. Arkansas Archeological Society member Don Higgins stands inside the partially excavated structure.

CSP Personnel

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.

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, GIS, and the use of multimedia technologies for education.

John Samuelsen (M.A., University of Arkansas, 2009) is currently a Ph.D. student in Anthropology at UAF. His specializations include web application development, database management, GIS, archaeogeophysics, and archeology of the American Southeast.

CSP Service Activities

Professional Service & Activities

- Lockhart is a co-principal investigator (with Jerry Hilliard and Dr. Tom Green) of the Survey's \$101,000 contract supporting a one-year study of the Prairie Grove Civil War Battlefield in northwest Arkansas under a National Park Service "American Battlefield Protection Grant" to Arkansas State Parks.
- Lockhart is a co-principal investigator (with Dr. George Sabo III and Dr. Andrea Hunter) of the Survey's \$240,000 grant from the Collaborative Research Program of the National Endowment for the Humanities to support a three-year study of American Indian art, ritual, and social interaction in the Central Arkansas River Valley.
- Lockhart served on the Survey's Publications Committee.

Public Service & Outreach

Invited Presentations. Lockhart gave a presentation on historic cemetery preservation at the Buffalo River
Headquarters in Harrison, Arkansas. He presented programs on remote sensing research at Pea Ridge and Prairie
Grove Civil War Battlefields to members of the National Park Service, Arkansas State Parks, and the Arkansas
Civil War Sesquicentennial Commission. He summarized the use and findings of geophysical remote sensing
and GIS at the Carden Bottoms site for Caddo, Quapaw, and Osage guests during a project review meeting at
Winthrop Rockefeller Institute.

Office of the Registrar

Lela Donat, Survey Registrar
Marian Kunetka, Assistant Registrar
Student employees (part-time):
Teka McGlothlin (undergraduate)

Duncan McKinnon, Leslie Walker (graduate students, Ph.D. program in Anthropology)

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.

News & Activities

Managing the State's 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 827 new sites were recorded, bringing the total for the state of Arkansas to 45,486. New information for 322 previously recorded sites (revisited by various persons during the year) was also added. New archeological projects numbered 105 this year, bringing the total projects listed in AMASDA to 6141. Finally, 11 archeological collections were accepted for curation.

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.

Approximately 175 researchers visited the office during FY 2010–2011. In addition, the office received about 216 requests for site information via 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 National Forests, primarily

Arkansas Archeological Survey Site File Activity, 2010–2011

New Sites		Total no. of sites
Recorded	827	in Arkansas site files: 45,486
New Data for		,
Known Sites	322	
Access to		
Site Records	175	
Collections		
Accessioned	11	
New Projects		Total no. of projects
Entered in AMASDA	105	in AMASDA: 6141

the Ozark-St. Francis and Ouachita Forests. Responses were by email, fax, telephone, or post.

In the course of the year, the registrar's office also assisted about **30** private firms doing research in Arkansas. A comprehensive list is provided on page 87.

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 Dr. Tom 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.

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 Andrew LoPinto (Isgrig skeletal material), Andrew Gottsfield (Spradley Hollow site), and Trevor Seekamp (Breckenridge Shelter). The number of students using our records has steadily increased.

The Survey was able to employ several UA students in the registrar's office. Teka McGlothlin (UAF anthropology major) is a work-study/hourly employee. Ph.D. students Leslie Walker and Duncan McKinnon were employed on grant funds.

Fifth graders from East Side Elementary School also toured in the spring during a visit to the Survey. At the Registrar's Office, the kids were especially delighted by Google Earth®.

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 cultural affiliation of detached human crania and mandibles excavated years ago at the (Caddo) Crenshaw site in Miller County. Ms. 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. Results of isotopic analysis to determine region of origin of the human bones were incorporated into Ms. Farley's report. In September 2010, Ms. Farley quit the project. In her place a team was formed to complete the grant: Frank Schambach, Melissa Zabecki, Glen Ackridge, John Samuelsen, David Jeane, Tom Green, and Lela Donat. Samuelsen used statistical programs such as Calib 6.0.2 to calibrate and interpret Accelerator Mass Spectrometry (AMS) dates and previous standard radiocarbon dates from the site. The new dates provided the unexpected result of placing the remains in the late AD 1200s to middle 1300s, with possible implications for determining their cultural affiliations. An extension was granted to July 31, 2011, for the final report.

AHTD "AMASDA Online." The original three-year grant from the Arkansas Highway and Transportation Department began in January 2007 and made available \$425,436 to upgrade the AMASDA archeological information database system and provide online access via the web. The online system allows archeological researchers who obtain a secure password to access records without visiting the office, saving time and expense. Scans of site form extension material were finished and added to the online system. Also, revisions were made to access request forms that will be used in-house and for online research.



Survey registrar Lela Donat shows visiting fifth graders the wonders of Google Earth®.

Although the project is not yet complete, AHTD began testing the geographical component of the AMASDA Online database this year. The Survey continues to upgrade and add new data to improve functionality. There is an extension on this grant until January 31, 2014.

