



A DIVISION OF THE UNIVERSITY OF ARKANSAS SYSTEM



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The 2006 Annual Report was edited by Deborah Sabo. Layout and cover design by Deborah Sabo. Cover illustration: Aden Jenkins uncovers a large redware storage jar during SRP excavations at Old Davidsonville (the partially restored jar is shown on the back cover). Overleaf: Matthew Reynolds (HSU station assistant) during salvage excavations at the 3CL593 mound site in January, 2006.



University of Arkansas System

ARKANSAS ARCHEOLOGICAL SURVEY

ANNUAL REPORT FOR FISCAL YEAR 2005-2006 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 eight state university campuses, two state parks, and the City of Blytheville enable scholars at eleven research stations around the state to carry out this mission. The Survey has been a model for statewide archeological programs in the United States and around the world.

Our coordinating office in Fayetteville is the Survey's administrative body. The Director, the State Archeologist, the Survey registrar, the fiscal officer, administrative assistant, publications staff, and outreach programs operate from the CO. The registrar maintains a central archive of all archeological site records for the state. The coordinating office building also contains the University of Arkansas Collections Facility. The Survey acts as a repository for archeological collections originating from state and federally funded projects in Arkansas, our own research, private consulting firms, and donations. Also at the coordinating office are our sponsored research program (SRP) and computer services program (CSP), which support themselves in part through grants and contracts with local, state, and federal agencies and with the business community. The CSP maintains several websites with educational information on Arkansas archeology and frequent updates about ongoing research projects. Our archeogeophysical applications program is the newest addition to research capabilities centered at the coordinating office.

Professional archeologists at our research stations teach 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.



The Arkansas Archeological Survey has 43 employees statewide. Cooperative agreements between the Survey, eight state university campuses, two state parks, and the City of Blytheville provide the eleven research stations with office, laboratory, and collection storage facilities. Each station is staffed by a Ph.D. archeologist and a full- or part-time archeological assistant. The station archeologists 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. 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 2005–2006

Dr. Thomas J. Green

S 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 seven state universities. Our field and laboratory projects provide research opportunities for both undergraduate and graduate students. We distribute free curriculum enrichment materials and give 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 prehistoric and historic 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. Accomplishments and challenges in 2005–2006 are outlined below.

Winthrop Rockefeller Center

The Arkansas Archeological Survey will play a helpful role in the development of The University of Arkansas System's Winthrop Rockefeller Center on Petit Jean Mountain. The Survey will advise the Center on developing exhibits about Arkansas River Valley archeology and history. Exhibit highlights will include the significant body of prehistoric American Indian rock art found on the mountain. Professional workshops and public educational programs about prehistoric and historic archeology are among other offerings being considered, including a workshop of the Eastern States Rock Art Research Association in spring 2007. This year Survey staff and UA System representatives held a planning retreat at the facility to discuss exhibitry.

Raiders of the Lost Arkansas

The Survey's Robert Mainfort was Guest Curator of an exhibit at the Old State House Museum celebrating the legacy of Samuel Dellinger, whose 1920s–1940s quest to protect Arkansas' archeological heritage from private collectors and out-of-state museum buyers resulted in one of the finest collections of prehistoric American Indian artifacts in the United States at the University of Arkansas Museum. During the 1920s and 30s, archeological sites in Arkansas were looted at a fantastic rate, and the finely made decorated and effigy pottery vessels sold to collectors and museums. Agricultural practice also destroyed countless sites. Dellinger instituted a program of scientific excavation throughout the state, worked to increase public awareness of archeology, and pursued his mission to expand The UA's museum collection, rather than see Arkansas antiquities disappear across state lines. "Raiders of the Lost Arkansas" opened in January 2006. The Survey's education specialist Mary Kwas also served on the exhibit Consulting Committee.

Beaver Lake Shoreline Survey

The summer drought was stressful for agriculture and wildlife, but brought an unexpected benefit to archeology. Sites that have been under water for decades were temporarily exposed along the shores of Beaver Lake. The Survey obtained permits from the Army Corps of Engineers and partnered with volunteers from the Arkansas Archeologiccal Society to revisit a number of these sites.

Arkansas Archeology on Cable TV

Two Survey research stations were featured on cable television programs this year. The History Channel's *Digging for the Truth* series featured the Parkin site and interviewed Jeff Mitchem for an episode called "America's Pyramids" that explored the mound-building cultures of the Mississippi River Valley and their encounters with the Hernando de Soto expedition in the 1540s. The History Channel also filmed at the Eaker site for an episode of the series *Mega Disasters* called "Earthquakes in the Heartland." Eaker contains evidence for ancient earthquakes associated with the New Madrid fault zone. Marion Haynes of the Blytheville research station was interviewed about his research on earthquakes and archeology. The episode also featured Survey archeogeophysical specialist Jami Lockhart. In June a Canadian film crew also visited the Eaker site for a Discovery Channel program.



Parkin station archeologist Jeff Mitchem (left) instructs **Digging for the Truth** series host Josh Bernstein how to load a replica sixteenth century matchlock arquebus like those used by Hernando de Soto's expedition

Development Continues at New UAFS Research Station

The Survey's newest research station opened at the University of Arkansas Fort Smith in late spring 2005 at the request of the Fort Smith campus. This year station archeologist Tim Mulvihill, with a crew composed almost entirely of volunteers, excavated on the Drennen-Scott House property to look for remnants of outbuildings and garden or landscaping features such as walkways. The University plans to develop the 1836 residence of City of Van Buren founder, businessman and Indian Agent John Drennen as a museum and training center for their Historical Interpretation degree program. The UAFS research station also initiated a joint local chapter of the Arkansas Archeological Society and Oklahoma Anthropological Society. The Ark-Homa Chapter is a focus for local citizens interested in prehistoric and historic archeology in western Arkansas and eastern Oklahoma.

New Station Archeologist & Museum Development for SAU

Dr. Jamie Brandon was hired as station archeologist for the SAU campus, replacing Frank Schambach, who retired at the end of the 2005–2006 fiscal year after 38 years of service. Brandon earned his M.A. in Anthropology at UAF and his Ph.D. at University of Texas – Austin. His dissertation research was in northwest Arkansas. Brandon will help develop a new museum at the SAU campus. As part of this project, SAU station assistant David Jeane attended an Arkansas Museum Association three-day Museum Studies Workshop in Smackover.

Toltec Station & Park Hosted Cultural Resources Conference

Representatives of 13 American Indian tribes, nations and other groups met with federal and state officials for a four-day conference in April to discuss work the Memphis District of the U.S. Army Corps of Engineers is doing on the Bayou Meto and Grand Prairie irrigation projects. The Tribal Consultation meeting was hosted by Toltec Mounds Archeological State Park, which is located at the edge of the Bayou Meto study area, and included a tour of Toltec Mounds and bus tours of the Bayou Meto and Grand Prairie areas. Several Survey staff members gave presentations on the archeology of the area, including telling of gaps in knowledge that could be addressed by work associated with the Corps projects. The conference aimed to build communication between the various parties and to address the Tribes' concerns and interests in heritage matters. Memphis District Archeologist Erwin Roemer organized the event.

Stations Benefit from General Improvement Funds

The Survey thanks Arkansas Rep. Tommy Roebuck (District 20) who helped secure General Improvement Funds to purchase some new computer equipment for the HSU station. A laptop computer and digital projector for illustrated PowerPoint presentations are essential for the station's classroom and public education mission. Thanks also to Arkansas Sen. Steve Bryles (District 15) for his assistance in obtaining General Improvement Funds to pay for much-needed exterior building repairs, plus some office and laboratory equipment at the Blytheville station.