Corps of Engineers Projects. A subcontract through Brockington and Associates for \$112,276 enabled rehabilitation of Cedar Grove site and Les Johnson collections for the Vicksburg District COE. Holli Howard re-boxed the collections. Leslie Walker edited Barbara Farley's draft inventory of the skeletal remains after Farley left. Teka Mc-Glothlin scanned Corps of Engineers reports. This project is complete.

DOD Fort Chaffee and Camp Robinson. Funds were available to scan all cultural resource reports pertaining to Fort Chaffee, Camp Robinson, and National Guard Armories, so these could be added to the database.

NAGPRA Functions

The Registrar's Office received human skeletal remains from the Arkansas Medical Examiner's Office in Little Rock. These are all prehistoric remains. Mary Suter (UA Museum Collections Facility) assisted by providing storage space in the curation area. Nancy O'Malley (Department of Anthropology and Office of State Archeologist, University of Kentucky) sent a sample taken from a desicated prehistoric burial in a dry bluff shelter in Newton County that was found in UK's collections. The sample was reunited with its respective burial from 3NW32.

Registrar's Office Personnel

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 an undergraduate anthropology major. Leslie and Duncan are in the Ph.D. program; both have completed their master's degrees in the department and continue to work with Survey archeologists as their advisors.

The Registrar's Office provided assistance to the following groups & agencies during 2010–2011

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

Out of State Museums and Universities

University of Memphis

AMERICAN INDIAN TRIBES

The Quapaw Tribe of Oklahoma The Caddo Nation – Binger, Oklahoma The Osage Nation – Pawhuska, Oklahoma

PRIVATE FIRMS

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

- Brockington Associates (nationwide)
- BSC of Oklahoma
- Burns & McDonnell, Kansas City
- CHRS, Inc. of PA
- C-Dimensions, TX
- CenterPoint Energy
- Coastal Environments Inc., Baton Rouge
- Deep East Texas Archeological Consultants
- Dynamic Environmental Associates, Inc.
- Earth Search of New Orleans
- Environmental Research Center of Missouri
- Environmental Corporation of America (GA)
- Flat Earth Archeology (AR)
- GEO-Marine, Plainview, TX
- 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)
- Natural Resource Group (nationwide)
- Panamerican Consultants of Memphis
- Peregrine Environmental (TX)
- PBS&J (TX)
- AAS Sponsored Research Program (AR)
- Seas Dimensions, Inc.
- Sphere 3 (TX)
- SPEARS, Inc. (AR)
- SW Power Administration Rows (nationwide)
- Terracon (nationwide)
- TRC Solutions, Atlanta, GA
- Weaver & Associates (TN)
- William Self Associates
- URS (nationwide)

Education Specialist

Mary L. Kwas, Research Associate

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.

News & Research

Old State House History Book

A Pictorial History of Arkansas's Old State House: Celebrating 175 Years was published by the University of Arkansas Press in early 2011. This book represents the completion of a long-term project, which began in 1996 when the Survey was contracted to undertake archeological work to uncover below-ground historic remains in conjunction with a renovation to the 1830s building. Released in time for the 175th anniversary of the construction of the building, the 234-page book is illustrated with color and black-and-white photographs. The book was a cooperative project with the staff of the Old State House Museum, who helped locate and get permission for images used, and provided images of objects from their collection. The book brings forward new information on a little-known aspect of Arkansas's history and was designed to be visually appealing and written in a style suitable for the general public. Following up on the publication, Kwas did a presentation and book signing at the Old State House Museum on April 7, 2011. About 35 people were in attendance. She also gave an interview to KUAR public radio in Little Rock.

Pioneer Cemetery Project

In 2009 Kwas and Dr. 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. Since that time, Kwas has worked with the Southwest Arkansas Regional Archives 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 project. Photographs to accompany the report were provided by Jamie Brandon of the SAU Research Station, as well as Josh Williams and Sarah Wade of Historic Washington State Park. Deborah Sabo (Survey Research Assistant) created the layout and design of the publication, which was printed in the fall of 2011.

Research on historic cemeteries is on the rise, and the publication should be of interest to regional historians, family history researchers, and visitors to the park.

Old Washington Book

Kwas's book *Digging for History at Old Washington* (2009, UA Press) received the 2010 Ned Shank Award for Outstanding Preservation Publication, which was presented by the Historic Preservation Alliance of Arkansas on January 14, 2011.

Pinson Mounds Publication

Kwas and Robert Mainfort, along with Andrew Mickelson, co-authored "Mapping Never-Never Land: An Examination of Pinson Mounds Cartography," which was published in the summer issue of *Southeastern Archaeology*. The article utilized historic maps, photographs, and other archival materials, along with geophysical surveys, to critique an early map of the Pinson Mounds site.

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 works with the Arkansas Archeological Society 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 the year's events.

In March 2011 the theme of Archeology Month was *The Archeology of Conflict*, chosen to coincide with the sesquicentennial of the Civil War. Thirty-four programs were scheduled at 26 venues across the state, including

9 museums, 10 state and national parks, 6 schools and colleges, and other agencies. For more information about Archeology Month see www.uark.edu/campus-resources/ archinfo/archmonth.html.

Arkansas Archeological Society

Kwas provides service to the statewide Arkansas Archeological Society and the Ko-ko-çi Chapter in Fayetteville. She provides occasional items for the Society newsletter *Field Notes* and updates for the Society website.

Annual Meeting: Kwas and Barbara Scott coordinate the Society's Annual Meeting. Kwas serves as program chair. Planning occurs throughout the year, with the most intensive phase from July through September 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-çi Chapter: Kwas continued to serve as newsletter editor for the Ko-ko-çi Chapter. The monthly newsletter is sent by email and regular mail to members and distributed to departments on the UAF campus. Kwas also handles press releases for the Chapter and sends news updates by email to Chapter members.

Web Sites

Kwas periodically submits updates for the Survey's Education web pages (www.uark.edu/campus-resources/archinfo/resources.html) and Archeology Month pages (www.uark.edu/campus-resources/archinfo/archmonth.html). The latter includes a program schedule, a program submission form, and a list of suggested ideas for participating in Archeology Month. Kwas also maintains the content of the "Archaeological Parks in the U.S." website (www.uark.edu/misc/aras/index.html). Deborah Weddle posts the new content in an attractive and workable design.

Other Educational Activities

Kwas coordinated a tour of the Survey for the Rogers Eastside Elementary 5th grade on March 8. Participants included 82 students and adult chaperones. Tour leaders were Kwas, Robert Mainfort, Leslie Walker, and Jerry Hilliard. Section presenters were John Samuelsen, Mary Suter, Lela Donat, and Marian Kunetka. An outside demonstration and display of experimental archeology was conducted by Jared Pebworth, Mike Evans, Liz Horton, and Devin Pettigrew. A packet of student thank-you letters was sent to the Survey following the tour.

Kwas also assisted Mary Suter in a tour of the Museum Collection during UA University Days.

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.

Service Activities

Professional Service

- · Advisor to the Society for American Archaeology, Public Education Committee
- · 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
- reviewed a book manuscript for University of Alabama Press
- provided a book review for the Journal of Southern Jewish History
- co-organizer for a forum on the SEAC Public Archaeology Interest Group presented at the Southeastern Archaeological Conference in Lexington, Kentucky, in October 2010
- co-organizer for a symposium on public outreach at the annual meeting of the Society for Historical Archaeology in January 2011

Public Service

- Kwas gave a talk related to her book *Digging for History at Old Washington* at the 4th annual Red River Heritage Symposium, Historic Washington State Park (audience 35).
- assisted Mary Suter in tour of collections for UA University Days for 7th-12th graders (attendance 5).

The Publications Program

Robert C. Mainfort, Jr., Series Editor Deborah Sabo, Popular Series Editor Lisa Davison, Accountant, Inventory, Sales & Distribution Brian Duncan, Customer Service

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.

New & Forthcoming Publications

Production of Research Series No. 65, *Toltec Mounds: Archeology of the Mound-and-Plaza Complex* by Martha Rolingson, is under way. Publication is scheduled for December 2011. The author of another manuscript accepted for publication is making revisions prior to production.

Reprints & Other Products

Research Series No. 44, Standards for Data Collection from Human Skeletal Remains, went into its twelfth printing in 2010. This has become a standard text and laboratory manual for human osteology / physical anthropology classes and is widely used in American and many Canadian university classes. We continue to receive many international requests for this textbook, but are unable to accommodate overseas customers.

Sales & Distribution

Publication sales and distribution numbered 1385 volumes in all series and produced \$24,187.08 in sales (\$16,616.52 in gross profits). This includes 103 volumes given away as complimentary copies, including books distributed to colleagues, teachers, reviewers, libraries and archives, graduate students, and volumes contributed to the Southeastern Archaeological Conference Student Paper Competition Prize. Our bestselling book continues to be RS44 (*Standards for Data Collection from Human Skeletal Remains*, 862 sold or 78% of the total Research Series volumes). Others that do well are PS03 (*Paths of Our Children, Historic Indians of Arkansas*, 145 copies) and TP11 (*A Handbook of Soil Description for Archeologists*, 64 copies). Our newest release, RS64 (*Archeological Investigations at Upper Nodena: 1973 Field Season*) was distributed to its contributors, to reviewers, and to some libraries this year.

Survey archeologists sold books this year at the Southeastern Archaeological Conference in Lexington, Kentucky (\$295 in sales), the Caddo Conference in Fort Smith, Arkansas (\$140.93 in sales), the Arkansas Archeological Society Annual Meeting in Hot Springs, Arkansas (\$92 in sales), and the Arkansas Archeological Society Training Program in Hope, Arkansas (\$258.92 in sales).

New Developments

As requested by Dr. Tom Green (Director of the Survey), Robert Mainfort negotiated an agreement with Larry Malley (Director, University of Arkansas Press) under which the Press will handle production (copy-editing, design/layout, and printing) of future volumes in the Research Series on behalf of the Survey.

Survey books, along with UA Press volumes, and Arkansas Archeological Society items for sale at the Society's 50th annual meeting in Hot Springs.