A Statement from Our Graphic Artist/Photographer

Over the last five years, under two NAGPRA (Native American Graves Protection and Repatriation Act) grant projects, Jane Kellett has photographed over 1000 American Indian pottery vessels from the University of Arkansas museum collection. She offers this statement about her work: "Through the macro vision the camera affords, I had the fortune to appreciate both util-

ity and design in a thousand variations—shape, texture, pattern, color. Words fail the visual experience, but I am reminded of von Goethe's aphorism, "thinking is more interesting than knowing, but not so interesting as looking." Ms. Kellett's thoughts remind us all that the gifts of the past and the knowledge offered by archeology cannot always be measured by statistics.

Quapaw pot with the open hand design, a prominent motif thought to represent human interaction with the unseen spirit realm. Photograph by Jane Kellett.



CONTRIBUTIONS TO HIGHER EDUCATION IN ARKANSAS

- Survey archeologists taught 15 college classes to 427 undergraduate and graduate students at seven university campuses in Arkansas.
- Survey archeologists taught Independent Study courses for five students at UAF, HSU, and ATU; ATU station archeologist Skip Stewart-Abernathy supervised five ATU students at the annual Training Program as a for-credit archeological field school; ASU station archeologist Julie Morrow mentored an ASU McNair Scholar and supervised his research project.
- The Survey provided part-time employment to 12 UAF and HSU students (see Appendix 4).
- Courses taught by Survey archeologists fulfill basic education requirements and contribute to several undergraduate majors and graduate degree programs at seven Arkansas universities, including (for example) Anthropology, History, Geosciences, and Environmental Dynamics at UAF, History at ATU, Heritage Studies at ASU, and the new African Studies Program at UAPB.
- Survey archeologists contributed guest lectures to students attending Hendrix College, University of Alabama, Texarkana College, Arkansas State University, University of Oklahoma, UALR, and UAF.
- Survey archeologists filled 18 thesis or internship committee positions for UAF graduate students in Anthropology and Environmental Dynamics; one MLA thesis committee position at HSU; and two thesis committee positions for ASU graduate students in Biology and Heritage Studies.
- UAF station archeologist George Sabo III is an assistant director of the interdisciplinary Environmental Dynamics Ph.D. program in the Fulbright College of Arts and Sciences.



ATU student Diane Billiter-Thomas waves from the pit at the Eaker site in Blytheville. She earned field school credit by attending the annual Arkansas Archeological Survey/Arkansas Archeological Society Training Program under ATU station archeologist Skip Stewart-Abernathy's supervision. Ms. Billiter-Thomas is also on the faculty at UA-Morillton, where she teaches Surveying.

- Survey archeologists provided direct supervision and/or assistance to research projects for six UAF graduate students, and one out-of-state graduate student.
- 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.
- Additional service to Arkansas college and university campuses included:
 - participation in course and program development for host departments
 - committee membership and curatorial functions for campus museums
 - assistance with historic properties owned by the universities

CONTRIBUTIONS TO PUBLIC SCHOOLS AND K-12 EDUCATION

- The Survey distributes its Teacher Packet containing information, activities, and lesson ideas for classroom use by Arkansas school teachers in printed form, as a CD-ROM, or as downloadable files available on our website.
- Survey archeologists gave 16 presentations on archeology, American Indians, and early Arkansas to K-12 students and their teachers at schools across the state, with combined audiences of about 915.
- Presentations by ASU station assistant John Thomas at Parker Pioneer Homestead in Poinsett County reached about 6200 school children on field trips at the outdoor museum.
- The Survey provided materials about archeology and American Indians to the Teachers of Arkansas Studies Council (TASC), the Arkansas Conference on Teaching in Little Rock, and University Days on the UAF campus.
- 135 Arkansas teachers enrolled in workshops conducted by Survey staff.
 - Education specialist Mary Kwas presented "Trash Box Archeology" at the Arkansas Conference on Teaching in Little Rock, at University Days on the UAF campus, and to representatives from 12 Centers for Math and Science Education, also on the UAF campus.
 - UAF station archeologist George Sabo III taught a focus workshop about the Survey's online educational resources for Fort Smith public school science teachers.
 - UAFS station archeologist Tim Mulvihill taught a workshop on Arkansas archeology to teachers attending an Alternative Learning Environment conference at UAFS.
- Survey staff members served as judges in several divisions at the Northwest Arkansas and Northeast Arkansas Regional Science Fairs.

GRANTS, HONORS, AND AWARDS

- \$15,000 granted by the Arkansas Natural and Cultural Resources Council for "Artifact Processing at Parkin Archeological State Park" (Parkin Station)
- \$915 granted by the Henderson State University Faculty Research grant program for "Caddo Chronology: A Proposal for Radiocarbon Dating Samples from the 2002 HSU Archeological Field School Excavations" (HSU Station)
- \$5123 granted by the Ross Foundation, Arkadelphia, for "Documenting Ceramic Vessels in the JEC's Hodges Collection" (HSU Station)
- ◆ \$27,500 granted by the Archaeometry Laboratory at the University of Missouri Research Reactor, Columbia, for "Investigating Ancient Production and Exchange Systems Using Ouachita Mountain Novaculite" (HSU Station)

- \$1300 granted by the Arkansas Archeological Society, Marcus Quinn Memorial Fund, for "Radiocarbon Dating Activity at 3GA48, a Novaculite Quarry in the Ouachita Mountains" (HSU Station)
- \$5000 granted by the Arkansas Game and Fish Commission for specialist analysis of floral samples from the Tom Jones site (SAU Station)
- ◆ \$4000 from MURR (University of Missouri Research Reactor) for neutron activation analysis of ceramic sherds from Greenbrier phase sites, Independence County, Arkansas (ASU Station)
- ♦ George Sabo III (UAF station archeologist) was awarded a certificate of appreciation for service to the Caddo Nation

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 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
- 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.
- Over 70 public lectures and other presentations by Survey staff served audiences of more than 8500.
- Survey staff have contributed 38 articles to the Butler Library's *Encyclopedia of Arkansas History and Culture* project.
- ◆ 73 members of the Arkansas Archeological Society attended our jointly managed annual Training Program for amateur archeologists. The 2006 program at the Eaker site in Blytheville was directed by Dr. Claudine Payne. 16 participants received technical certification in one or more areas.
- Our main website received, on average, 1478 visits per month, with a year-end total of 17,737.
- Our interactive educational websites—*First Encounters* and *Rock Art in Arkansas*—had 12,627 and 4265 visits respectively during 2005–2006.
- Marion Haynes (Blytheville) continued his appointment by Governor Huckabee to the Arkansas Governor's Earthquake Advisory Council.
- We continued our NAGPRA compliance program in cooperation with several American Indian Tribes. The federal Native American Graves Protection and Repatriation Act 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 returned to modern representatives of the appropriate culturally affiliated American Indian Tribe. NAG-PRA tasks accomplished this year:
 - With a \$74,709 grant from the National Park Service, the Survey began the process of determining cultural affiliation and ultimate disposition of Native American sacred objects, objects of cultural patrimony, and/or unassociated funerary objects in the control of the University of Arkansas Fayetteville Collections Facility. Of 1571 pottery vessels in these categories, 525 were covered by the first grant. In 2005–2006, inventory of these vessels was completed.

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 the Society for American Archaeology, Southeastern Archaeological Conference, Society for Historical Archaeology, South Central Historical Archeology Conference, Society for Bead Researchers, Arkansas Museums Association, Arkansas Historical Association, and Arkansas Humanities Council.
- Survey staff composed the planning committee of the 63rd annual meeting of the Southeastern Archaeological Conference, held at the DoubleTree Hotel in Little Rock, November 8–11, 2006.