	Research Series	Research Reports	Popular Series	Technical Papers	Total
No. of Titles	64	32	5	П	112
Sold	1036	7	167	72	1282
Free	67	3	33	0	103
Total	1103	10	200	72	1385

Survey Books Get Good Reviews

Archeological Investigations at Upper Nodena: 1973 Field Season (Research Series No. 64, edited by Robert C. Mainfort Jr.) was reviewed by Mark A. Rees in the *Journal of Alabama Archaeology* (vol. 55, nos. 1–2, for 2009, pp. 90–92; published in 2011). The review provides a comprehensive summary of the volume's contents, and concludes by noting that

The research potential for existing collections from Upper Nodena and other sites is well articulated and clearly demonstrated by the authors of this report. Their contributions are a welcome addition [to previous publications about the site]. As with anything done well, this report has been well worth waiting for (p. 92).

Staff Activities

Series Editor **Robert Mainfort** solicited manuscripts, and worked with authors who are revising manuscripts prior to production. He negotiated an arrangement with Larry Malley (Director of the University of Arkansas Press) whereby the Press will handle production of future Research Series volumes.

Deborah Sabo compiled, edited, and designed the Annual Report of the Survey for FY2009–2010. This year, with help from Deborah Weddle, the html catalog on the Publications webpages was updated and reorganized. Sabo makes all arrangements for reprints. This year new digital files for RS44 were required by the printer. Sabo converted existing files to updated InDesign documents and checked them against the printed book. This included correcting a few minor errors in the original. Mainfort and Tom Green assisted with proofreading the new files. She keeps the Survey's information up-to-date at Bowker Books-in-Print online. She is (*ex officio*) a permanent member of the Survey Publications Committee. She continued work on a complete redesign of the Survey's educational fliers and Teacher Packet, and designed and produced the Programs for the Arkansas Archeological Society's 50th Annual Meeting and for the 53rd Caddo Conference held in Fort Smith. As editor of the Popular Series, she continued consultation with the author of a forthcoming replacement for the Survey's best-selling *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. This year **Brian Duncan** took over Sabo's former tasks related to sales and customer service.

Lisa Davison managed publication sales, distribution, 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.

The Survey publications committee—**Jamie Brandon** (chair), **Kathleen Cande**, **Mary Kwas**, **Jami Lockhart**, and **Deborah Sabo** (*ex officio*) provided input on various matters regarding the publication program. Brandon was especially helpful with regard to photographs and graphics that will appear in a forthcoming monograph. The program staff appreciate the committee's assistance and suggestions.

Photographic and Graphic Arts Support

M. Jane Kellett, Graphic Artist

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.

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.

2010-2011 Activities

- 40 rolls of black and white film processed and cataloged
- 1400 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
- 50 graphic and design works, maps, graphs, posters, and illustrations
- 1100 items photographed: prehistoric and historic pottery and artifacts for grants, publications, research, presentations, museum collections, and public and professional meetings



from the Museum of Discovery collection

Ceramic vessel and graphic rendering of the design on the vessel's base. By Jane Kellett. This item is among the many thousands of objects from the Museum of Discovery's (Little Rock) Native American collection that were transferred to Survey ownership, and are now being cataloged. Some of the items have been loaned for exhibit to Tribal museums.

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.

Partners in Preservation

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

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.

AAS Chapters

The Arkansas Archeological Society's total membership declined from 611 in the 50th anniversary year of 2010 to 535 in 2011. This is closer to the figure for the previous four or five years, reflecting a steady membership averaging about 550. Active chapters across the state work closely with the Survey research archeologists in their areas. Chapters have monthly meetings during the academic 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. For example, Society members spent 400 hours in the field at the Carden Bottoms site as part of the Survey's NEH-supported research in the Central Arkansas River Valley. And members contributed over 6000 hours to excavations at Historic Washington during the Training Program. Altogether, volunteers contributed over 9900 hours to archeological projects across Arkansas in 2010–2011. 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. Stewards visit their assigned site(s) and report periodically on problems such as erosion or vandalism. Stewardship is conducted in cooperation with interested landowners. Stewards visit with landowners and tenants to discuss ways to protect the sites from trespass and damage such as unauthorized digging. The Survey provides training and guidance for site stewards in the form of a half-day workshop during the summer Training Program, plus mentoring for individual stewards. Gary Knudsen is the chair of the Stewardship Committee and has worked to reassess how prospective Stewards may be evaluated and prepared to carry out their mission.

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.

Dr. Glen Akridge of Fayetteville is editor of *The Arkansas Archeologist*. Volume 50 was in preparation during 2010–11. *The Arkansas Archeologist* is 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 2011

Archeology Month is a multifaceted public education concept to promote awareness and appreciation of Arkansas archeology. The theme of Archeology Month for 2011 was The Archeology of Conflict, to coincide with Arkansas's observation of the sesquicentennial of the Civil War.

There were 34 scheduled programs at 26 venues across the state, including 9 museums, 10 state and national parks, 6 schools and colleges, and other locations. This year's events included illustrated talks, exhibits, walking tours, artifact identification programs, and hands-on activities. Dr. Jamie Brandon (station archeologist at SAU) led a "Spring Break Dig" in Block 6 at Historic Washington State Park, in preparation for the Society's annual summer Training Program. Society members and students volunteered for the excavation, which could be viewed by park visitors. The Arkansas Civil War Sesquicentennial Commission lent its logo for appropriate events.

The poster was sponsored by the Arkansas Archeological Society and designed by Ben Swadley (superintendent at Parkin Archeological State Park), a Society vice president and chair of the Archeology Month committee. It featured images of the opposing Civil War generals who fought at Prairie Grove Battlefield, on a background of blue and grey. Arkansas State Parks contributed computer and digital services. The poster was included in the national display of Archeology Month posters at the 2011 Society for American Archaeology meeting in Sacramento, California. It can be seen on our website at www.arkansasarcheology.org/archmonth.html.

Annual Meeting

The 2010 meeting was held September 24–26 in Hot Springs, celebrating the 50th anniversary of the Society with additional special events. There were 130 registrants. Society member Glen Akridge handled local arrangements. At the reception on Friday night, there was a showing of the newly digitized (by UA anthropology graduate

student and Forest Service archeologist Pritam Chowdhury) 1972 film on the Training Program at the Ferguson site, called "Preserving the Past for the Future." There was also a continuous loop photo DVD (compiled by Glen Akridge) showing images from the past 50 years.

Of 14 scheduled papers, nine were by Survey employees and one by a student working with Survey archeologists. The keynote speaker, Dr. Brian Fagan (University of California, Santa Barbara, Emeritus), spoke on storytelling about the past. His presentation was titled "Come Let Me Tell You a Tale... or Begin at the Beginning, Go on to the End, and Then Stop." Tours on Sunday were available at Dan's Whetstone Company, Inc., and the Fordyce-Ricks Estate.

Many people contributed to the souvenir program booklet. Deborah Sabo created the design and digital file and managed printing. The expanded program included a color illustration of the winning 50th anniversary logo, compilations of Society awards and officers over the 50-year history, illustrations, and a tribute to the late Louis Gregoire, an artist and member who donated many original works to the Society during his life for fund-raising and other purposes.

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 2010 annual meeting in Hot Springs were Mary Beth Trubitt (HSU station archeologist), \$595 for one AMS radiocarbon date for the Hedges site 3HS60; Duncan P. McKinnon (UAF Ph.D. candidate and Survey graduate assistant), \$595 for one AMS radiocarbon date for a 1980 sample collected from the Battle Mound site 3LA1; David Markus (University of Florida Ph.D. candidate working with site materials in the SAU area), \$1450 for labor costs related to faunal analysis of newly collected materials from the Block House at Historic Washington 3HE236-19; Julie Morrow (ASU station archeologist), \$1450 for botanical analysis of samples of charred plant materials from 3GE6, 3RA95, 3CY91, and 3CG453.

"Society Dig": The Training & Certification Program

This unique program is managed cooperatively by the Society and 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 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 2011 Training Program at Historic Washington State Park

Fieldwork

The 2011 Training Program was held within the antebellum town of Washington, Arkansas (3HE236), and hosted by Historic Washington State Park and the Pioneer Washington Restoration Foundation, Inc. Dr. Jamie Brandon, station archeologist at Southern Arkansas University in Magnolia, directed the excavations and research design.

The town of Washington was founded in 1824 on America's western frontier, and was a thriving county seat and commercial center in a region of farms and plantations. The town was near the southern end of the old Southwest Trail, and on the Fort Towson Road. It served as the Confederate capital of Arkansas for two years during the Civil War, managed to escape destruction, and continued to thrive in the decade following the war, but its influence and population declined when it was bypassed by the railroad.

This was the first return of a Training Program to Historic Washington since 1984. (The Society held four previous Training Programs there in the 1980s.) This time, the project concentrated on Block 6 in the previously unexplored mercantile district of the town, thus adding new archeological insight to a crucial aspect of Washington's history—its role as a thriving commercial center in the 1830s–1880s.

There were 94 registered participants plus 23 staff. The dig focused on four excavation areas within Block 6, and recovered tens of thousands of mid to late nineteenth century artifacts, many of which pointed directly to merchant activity: rolls of sheet copper to be cut and sold, a variety of types of scale weights, and coins to be used in these economic transactions.

In Area A, a large square anomaly in the remote sensing data is probably a merchant warehouse in use from the 1830s until the 1870s. Concentrations of brick, flat

window glass, and a central support system proved that the structure was a large warehouse-type building, not a residence or a fenced wagon yard.

Excavation units in Area A´ nearby were opened to explore an anomaly revealed in the remote sensing data. At first this was predicted to be associated with the large building explored in Area A, but it was soon revealed as something entirely different that proved to be one of the most popular elements of the dig— a moderate-sized, brick-lined, bell-shaped cistern, complete with a charcoal-filled filter box. The cistern was excavated only to a safe depth and then backfilled. Dr. Brandon plans to re-open it next year and continue excavating, using stepped trenches or scaffolding to protect the crew.

Area B units were placed over remote sensing features that might have been small buildings. There was a rich midden with many artifacts, and a feature that may be a trash pit or root cellar. More work is needed to understand this area.