SCIENTIFIC ACHIEVEMENTS & ARCHEOLOGICAL MISSION

- Survey professional staff authored or coauthored 42 publications and reports, and presented 17 papers and workshops at professional meetings in 2005–2006.
- 1260 new archeological sites were recorded, bringing the total number of sites in Arkansas site files to 40,944.
- 183 new archeological projects were entered in the database, bringing the projects total to 5254.
- The Survey registrar facilitated 540 requests for information from the Arkansas site files by students, researchers, and project managers. Formal access to records by authorized researchers numbered 179.
- Our sponsored research program administered new grants and contracts with budgets totaling \$246,629 and submitted six final project reports.
- The Survey logged over 11,112 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 under grants or contracts from Mack-Blackwell Transportation Center, Arkansas Highway and Transportation Department, and Camp Robinson (DOD).

RESEARCH HIGHLIGHTS FOR 2005-2006

- Archeological research projects at all stations and at the coordinating office produced new knowledge about the prehistory and early history of Arkansas. Much of this work was made possible through the support and cooperation of various agencies, including the Arkansas Game and Fish Commission, the U.S. Forest Service, U.S. Fish and Wildlife, the U.S. Army Corps of Engineers, Arkansas State Parks, the National Park Service, National Endowment for the Humanities, and the Quapaw Tribe of Oklahoma, and with the help of volunteers from across the state.
 - Julie Markin began a program to study relationships between the Toltec Mounds site and smaller farm and village sites, leading to an overall picture of the Plum Bayou cultural landscape. See pp. 22–23.
 - A grant from ANCRC helped support processing the backlog of artifacts from a decade of excavations at the Parkin site, bringing new details to light. Jeffrey Mitchem's research supports more truthful interpretive artworks at Parkin Archeological State Park. **See pp. 26–28.**

- George Sabo, Jerry Hilliard, and graduate student Leslie Walker at the UAF station studied UA Museum collections to gain new insights on the development of Mississippian culture. Using artifacts from the important Carden Bottoms locality in the Central Arkansas River Valley show, they are examining art and iconography as expressions of religious belief. **See pp. 30–32**.
- Marvin Jeter and Robert Scott (UAM) moved forward with analysis of the Taylor Mounds, a site that changed over 1000 years from a village to a "vacant ceremonial center" where people from surrounding hamlets gathered for community events. **See pp. 35–37.**
- John House and Mary Farmer (UAPB) have concentrated on the Menard Locality and Arkansas Post since 1997. This year, House and Glen Akridge published on red pigment from the Lake Dumond site, which proved to be vermilion, likely obtained in trade from Europeans. **See pp. 40–42.**
- Tim Mulvihill (UAFS) excavated on the grounds of the historic Drennen-Scott House. Following detailed mapping of the property, the Survey's Jami Lockhart conducted geophysical remote sensing to look for subsurface features. The volunteer crew found remains of a stone walkway leading to a terraced garden area and other features that will aid renovation of the property. **See pp. 44–46.**
- Mary Beth Trubitt and Matt Reynolds (HSU) began a new project to study exchange systems by using neutron activation analysis of novaculite to get a chemical signature that tells where a particular stone specimen was obtained. Trubitt submitted grant applications to support the research. **See pp. 48–49.**
- Frank Schambach (SAU) worked toward a final report on the Tom Jones site, a Caddo mound group on Grandview Prairie. Structure floors uncovered at the site apparently belonged to elite houses, not ordinary dwellings. They contained better cuts of venison, delicacies, and a surprising number of songbird bones, probably taken for their colorful feathers rather than as a food source. **See pp. 53–56.**
- The ATU station assisted a Forest Service "Passport in Time" project with excavations at a homestead site in Pope County. Relatives of the old home site participated in the excavation. Larry Porter continued work at the antebellum Widow Logan site, while Skip Stewart-Abernathy helped Faulkner County Historical Museum Director Lynita Langley-Ware with excavations at Cadron Settlement Park. **See pp. 59–61**.
- Julie Morrow (ASU) continued working with the King Mastodon materials for a final report, and hopes to develop a book on Pleistocene faunal remains in Arkansas. She also studied the Anzick site in Montana, which contains the only known Clovis Paleoindian burial, and made new conclusions about the rare antler implements included in the grave of a two-year-old child. **See pp. 64–65**.
- For a third year, Claudine Payne directed excavations at the Eaker site, a Mississippian "small chiefdom," to study how the typical Mississippi era communities were organized, and to lay the groundwork for possible interpretation of the site as an archeological park. **See pp. 68–70.**
- The Sponsored Research Program excavated at Old Davidsonville State Historic Park, uncovering thousands of artifacts that reveal life at this short-lived (1815–1830) County seat town. The quantity of food-related artifacts in Lot 35 was in line with archival research suggesting "public houses of entertainment." Glass beads and "tinkling cones" represent artifacts typically used in trade between Early Americans and Indians. **See pp. 72–73.**
- Our archeogeophysical specialist contributed to research projects around the state and was depicted "in action" for a documentary on earthquakes filmed by The History Channel. **See pp. 6, 79-80.**

CHALLENGES

The Survey recognizes a number of challenges in fulfilling our mission of research, service, and education. While funding is a consistent challenge that limits us in many ways, 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 and loss of archeological sites due to changing land use patterns and to vandalism was the major inspiration in creating the Arkansas Archeological Survey nearly 40 years ago. Even with public education programs and state and federal laws to protect cultural resources, site destruction remains an important issue.
- Population increase and the pressure of land development threaten sites in the state's growth regions, especially the northwest, central, and West Memphis areas. Land-leveling for agriculture in the river valleys also destroys large numbers of sites.
- The Survey and the Arkansas Archeological Society have developed a Site Steward program to monitor important sites and to inform interested landowners about archeological sites and how to protect them.
- We have conducted several successful salvage excavation projects, in cooperation with landowners, to recover information from sites that will be impacted by land use.
- Rockshelters in the Ozarks have increasingly been exploited as illicit methamphetamine labs, with attendant vandalism of archeological deposits. The Survey has worked cooperatively with local law enforcement agencies to address this problem.
- Curation Space and Management of Collections. The Survey is obligated to curate archeological collections resulting from our own research and from projects done in Arkansas by government agencies and private contracting firms. We have formal agreements with several governmental entities to house and care for archeological collections from sites on public lands in Arkansas. All these collections need to be accessible for research and instruction, and for public interpretation of historic sites.
- Several of our research stations have substandard storage facilities. Other stations have insufficient room for their collections or will soon run out of room.
- The UA Collections Facility in Fayetteville will soon be out of room. Also, there is inadequate lab and research space at the Collections Facility.
- Despite good efforts by our host institutions, security is an issue. Twenty-six prehistoric Caddo Indian pottery vessels were stolen from the Survey's SAU station collection this year.
- 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 analyses and the writing of reports. 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 39 years of efforts by the Survey, many Arkansans still do not know that Arkansas possesses unique and significant 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 by expanding our website, providing more and better resources for classroom teachers, and writing more Popular Series books. Funding to hire more assistants is the main barrier to these goals.
- Archeology-themed parks are popular and a great way to improve awareness. Arkansas has only a few interpreted archeological sites that can be visited by the public. We would like to work with State Parks, the Forest Service and the National Park Service to develop sites on state and federal lands. Our current program of research at the Van Winkle's Mill site in Benton County, in cooperation with Arkansas State Parks and the Corps of Engineers, is a model for such efforts. Ongoing work at Old Davidsonville is another example.

- 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. Low salaries and an unpredictable budget-stream for capitol equipment have been our most consistent challenges over the years.
 - 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 station assistants.
 - Several stations have gone without research assistants for a year or more at a time. This severely hinders our ability to fulfill our mission.
 - The coordinating office in Fayetteville has been unable to rehire a full-time person as liaison with the Arkansas Archeological Society. Other staff have taken up part of the slack, but this means we have to restrict other activities. Our cooperative relationship with the Society has been crucial to research projects and public education efforts, and provides a model that is admired and imitated nationwide.
 - We need to replace aging computers, vehicles, and other equipment. Modern archeology is a high-tech process. We need sophisticated computer software, computerized transits and mapping technologies, GPS devices, digital and film cameras, and upgrades for our archeogeophysical equipment, as well as more traditional field equipment and lab supplies.
 - ¥ General Improvement Funds aided two of our research stations with building repairs and needed equipment purchases during 2005–2006.
 - * The Higher Education Bond Issue will help with some of our technology needs.