In Area C, remote sensing anomalies that looked like the footprints of storefronts along Franklin Street turned out to be exactly that. Limestone foundations were just below the surface and abundant brick revealed the original construction. The material recovered from within the brick scatter attests to both the commercial nature of the buildings and to an early date. There were hand blown apothecary bottles (like the ones found at Old Davidsonville), lead bale seals for marking bundles of goods for inventory purposes, and, most spectacularly—money.

Aside from the brick cistern, two of the most popular finds from the dig were coins: an 1827 American silver half dollar, and a 1780s Spanish colonial 1 *Real* coin. The Spanish coin (worth "one bit," roughly equivalent to an American dime) would have been fairly common on the frontier, and was legal currency in the U.S. until 1857.

Aside from Dr. Brandon, additional Survey personnel who assisted at the Training Program in one capacity or another included Barbara Scott, who managed the field office, Dr. "Skip" Stewart-Abernathy and Larry Porter (WRI), Marvin Jeter and Jessica Howe (UAM), Elizabeth Horton (Toltec), John House and Mary Farmer (UAPB), Bob Scott (ASU), Jared Pebworth and Aden Jenkins (CO), Mary Beth Trubitt (HSU), Jeff Mitchem (Parkin), Bob Mainfort (SRP), and David Jeane (SAU). Many Society members served in supervisory capacities as well, notably Paul and Marilyn Knapp, Mary Ann Goodman (Lab Supervisor), Scott Akridge (Camp Boss), and Gary Knudsen.

Seminars

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 semi-

nars. They move along at their own pace and according to their individual interests.

Seminars taught at the Dig this year were two sessions of Basic Excavation (taught by Dr. Elizabeth Horton and Dr. John House), and one session each of Basic Lab (Dr. Claudine Payne), Ceramic Analysis (Dr. Robert Mainfort), Arkansas Archeology (Dr. Marvin Jeter), Site Survey (Robert Scott), Historic Ceramics (Dr. Skip Stewart-Abernathy), and Human Osteology (Dr. Jeffrey Mitchem). All seminar instructors this year were Survey staff. Sixty-one people signed up for the various seminars.

Additional Certification classes were offered this year at the Survey's research station at Winthrop Rockefeller Institute on Petit Jean Mountain. David Jeane (SAU) and Dr. Claudine Payne (Blytheville) co-taught the Advanced Lab class, and Leslie Walker (Ph.D. student and graduate assistant at the UAF station) taught Lab Photography.

At the 2010 annual meeting in Hot Springs, 18 Society members received certificates in various categories (they are named in *Field Notes* No. 358).



Supervisor Paul Knapp takes notes as Tony Caver excavates a whole glass bottle during the 2011 Arkansas Archeological Society Summer Training Program in Historic Washington State Park.

Appendix I. Reports & Publications by Survey Staff during 2010–2011*

Al-Bataineh, Muwafaq, Mahmoud El-Najjar, and Jeffrey Mitchem

2011 Ya'mun Beads from the 1999 Season. In *Ya'Mun: An Archaeological Site in Northern Jordan*, edited by Mahmoud El-Najjar, pp. 109–120. Deanship of Research and Graduate Studies & Faculty of Archaeology and Anthropology, Yarmouk University, Irbid, Jordan.

Bragg, Don C., and Jessica R. Howe

2010 An Archeological Search for the Remains of the 1870 Drew County Courthouse. *Drew County Historical Journal* 25:33–42.

Brandon, Jamie C., Lela Donat, Barbara Farley, Holli K. Howard, Teka R. McGlothlin, and Leslie Walker

2010 Rehabilitation and Consolidation of the Archeological Collections and Support Documentation from the Les Johnson (3AS159) and Cedar Grove (3LA97) Projects. Report submitted to the USACE, St. Louis District by the Arkansas Archeological Survey, Southern Arkansas University Research Station Project No. 55. Magnolia, Arkansas.

Brandon, Jamie C., and David Markus

2011 Digging For History: The Arkansas Archeological Society Training Program Returns to the Town of Washington in Southwest Arkansas. *Field Notes* 359:3-7.

Davidson, James M., and Jamie C. Brandon

2011 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.

Early, Ann M.

2011 The Greatest Gathering: The Second French-Chickasaw War in the Mississippi Valley and the Potential for Archaeology. In *French Colonial Archaeology in the Southeast and Caribbean*, edited by Kenneth G. Kelly and Meredith D. Hardy, pp. 81–96. University of Florida Press, Gainesville.

Farmer, Mary

2011 Mule-Footed Pigs of Cleveland County. Field Notes 359:13.

Green, Thomas J.

International Variety in CRM. In *Companion to Cultural Resource Management*, edited by Thomas F. King, pp. 420–438. Wiley-Blackwell, Malden, Massachusetts.

Horton, Elizabeth, and George Sabo III

2011 Spiro Perishable Project Makes Exciting New Discovery. Field Notes 358:9–13.

House, John H.

2011 Cultural Resources Survey of a Proposed Microwave Tower, Arkansas Post National Memorial, Arkansas County, Arkansas. Report submitted by Arkansas Archeological Survey to Arkansas Post National Memorial.