Personnel Changes

SURVEY EDITOR MARY LYNN KENNEDY RETIRES



Mary Lynn Kennedy retired on July 1, 2006 after 31 years as the Survey's editor. During the course of those 31 years she copy-edited 52 issues of the Survey's Research Series, two Popular Series, 11 Technical Papers, and 32 Research Reports. She also saw each through the production process and kept track of reprints, sales, and publicity. Although each manuscript may present new problems, her most challenging work was with the eight volumes of the overview of the Southwest Region of the U.S., funded by a contract with the U.S. Army Corps of Engineers. She worked with over 20 authors over a period of three years to complete this project. And then there were seven volumes of a similar overview of the Northern Plains, also sponsored by the Corps of Engineers. One

of the Survey's most important publications during Ms. Kennedy's tenure was *Standards for Data Collection from Human Skeletal Remains* (edited by Jane Buikstra and Douglas Ubelaker), which has become a "standard" in the field of bioarcheology and is widely used as a college text. Importantly for the production of this large number of publications is that Mary Lynn kept up with changes in technology over the years. We miss her energy and wish her well in retirement.

FRANK SCHAMBACH RETIRES

Frank F. Schambach retired from the Survey June 30, 2006, after 38 years as station archeologist at the Southern Arkansas University campus in Magnolia. Schambach's love of history began in childhood. He served in the U.S. Army from 1955–58, then studied at the University of Michigan, where his advisor reportedly told him, in 1959, that "anthropology was no way to make a living."

Schambach went on to earn his bachelor's degree in anthropology at Bard College in 1963. His post-graduate education was at Harvard University, where he earned his master's in 1964 and his doctorate in 1970. At Harvard he was introduced to Arkansas archeology by Stephen Williams, then Curator of American Archeology at the Peabody Museum, who suggested Schambach use Philip Phillips's collections and notes from a 1939 survey of part of the Ouachita Valley as a dissertation project.

Schambach agreed, but decided he needed to excavate a few of the sites for more information. He traveled to Arkansas and there discovered the "staggering quantity of unstudied materials" curated at the University of Arkansas Museum under Charles R. McGimsey's direction, all in perfect order with records intact and easily accessible. This material became the basis for Schambach's dissertation on *Pre-Caddoan Cultures in the Trans-Mississippi South*, which is still consulted as the definitive work on this subject.

The Arkansas Archeological Survey was created while Schambach was working on his dissertation, and Frank was hired as one of the Survey's founding station archeologists. In 1982 he was promoted to Full Professor in the University of Arkansas Department of Anthropology. He has been a popular teacher at SAU, where his anthropology classes consistently met (or exceeded) their capacity enrollment. Frank has also been fortunate in having a dedicated cadre of skilled amateur volunteers who have devoted thousands of hours to SAU station research projects in the field and lab over the years.

Schambach's professional life has centered around Caddo area archeology. He is the author of numerous articles and book chapters and several monographs, and has presented scores of papers at professional meetings, as well as many invited lectures to various groups. His work at the Crenshaw site stands out, for it was here that finds of



unusual treatments of deer antlers and human skull burials started him on the long road to reconstruct the story of the development of Caddo culture and ceremonial life—a project that he hopes to address in retirement. Other important sites and topics he has been involved with (to name only a few) are the Ferguson site, Battle Mound, Shallow Lake, Bangs Slough, the Sanders site in east Texas, Spiro, the de Soto route, trade and warfare in the Mississippian world, and most recently the Tom Jones Caddo mound group on Grandview Prairie.

Schambach has also been a dedicated professor of archeology and archeological knowledge to the public, presenting over 500 talks to public school audiences, service clubs, the Kadohadacho Chapter of the Arkansas Archeologiccal Society and other local groups in southwestern Arkansas during his career. He is the author/compiler of several annotated slide sets for public talks and has been on the Board of Directors for Pictures of Record, Inc. since 1989.

One of Frank's great strengths is his skill as a writer. His prose is lively and entertaining without sacrificing precision—a rare gift. In an interview granted to the *South Arkansas Sunday News* (18 June 2006), Schambach likened the process of piecing together archeological information to solving a puzzle. Archeology tells a story, one that cannot be adequately told in tables and lists. Frank Schambach's colleagues and friends at the Arkansas Archeological Survey and beyond wish him well in retirement, and look forward with excitement to whatever part of the story of Caddo archeology he may gift us with over the next few years.

Frank Schambach at the Crenshaw Mound, 1969.

THE DIRECTOR OF THE ARKANSAS ARCHEOLOGICAL SURVEY

Thomas J. Green joined the Survey as Director in 1992 after a nationwide search. He received his Ph.D. in anthropology in 1977 from Indiana University. He was State Archeologist for Idaho from 1976 to 1992, and Deputy State Historic Preservation Officer for Idaho from 1986 to 1992. His professional specializations are American Indian prehistory and ethnology, public archeology, and cultural resource management. By agreement with the University of Arkansas System, Dr. Green has a faculty title of Associate Professor in the UAF Anthropology Department.

Selected Academic and Service Activities for 2005–2006

- Taught the Cultural Resource Management graduate seminar (ANTH 5443) for the Anthropology Department at UAF during Spring 2006 (10 students)
- Currently a member of three M.A. committees and three Ph.D. committees at UAF; Chair of two Ph.D. committees
- Taught two Cultural Resource Management classes for the U.S. Army Corps of Engineers in Santa Fe, New Mexico, and St. Louis, Missouri (60 students)
- Chair, Society for American Archaeology Professional Development Committee
- Member, RPA (Register of Professional Archaeologists) Professional Development Committee
- Member, RPA Standards Board
- Planning Committee, 63rd Southeastern Archaeological Conference, Little Rock, November 2006
- Presented programs to the Ko-ko-ci and Tunican Chapters of the Arkansas Archeological Society
- Taught Basic Excavation at the 2006 Arkansas Archeological Society/Arkanas Archeological Survey Training Program (9 students)



Dr. Green (at right) teaches the Basic Excavation seminar at the annual Training Program for amateur archeologists. Seventy-three participants from Arkansas and across the country converged at Blytheville to stay in local hotels and eat at local restaurants while getting hands-on experience at the the National Register and National Landmark Eaker prehistoric site. Training Program registrants contributed 5640 volunteer hours to Arkansas archeology. (Photo by Smoke Pfeiffer.)

THE ASSISTANT DIRECTOR FOR FISCAL AFFAIRS

Betty Grant took over the Assistant Director for Fiscal Affairs position in July 2002. Prior to this she had been the Survey's Accountant for 11 years. 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 biennial 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. She also supervises the Survey Accounting Tech I (Mary Worton), Administrative Assistant (Barbara Scott), and the Custodial position (Kathy Alsobrook).

THE SURVEY ADMINISTRATIVE ASSISTANT

Barbara Scott has been the Survey's Administrative Assistant at the coordinating office in Fayetteville since 1998. In addition to normal office duties, Ms. Scott coordinates communications throughout the Survey's statewide organization. At the CO she manages the reception area and workroom, supervises work-study students, 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. When budget cuts prevented the Survey from filling its research assistant position for liaison with the Arkansas Archeological Society and publication sales, Ms. Scott took on a number of that person's duties as well, including logistical arrangements for the summer Training Program and the Society's Annual Meeting.



Barbara Scott keeps things running smoothly at the Training Program. (Photo by Joe Melton.)

THE STATE ARCHEOLOGIST

Dr. Ann M. Early

The State Archeologist is responsible for various administrative activities relating to management and protection of archeological sites and site data in Arkansas, as well as 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. The State Archeologist oversees the Survey registrar's office and advises the Arkansas Archeological Society, an active organization of amateur archeologists, on their various educational activities.

NEWS AND RESEARCH

Preserving Historic Cemeteries

Efforts to preserve and protect old cemeteries—including many containing unmarked graves or suffering from years of neglect—has become a major cultural resource issue in Arkansas. Several years ago Ann Early began an initiative to document cemeteries in the Survey's archeological database in order to provide efficient assistance to groups and individuals seeking help with cemetery preservation projects.

Advice and referrals about cemeteries continued to occupy much of Early's time. Some of the issues of concern are access to old cemeteries on private lands, perceived threats from development, and efforts to document, rehabilitate, or commemorate historic cemeteries.

Endangered graveyards are found across Arkansas, in developing urban and suburban areas and in rural settings. Many are burial places for African American communities. With funds now available from the Arkansas Endowment for the Humanities to support African American Cemetery research and preservation efforts, the number of ongoing projects has considerably increased across the state. But there are still many more people seeking technical and financial assistance than there are funds and personnel to help.

Ann Early attended the annual conference of the Association for Gravestone Studies, held in June in Doylestown, Pennsylvania, to learn more about resources and programs available for cemetery research and preservation.

Trail of Tears: Footprints Across Arkansas

The 1838–39 forced removal of most of the Cherokee people from east of the Mississippi River into Indian Territory in present-day Oklahoma is an episode of abiding interest to historians and to descendants of the Cherokees who traveled the Trail of Tears. Because removal routes crossed Arkansas, the Trail is a concern for many Arkansans as well. Though the term "Trail of Tears" is most often associated with the Cherokees, Choctaw, Creek, Chickasaw, and Seminole people of today are also interested in their own removal-era histories, and have begun efforts to identify those places in Arkansas that were important settings of their travels.

This year Ann Early continued involvement in several projects connected to Indian Removal. She supervised UAF anthropology graduate student Amber Horne's completion of *Footprints Across Arkansas*, a Trail of Tears Atlas, and subsequent production of both digital and print versions. A \$15,000 grant secured from the Arkansas Historic Preservation Program in the previous fiscal year for creation of the Atlas, supplemented with in-house support from the Survey's budget, allowed for printing of a limited number of the large-format color atlases. These were distributed free-of-charge to selected archives and libraries across the state and donated to each of the Indian Nations that were a subject of the Atlas research.

Digital files of the Atlas were forwarded to the Arkansas Historic Preservation Program and a version was posted on their website. An interactive version will be posted on the Survey's website in the future. Ann Early introduced the Atlas at a meeting of the Arkansas Chapter of the Trail of Tears Society in Pea Ridge.

National Register

Although Arkansas has thousands of important archeological sites, few have been formally recognized by their addition to the National Register of Historic Places. Archeological site nominations are based on the scientific potential and cultural importance of a property. The nomination forms need to include detailed documentation with firm evidence that a site possesses intact deposits and artifacts that could be studied at some future time. Gathering this kind of information is



more time-consuming and expensive than documenting houses and other standing structures that are more commonly nominated to the National Register. As a result, there is a backlog of worthy archeological sites that have not been formally nominated for consideration.

This year, Ann Early had the opportunity to address this problem. She reviewed the status of several thousand sites in the AMASDA database and developed a priority list of site categories and topical research themes that need attention, in order to identify those sites most urgently deserving, and most likely to succeed in the nomination process. Early worked with graduate assistant Katherine Cleek, who gathered site information from the site files and completed the nomination paperwork, and with UAF station archeologist George Sabo III, who has been leading a team to document rock art sites across the state.

National Register nomination forms were completed for six rock art sites on public lands, and for the historic Van Winkle Mill site in Hobbs State Park and Conservation Area, Benton County. Archeological field schools and other research at Van Winkle over the last several years has led to graduate student theses and dissertations and public interpretation projects.

Other Research

Ann Early continued with other ongoing research interests as time allowed. One project concerns the history of French Colonial life in the Mississippi Valley, in particular the role of Arkansas in the second Chickasaw War of 1738–1740. Early completed a chapter on this subject for a book about French Colonial archeology in the Southeast, now under consideration by the University of Florida Press.

Another long-term research interest is the prehistory and history of Caddo culture. Early and three co-editors completed a revision of their 1999 *Caddo Bibliography* (published as Survey Technical Paper 10). She also revised some of her work on the characteristics of prehistoric Caddo pottery decoration and presented a paper on "Form and Structure in Prehistoric American Indian Ceramic Design" at the 2005 annual meeting of the Southeastern College Art Conference, held in Little Rock.

Finally, she continued to pursue research on the history of Indians in Arkansas, both real and imagined. Some results were incorporated in a number of articles Early wrote for the online *Encyclopedia of Arkansas History and Culture*.

SERVICE AND PROFESSIONAL ACTIVITIES

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

Academic Service and Activities

By agreement with the University of Arkansas System, Dr. Early has a faculty title of Associate Professor in the UAF Department of Anthropology. Activities this year:

- supervised UAF anthropology graduate assistant Amber Horne in completion of the Trail of Tears Atlas
- supervised UAF anthropology graduate assistant Katherine Cleek in developing Nominations to the National Register of Historic Places for six rock art sites and one historic site in Arkansas
- provided informal advice to several graduate students working on archeological projects

Scholarship and Research

- contributed a chapter on the search for Fort St. Francis, a French Colonial outpost built in Arkansas for the Second Chickasaw War of 1739–40, to a book on French Colonial archeology in the Southeast (currently under consideration by the University of Florida Press)
- primary editor of updated *Caddo Bibliography*, Arkansas Archeological Survey Technical Paper 10, revised edition printed in 2006
- proofed and corrected maps and text for Footprints Across Arkansas, the Trail of Tears Atlas
- presented a paper on Caddo ceramic design at the Southeastern College Art Conference, Little Rock
- presented "Introduction to the Trail of Tears Atlas" at the Arkansas Chapter, Trail of Tears Organization Meeting, Pea Ridge

Records and Collections Management

- prepared AMASDA database entry paperwork for historic cemeteries, Civil War sites, Trail of Tears sites, and other kinds of sites that had been nominated to the National Register of Historic Places
- reviewed and granted requests from scholars and publishers for permission to use images and figures from Survey publications
- attended an Arkansas Hazard Mitigation Meeting regarding the Arkansas plan for mitigating natural and human damage to artifact collections and archives
- solicited cemetery information from individuals and land managers for continuing statewide Cemetery Recording Project

Review of Projects

- reviewed 62 permit applications posted by U.S. Corps of Engineers districts for projects in Arkansas
- read Section 106 compliance paperwork generated by Arkansas Historic Preservation Program staff and various agencies and individuals
- read contract reports and other limited distribution reports submitted to the State Historic Preservation Officer and Survey Registrar upon completion of work in Arkansas

Professional Service

- responded to 140 requests for assistance and information from professional archeologists and cultural resource management specialists about archeological issues in Arkansas
- reviewed a chapter for a book under consideration by Louisiana State University Press
- reviewed a manuscript for publication by the National Park Service

- reviewed a manuscript submitted for consideration to *Southeastern Archaeology*
- member, Arkansas Historical Association Board of Trustees; State Review Board of Historic Preservation; Editorial Advisory Board, *Encyclopedia of Arkansas History and Culture*
- participated in Tribal Consultation Meetings, Grand Prairie and Bayou Meto Projects, sponsored by the USACE Memphis District, Little Rock; and Bridge-A-Gap Meeting sponsored by the Ozark and Ouachita National Forests, Creek Tribal Center, Okmulgee, OK

Service to the Arkansas Archeological Society

- presentation to the Central Mississippi Valley Chapter (Jonesboro), audience of 30
- taught Stewards Workshop at the 2006 Training Program
- worked with the Stewards Committee chairman to implement the Stewards Program
- assisted preparations for the 2006 Training Program