2011 Remembering Joe Madonia, 1926–2011. Field Notes 359:11.

House, John H., and John Riggs

2010 Radiocarbon Dates from the Dobrovich Site, Prairie County. Field Notes 356:12–13.

Hutchinson, Dale L., and Jeffrey M. Mitchem

2010 Correlates of Contact: Epidemic Disease in Archaeological Context. Reprinted in *Perspectives from Historical Archaeology: The Archaeology of Native American-European Culture Contact*, edited by Timothy K. Perttula, pp. 37–51. Society for Historical Archaeology, Rockville, Maryland.

Kwas, Mary L.

Book review of We Were Merchants: The Sternberg Family and the Story of Goudchaux's and Maison Blanche Department Stores, by Hans J. Sternberg and James E. Shelledy. Southern Jewish History 13:245–248.

^{*} Survey authors are shown in boldface for works co-authored with non-Survey colleagues.

2011 A Pictorial History of Arkansas's Old State House: Celebrating 175 Years. University of Arkansas Press, Fayetteville. Lockhart, Jami J.

2010 Tom Jones (3HE40): Geophysical Survey and Spatial Organization at a Caddo Mound Site in Southwest Arkansas. *Southeastern Archaeology* 29(2):236–249.

Lockhart, Jami J., Juliet E. Morrow, and Shaun McGaha.

2011 A Town at the Crossroads: Site-wide Gradiometry Survey 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 in Never-Never Land: An Examination of Pinson Mounds Cartography. *Southeastern Archaeology* 30(1):148–165.

Markus, David M., and Jamie C. Brandon

2010 Recent Excavations at the Abraham Block House, Historic Washington State Park. Field Notes 357:7–10.

Mitchem, Jeffrey M.

2010 Early Sixteenth-Century Glass Beads from the Tatham Mound, Citrus County, Florida; Current Research on Beads and Pendants from San Luis de Talimali Mission, Florida; Preliminary Observations on Beads and Pendants from the Apalachee Village at San Luis de Talimali Mission, Florida; and Interpretations Based on Personal Adornment Items from the Mission San Luis de Talimali Cemetery, Florida. [Reprints of articles published in *The Bead Forum*]. Beads: Journal of the Society of Bead Researchers 21:92–99.

Morrow, Juliet E.

2010 The Sloan Site Revisited. The Missouri Archeologist 71:1–40.

2011 An Extinct Cervid Antler from Arkansas. Field Notes 358:3-4.

Payne, Claudine

2011 Review of Cosmopolitan Archaeologies, edited by L. Meskell. *Museum Anthropology Review* 5(1–2). http://scholarworks.iu.edu/journals/index.php/mar.

Porter, Larry

2010 "New" Radiocarbon Dates for the Petit Jean River Valley. AMS Dates from 3LO226. Field Notes 355:3-4.

Trubitt, Mary Beth

- 2011 Another Archaic Period Date from Jones Mill. Field Notes 358:5-6.
- 2011 Reconstructing Ancient Foodways. Online document at http://arkarcheology.uark.edu/indiansofarkansas/index.html?pageName=Ancient_Foodways.
- 2011 A Cultural Resource Assessment of Essex Park (3GA932). Limited distribution report. Arkansas Archeological Survey, Henderson State University Research Station, Arkadelphia.
- 2011 Helms Cemetery: Documenting and Preserving Historic Cemeteries. Online document at http://www.hsu.edu/pictures.aspx?id=13591.

Trubitt, M. B., K. Parker, and L. Kelly

2011 Reconstructing Ancient Foodways at the Jones Mill Site (3HS28), Hot Spring County, Arkansas. Caddo Archeology Journal 21:43–70.

Appendix 2. Papers, Symposia & Workshops by Survey Staff during 2010–2011*

Brandon, Jamie C.

- 2010 Discussant for the "Sentinel to History: Historical Archaeology in the State of Arkansas" symposium (Carl Carlson-Drexler and David Markus, organizers) at the 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington, KY.
- 2011 Bear Grease Pomade in the Bear State: Class, Consumerism, and Colonialism at the Royston House in Historic Washington State Park, Arkansas. Society for Historical Archaeology Conference on Historical and Underwater Archaeology, Austin, TX.
- 2011 Discussant for the "Reinterpreting the Domestic: Household Archaeology Across Boundaries of Space, Time and Disciplinary Divisions" symposium (Emily Root-Garey and Nedra Lee, organizers) at the Society for Historical Archaeology Conference on Historical and Underwater Archaeology, Austin, TX.

Brandon, Jamie C. (organizer and chair)

"The Revelatory Power of an Artifact in Context" symposium at the Society for Historical Archaeology Conference on Historical and Underwater Archaeology, Austin, TX.

Cande, Kathleen

A Saga of Restoration: Excavations at the Looney Tavern and Rice House, Randolph County, Arkansas. 50th Annual Meeting of the Arkansas Archeological Society, Hot Springs.