Other Public Service and Outreach

- presented the Survey's 2006–2007 Budget Proposal to the UA Board of Trustees
- began efforts to amend the Arkansas Antiquity Act
- responded to 34 requests for information and assistance regarding historic cemeteries
- responded to at least 115 requests from the general public for information or assistance with archeological sites, artifacts, or American Indian subjects
- provided technical information to the Arkansas State Lands Commissioner and Director of the Department of Arkansas Heritage regarding the management of historic and archeological properties under water in Arkansas
- reviewed, commented on, and advised editors of a dozen articles written by other scholars for the *Encyclopedia of Arkansas History and Culture*
- provided ongoing advice and editorial comment on the Trail of Tears film project sponsored by the Rockefeller Foundation and other agencies

TOLTEC MOUNDS ARCHEOLOGICAL STATE PARK

Julie Markin, Station Archeologist Marilyn Whitlow, Secretary/Laboratory Assistant

The Toltec Mounds site in Lonoke County 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. The mostly square and flat-topped mounds were aligned according to astronomical observations. The two largest are 39 and 49 feet high. The site had a small permanent population of religious and political leaders and their families; most people lived in scattered villages and hamlets in the surrounding country-side, 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. The Toltec Mounds site is a National Historic Landmark and has been protected and developed as a state park since 1975. The Survey's research program at Toltec Mounds began in 1976.

NEWS AND RESEARCH

Plum Bayou Culture Survey

This year, with a new station archeologist, the major focus of research shifted from the Toltec site itself to an assessment of associated Plum Bayou culture sites distributed around Toltec. This information will help clarify the context of Toltec's cultural setting, how Plum Bayou culture developed, and the dynamics of the site's relationship with its neighbors. Ultimately it will help enrich interpretation at the park as well.

The first stage of the project was a review of all the existing records for Marksville through Coles Creek period sites in Lonoke and Pulaski counties. This represents the time period from about A.D. 1–1200. Plum Bayou culture fits within this range at about A.D. 500–900. A "windshield survey" confirmed that most sites are accessible, although continued cultivation has certainly affected the deposits.

The second stage will be new ground surveys and excavations at sites that may have earthworks, middens, and/or subsurface features, and sites whose existing artifact collections have the right "mix" of ceramics to suggest a Plum Bayou cultural affiliation. The diagnostic assemblage should include a high percentage of the ceramic type Baytown Plain, some Coles Creek Incised, and a minimal amount of Larto Red. A program of systematic ground surveys of the bayous around Toltec to locate new sites and to better assess the distribution, size, and relationship of contemporaneous Plum Bayou settlements is also under way. Volunteers from the newly re-formed Toltec Chapter of the Arkansas Archeological Society, the Central Arkansas Master Naturalists Program, and Park staff performed surface survey in fields along Plum Bayou in Jefferson County and Indian and Bakers Bayous in Lonoke County. The crews documented several new sites that had pottery consistent with the Plum Bayou culture designation.



Ross Davis, Debbie Steward, Melissa Sorrells, and Frank Skinner prepare for a controlled surface collection along Plum Bayou.

Crews also revisited the Coy Mound site in Lonoke County, about 19 km east of Toltec. This site was explored by Edward Palmer in 1883, who called it the Tate Mounds. Four mounds were originally recorded, but only one remains today. The site is in cultivation and is heavily collected by relic hunters. Fieldwork by Michael Nassaney in 1988, 1989, and 1994 with students from Western Michigan University and the University of Arkansas, Little Rock, indicated that the Coy Mound site is roughly contemporary with Toltec. After the crops are harvested, Julie Markin plans to continue fieldwork at Coy, including some new test excavations, to better determine its place in the Toltec political system.

Another part of this project is analysis of ceramics from Plum Bayou sites across the Central Arkansas region to develop a "catalog" of Plum Bayou decorative motifs. The study region is defined by a 100 km radius from the Toltec site. Unfortunately, several collections have too few sherds, or sherds too small or too eroded to provide useful information. But other collections are giving good results. One of these is from the Steve Hoffman site on the west side of Little Rock, about 30 km from Toltec. The Society had its Training Program here in 1971. The site has Plum Bayou and Caddo components.

General Station Management

Marilyn Whitlow continued to care for records and collections at the Toltec station. She has nearly completed scanning all the slides in the Toltec collection to convert them to digital images. She is also working on a searchable database of the digital images by artifact type, provenience, and year of excavation. When the project is finished, over 9000 slides will have been scanned and cataloged.

Ms. Whitlow assisted with the design and installation of an exhibit on the Survey's research at Toltec Mounds Archeological State Park near the entrance to the Main Library of the Central Arkansas Library System. The exhibit remained on display for five months.



The Toltec Mounds exhibit at the Main Library, located in the River Market District of Little Rock.

Ms. Whitlow also helped in the revitalization of the local chapter of the Arkansas Archeological Society by creating and mailing post card announcements for the meetings. The Toltec Chapter received its official charter in March 2006.

Cemetery Recording Project

Julie Markin served as the humanities scholar on four Arkansas Humanities Council Documentation and Preservation grants, helping local groups concerned with preserving African-American cemeteries. Ms. Whitlow filled out site forms for historic cemeteries she visited, and also for cemeteries visited by Markin and by recently retired station archeologist Dr. Martha Rolingson.

TOLTEC MOUNDS STATION PERSONNEL

Julie Markin (ABD, University of Georgia) is scheduled to defend her doctoral dissertation during Fall 2006. Her research interests focus on the Late Woodland to Mississippian period transition and the emergence of chiefdom political organization in the American Southeast. Besides fieldwork in Alabama and Georgia, she has classroom and field school teaching experience, and worked for four years as Director of Educational Programs for The Coosawattee Foundation in Calhoun, Georgia. Julie Markin joined the Survey in July 2005.

Marilyn Whitlow has been Secretary at the Toltec Mounds station since 1985. She works with Julie Markin on many aspects of station management, including daily operations, research (field and lab), and outreach. She has recently been involved in the Plum Bayou survey, cemetery recording project, development of temporary exhibits, and working with the Toltec Chapter of the Arkansas Archeological Society.

Academic Service and Activities

- lecture and tour of the site and lab for students from Dr. Brett Hill's Hendrix College archeology class
- provided information about the Toltec Mounds site and Plum Bayou culture to visiting students from University of Alabama and UALR
- UALR Anthropology Advisory Council
- site tour for a UAF Anthropology faculty member

Professional Service and Activities

- Local Arrangements Co-Chair, Southeastern Archaeological Conference 2006 Meeting, Little Rock, November 8–11 (Markin)
- participated in invited symposium *Ceremony and Daily Life through the Eyes of a Pot* at the 2005 Southeastern Archaeological Conference, Columbia, South Carolina (Markin)

Service to Arkansas Department of Parks and Tourism

Markin is the primary resource person for development of interpretive programs at the park. She is consulted by park staff on maintenance and operations activities that might affect the site and all matters pertaining to archeology. Specific issues this year included:

- definition of park boundaries; ideas for temporary exhibits; photographs and PowerPoint presentations for special programs; review of materials for visitor hand-outs; general site interpretation
- Markin presented a lecture on the prehistory of Central Arkansas and the Toltec Mounds site to the Central Arkansas Master Naturalists Program, audience of 50

Public Service and Outreach

- presented a program to the Little Rock Corps of Engineers, audience of 35 (Markin)
- presented two programs for the Museum of Discovery's "Can You Dig It?" event, combined audiences of 525 (Markin)
- presented a lecture to nine Chinese archeologists, culture heritage and museum directors in a cultural exchange program with the Department of Arkansas Heritage (Markin)
- provided information about Toltec Mounds and research for a popular guide to southeastern archeological sites, which will be published by the University of Georgia Press (Markin)
- humanities scholar for four Arkansas Humanities Council grants to document and preserve historic cemeteries (Ellis, Campbell, Hickman/New Dora, and Pulaski cemeteries) (Markin)
- Merit Badge Counselor for Boy Scouts of America Archaeology Merit Badges (Markin)
- installed exhibit on Toltec at the Main Library in Central Arkansas Library System (Whitlow)

- presented Spring Equinox program at Toltec Mounds, audience of 70 (Markin)
- hosted an Artifact Identification Day, about 22 attendees (Markin, Whitlow)
- responded to numerous requests from the public for information about archeology, artifacts, and Toltec Mounds (Markin, Whitlow)

Service to the Arkansas Archeological Society

- with the Station's Board of Advisor's, re-formed the local chapter of the Society, now named the Toltec Chapter (Markin, Whitlow)
- taught Basic Excavation seminar at the Training Program (Markin)
- assisted excavation at the Training Program (Markin)
- Local Arrangements Chair for the Society's 2006 annual meeting, Little Rock, September 22–24 (Markin)
- presented programs to the Tunican (Monticello), Central Mississippi Valley (Jonesboro), Arkansas River Valley (Russellville), and Toltec (Little Rock) chapters, combined audiences of 85 (Markin)

Volunteer Hours

- the station logged 1258 hours contributed by volunteers, including 735 hours by former station archeologist Dr. Martha Rolingson, who retired at the end of the 2005 fiscal year
- Dr. Rolingson also continued to work on a comprehensive report covering nearly three decades of work at the Toltec Mounds site

PARKIN ARCHEOLOGICAL STATE PARK

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

Penny N. King, Archeological Laboratory Assistant III (part-time)

Deanna L. Potter, Archeological Laboratory Assistant I (part-time)

Laura J. McCallister, Archeological Laboratory Assistant I (part-time)

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 AND RESEARCH

National Exposure on The History Channel

Dr. Mitchem was featured in an episode of The History Channel's highest-rated series, *Digging for the Truth.* Titled "America's Pyramids," the show was an investigation of the various mound-building cultures of the Mississippi River Valley and the fact that they were able to defeat and drive out Hernando de Soto's men in the 1540s. The producers sought out Mitchem for his expertise on sixteenth century Spanish weaponry and his knowledge of the Soto expedition.

Mitchem was filmed at the Parkin site and at the nearby Village Creek State Park talking with the series host, Josh Bernstein, about the types of weapons and

armor worn by the Spaniards. He also described the flight of the surviving Spaniards down the Mississippi River after Soto's death in 1542. Filming included Mitchem and Bernstein canoeing on a lake at Village Creek, as well as the host firing a replica Spanish matchlock arquebus and shooting arrows into replica Spanish armor at Parkin. The filming took place in July 2005, and the program first aired in January 2006.

Rediscovery of the Missing Half of the Armorel Pipe

In February of 2006, Mr. Johnny Richardson of Russellville, Alabama, contacted the Parkin station. A former resident of Blytheville, Mr. Richardson said he had visited Parkin Archeological State Park recently and thought he might have the other half of a partial stone pipe on display in the exhibit area.

The sandstone pipe was collected from the surface at the Armorel site in Mississippi County when former ASU station archeologist Dan Morse took some students to the site during a Spring Break outing in the early 1970s (probably 1974). Morse and the students



Reunited fragments of the Armorel pipe.



Deanna Potter (left) and Penny King (right) processing Parkin station artifacts in the laboratory.

thoroughly searched the surrounding area, looking for the other half, without success. The portion curated by the Survey and on display at Parkin has an incised image of a human arm and hand on one side, and what appears to be a round chunkee stone (a gaming piece) positioned as if it was just released from the hand.

Mr. Richardson brought his pipe fragment to the station, and sure enough the two pieces matched. His piece depicts the other arm, but few other details. Besides Mitchem, Dr. Claudine Payne and Marion Haynes, archeologists from the Survey's Blytheville station, examined the pipe. It was photographed and measured. Mr. Richardson could not recall the year he found it, but said it was during the 1970s. It is interesting to speculate whether he or Dr. Morse got there first.

Ongoing Parkin Artifact Analysis

Due to the hard work of Parkin station secretary Faye Futch and three hourly employees, Penny King, Deanna Potter, and Laura McCallister (supported by an Arkansas Natural and Cultural Resources Council grant), washing and rough sorting of all the excavated material from the site was finished by the end of the fiscal year. The major excavations of the 1990s (with crews composed of Survey personnel, UA field school students, and volunteers) yielded great quantities of artifacts and the debris of centuries of occupation. The sheer volume of material had resulted in a backlog that took several years to process. Final sorting, reboxing, and data entry are still ongoing, but the completion of these basic tasks has already freed up a great deal of curation space in the Parkin Station laboratory.

Continuing analysis of these materials is essential for a solid understanding of the site and its original occupants. One example: field and laboratory research have revealed new details about the architecture of the houses. During the year, Mitchem worked with artist Charles Carr to redo some of the exhibit artworks and one of the wayside panels on the site, incorporating these details. Such changes lead to a more truthful representation of the lives of American Indians who developed a rich and vibrant culture on this continent many centuries prior to European invasion.

General Station Management

Interaction with the public is a major aim of the Parkin research station. Park visitors sometimes bring artifacts or collections they want us to look at, and local residents often call with questions or arrange to bring in artifacts for identification. These informal contacts give us the chance to highlight the value of archeology and to explain how uncontrolled digging harms our ability to understand 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.

Other Research

While keeping up with the Parkin site research is a full-time job, Mitchem also continues to pursue other

research interests. He is an expert in the analysis of Spanish trade beads, and is often called upon to analyze bead assemblages from Florida and other New World areas. Writers, fellow archeologists, television producers, and collectors contact him for information on the Soto expedition and associated Spanish artifacts. He also maintains a long-term interest in the history of archeology (especially in Florida and the southeastern United States), working with materials in the National Anthropological Archives and other repositories.

PARKIN STATION PERSONNEL

Jeffrey M. Mitchem (Ph.D., University of Florida, 1989) joined the Survey in 1990 to establish the Parkin research station after brief 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, Florida archeology, and the history of archeology in the Southeast.

E. Faye Futch earned an Associate of Arts degree in 2002 from Mid-South Community College and a B.S. in Interdisciplinary Studies with a Minor in African-American Studies from Arkansas State University in 2005. She joined the Survey staff in 1990 as secretary at the Parkin station. She also helps process artifacts in the laboratory and greets visitors to the park and station. Ms. Futch is working toward a Master's degree in History, with an emphasis in Public History, at Arkansas State University.

Grants, Honors & Awards

• \$15,000 from The Arkansas Natural and Cultural Resources Council for "Artifact Processing at Parkin Archeological State Park"

Academic Service and Activities

By agreement with the University of Arkansas System, Dr. Mitchem holds a faculty title of Associate Professor in the UAF Department of Anthropology. He has taught past UAF archeological field schools.