Chowdhury, Pritam, and Jamie C. Brandon

2010 Urban Farmstead Landscapes at the Royston House (3HE236-91), Historic Washington State Park, Washington, Arkansas. 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington, KY.

Early, Ann M.

- Stylistic Change in Caddo Ceramics and Negotiating New Cultural Boundaries in the Protohistoric Southeast. 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington, KY.
- 2011 Design and Meaning in Caddo Ceramics: A Case Study with Protohistoric Fineware. 53rd Annual Caddo Conference, Fort Smith, AR.

Farmer, Mary

2010 The Ashley Mansion: Archeology in Downtown Little Rock. 50th Annual Meeting of the Arkansas Archeological Society, Hot Springs.

Horton, Elizabeth

2011 Framing the Sacred. 76th Annual Meeting of the Society for American Archaeology, Sacramento, CA.

Howe, Jessica, and Patsy White (deceased)

2010 The Clark and Norrell Sites: Two Plaquemine Culture Cemeteries in Southeast Arkansas. 50th Annual Meeting of the Arkansas Archeological Society, Hot Springs.

Jeter, Marvin

2010 Fifty Years (Plus or Minus) of Public Archeology in Southeast Arkansas. 50th Annual Meeting of the Arkansas Archeological Society, Hot Springs.

Mitchem, Jeffrey M.

- 2010 The Development of Parkin Archeological State Park. 50th Annual Meeting of the Arkansas Archeological Society, Hot Springs. [Read by Glen Akridge]
- 2010 Mississippian Fortifications at Parkin and Neeley's Ferry, Northeast Arkansas. 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington, KY.

Moe-Hoffman, Amy, Evan Peacock, Robert J. Scott Jr., and Marvin D. Jeter

2010 Freshwater Mussell Shell from Two Late Prehistoric Sites in Southeastern Arkansas: Biogeography and Contextual Considerations. 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington, KY.

^{*} Survey authors are shown in boldface for works co-authored with non-Survey colleagues.

Marshall, David Anthony, Juliet E. Morrow, and Jeff Gatewood

2011 Functional Determination of Large Dalton Points at the Sloan site. 76th Annual Meeting of the Society for American Archaeology, Sacramento, CA.

Morrow, Juliet E.

- 2010 The Early Mississippian Occupation at the Bruce Catt Site. 50th Annual Meeting of the Arkansas Archeological Society, Hot Springs, AR.
- 2011 Clovis-Era Lithic Technology in the Midcontinent. 76th Annual Meeting of the Society for American Archaeology, Sacramento, CA.
- 2011 Excavations at the Bruce Catt site: An Early Mississippian Village in Clay County, Arkansas. Annual Meeting of the Missouri Archaeological Society, Springfield, MO.
- 2011 The Cultural History of Northeast Arkansas from Clovis to Contact Period. SETAC (The Society for Environmental and Toxicology Chemistry) Meeting, Forrest L. Wood Nature Center, Jonesboro, AR.

Riggs, John, Juliet Morrow, and Shaun McGaha

2011 Section 106: Preservation versus Process. 76th Annual Meeting of the Society for American Archaeology, Sacramento, CA.

Sabo, George III

2011 Caddo Ceramics: Historical and Traditional Perspectives. 53rd Annual Caddo Conference, Fort Smith AR.

Sabo, George III, Jami Lockhart, Jerry Hilliard, Jared Pebworth, Michael Evans, Leslie Walker, Larry Porter, Aden Jenkins, Duncan McKinnon, and John Samuelsen

2011 Protohistoric House Architecture in the Carden Bottoms, Arkansas. 53rd Annual Caddo Conference, Fort Smith AR.

Sabo, George III, and Leslie C. Walker

2010 The Antiquity of Dance on the Western Edge of the Mississippian World. 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington KY.

Stewart-Abernathy, Leslie C.

- 2010 The Power of Things in Places: Some Historical Archeology of Antebellum Arkansas. 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington, KY.
- 2011 Colonel Mustard and the Dog with a Crock in the Basement: The Power of Things in Places in Antebellum Arkansas. South Central Historical Archeology Conference, Nashville, TN.

Stewart-Abernathy, Leslie C., and Don Higgins

2011 Strangers in the Ozarks, or, Why Don't the Old Settler Cherokee, African-Americans, and German-American Settlers Count as Helping to Create the Upland South? Society for Historical Archaeology Conference on Historical and Underwater Archaeology, Austin, TX.

Trubitt, Mary Beth

- 2010 Magnetite Use at Jones Mill. 50th Annual Meeting of the Arkansas Archeological Society, Hot Springs, AR.
- 2010 Fishing, Farming, and Novaculite Flaking by the Ouachita River. Poster presentation at the 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington, KY.
- 2011 The Ancient Caddo Community at Jones Mill, Hot Spring County, Arkansas. East Texas Archeological Conference, Tyler, TX.
- 2011 Two-Stage Caddo Mounds in Southwest Arkansas. 53rd Annual Caddo Conference, Fort Smith, AR.

Walker, Leslie C.

2010 Community Interaction and Artistic Variation on the Protohistoric Frontier. 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington KY.

How to Contact the Arkansas Archeological Survey

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

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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

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