Professional Service and Activities (Mitchem)

- Chair, Nominating Committee, Southeastern Archaeological Conference
- Secretary-Treasurer, Society of Bead Researchers
- Personnel Committee, Arkansas Archeological Survey
- Editorial Review Board, Florida Anthropological Society and *The Florida Anthropologist*; Florida Archaeological Council; Search Commmittee for Editor, *The Florida Anthropologist*
- reviewed manuscripts submitted to journals The Arkansas Archeologist and Ethnohistory
- reviewed a book manuscript submitted to the University of Alabama Press
- organized a symposium in honor of Jerald T. Milanich for the 2006 Southeastern Archaeological Conference, November 8–11, Little Rock

Service to Arkansas Department of Parks and Tourism

Mitchem is the primary resource person for development of interpretive content at Parkin Archeological State Park, and advises park staff on any maintenance and operations activities that might affect the archeological remains. Matters of concern this year included:

- renovation, exhibits, and interpretation of the African-American schoolhouse on Parkin State Park property
- possible impacts of the Parkin Water System Improvement Project
- redesign of the Spanish artifact exhibit in the Visitor Center
- consultation with State Parks, Arkansas Game & Fish Commission, and U.S. Fish & Wildlife Service on the Parkin Boat Ramp project
- design and construction of a new storage area in the Visitor Center
- liaison to artist Charles Carr, who is redoing Parkin exhibit artworks for the Visitor Center and wayside panels
- · presentation to park interpretive staff about the content of the Ted Morris paintings of the Parkin site
- monitoring of several maintenance projects at the park

Public Service and Outreach (Mitchem)

- consulted with the Arkansas State Historic Preservation Officer, U.S. Fish & Wildlife Service, Arkansas Game & Fish Commission, Arkansas Historic Preservation Program, and Arkansas State Parks
- consulted with producers of The History Channel's *Digging for the Truth* series and did on-camera interviews for an episode of that series
- interviewed about the Parkin site and the Soto expedition for a Mountain Home radio station
- presentation to the Spring River Gem and Mineral Club, Cherokee Village, audience of 45
- presentation to the Men's Club at Graham Memorial Presbyterian Church in Forrest City, audience of 30
- presentation to the Women's Progressive Club, Marked Tree, audience of 30
- participated in an Artifact Identification Day during Archeology Month

Service to the Arkansas Archeological Society (Mitchem)

- directed excavations in Area F of the Eaker site during the Training Program, and participated in excavations elsewhere at the site
- taught a make-up day of the Human Osteology Seminar for two participants at the Training Program
- presented programs to the Central Mississippi Valley and Tunican Chapters, combined audiences of 61

Service to the Parkin Archeological Support Team (P.A.S.T.)

• served as humanities scholar for a project "From Sharecropping to Sawmilling: An Oral History of African-American Life in Parkin," funded by an Arkansas Humanities Council grant (Mitchem)

Volunteer Hours

• six volunteers contributed 67 hours in the Parkin station laboratory during the year

Staff Accomplishments

• E. Faye Futch earned her B.S. degree in Interdisciplinary Studies from Arkansas State University, with a minor in African American Studies. Ms. Futch is now pursuing an M.A. in Public History.

UNIVERSITY OF ARKANSAS AT FAYETTEVILLE

Dr. George Sabo III, Station Archeologist Jerry H. Hilliard, Research Associate

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 rockshelters along the White and Illinois rivers. Rock art, both painted and carved, is also found in some shelters. Station research in the last 25 years has broadened the archeological picture by focusing on ceremonial mound sites that link the Ozarks to the Mississippian and Caddoan cultures. Other projects have emphasized historical sites left by pioneer Arkansans, and environmental history. The station's latest initiatives are a comprehensive study of prehistoric rock art and analysis of museum-curated archeological collections from the Central Arkansas River Valley.

NEWS AND RESEARCH

NEH-Funded Rock Art Research

The UAF station's primary research activity was Year 3 of "Rock Art and the Southeastern Ceremonial Complex," a project funded by the National Endowment for the Humanities. Team members (Mike Evans, Jerry Hilliard, Aden Jenkins, Jared Pebworth, George Sabo, John Samuelsen, and Leslie Walker) spent considerable effort producing archival copies of hundreds of tracings of rock art designs made in the field on clear mylar sheets. The archival versions are on acid-free tracing paper in permanent ink. These and all other documentary records for the project were completed and placed in the archives at the UAF station and the Survey registrar's office.

John Samuelsen built a new, database-driven website for the project using MySQL and Apache web server software and the PHP programming language. Hilliard, Sabo, Walker, and Samuelsen entered extensive information for 143 rock art sites into the database. Plans were made for Deborah Sabo to develop and edit other content for the website.

Working with Jami Lockhart of the Survey's Computer Services Program, Hilliard, Sabo, and Leslie Walker analyzed local and regional stylistic variability of rock art, comparing the motifs and themes with those expressed in other artifact media such as decorated pottery and engraved shell. They also used GIS to study rock art sites in a landscape context, looking at the specific characteristics and distributions of rock art sites in relation to other site types (e.g., rock shelters, openair residential sites, ceremonial centers) in the project area. The most exciting result of this cultural landscape approach was discovery of a correspondence between spatial aspects of Dhegiha Siouan (Osage and Quapaw) cosmologies and rock art motif distributions in the Arkansas River valley. North of the river, motifs representing spirit-world themes were common, while south of the river, abstract designs and human-world themes were more likely to be found. It is too soon to postulate whether this might reflect social divisions, or symbolic representations of specific religious allegiances. Sabo presented these results at the annual Visiting Scholars Conference, Southern Illinois University – Carbondale.

SECC Iconography Workshop at Texas State University

Dr. Sabo attended the Mississippian Art and Iconography Workshop at Texas State University – San Marcos in June. He and Dr. James A. Brown (Northwestern University), Dr. Robert Hall (University of Illinois – Chicago), and Dr. Alex Barker (Museum of Art and Archaeology, University of Missouri – Columbia) continued to examine art motifs on engraved shell objects from the Spiro site within the context of Southeastern Indian mythology, language, and social organization.

Two main styles are recognized in the iconography of the Southeastern Ceremonial Complex—a widespread late prehistoric and protohistoric religious manifestation. The Braden school, or style, is believed to have been introduced to Spiro (Oklahoma) from the Cahokia (St. Louis) region around A.D. 1200, and there transformed into the later Craig school, which appears to be a synthesis of Spiroan and Cahokian artistic traditions.

The Braden and Craig styles seem to be associated with corresponding sets of background mythic traditions. Through detailed analysis of the art motifs, workshop members hope they will be able to piece together the key "story lines" of these myth cycles, and understand how the narrative traditions by which ancient American Indians expressed their world views and religious beliefs evolved in the centuries prior to contact with Europeans.

The Mississippian Art and Iconography Workshop provides a forum to exchange ideas on the connections between ancient art, religion, and ceremonial practice, and supports the primary theoretical framework for the station's NEH-funded Rock Art Project. Many of the rock art images recorded in Arkansas are similar to the more intricate motifs of the shell art studied at the San Marcos Workshop.

Membership at the Workshop is by invitation. This is the third year Sabo has participated. This years' accomplishments included outlining an overall interpretation of the Craig School corpus, and plans for an associated book.

New Research on UA Museum Collections

The station began two new projects analyzing collections in the University of Arkansas Museum. One focuses on late prehistoric collections from sites in the Central Arkansas River Valley between the Toltec and Spiro sites. This project's goal is to study the development of Mississippian cultures in that region by examining art and iconography as expressions of religious belief. Leslie Walker is examining material from the Point Remove site. She and Sabo are also looking at collections from sites in the significant Carden Bottoms locality.

The second project is an analysis of collections from Ozark rock shelters carried out by UA Museum crews in the 1930s under the direction of Samuel C. Dellinger. This study also concentrates on Mississippian culture developments, in particular a comparison of mortuary programs in the rock shelters with burial practices documented at regional mound centers.

Hilliard, Sabo, and Jami Lockart (CSP) began this project with a GIS analysis comparing rock shelters containing mortuary activity with other site types—rock shelters without burials, rock art sites, residential sites, and ceremonial centers. Work then focused on specific sites.

Jerry Hilliard completed an inventory and report on the UA Museum's 1932 excavations at Brown Bluff, including a complete analysis of the artifacts, notes and other records. (This report was in concert with SRP's major report on the more recent work at Brown Bluff for the Arkansas Highway and Transportation Department.) Hilliard's results provide a context for the rock art pictographs at Brown Bluff. Hilliard, Sabo, and



These artifacts from the Kinkead-Mainard site in the Central Arkansas River Valley are part of the UAF station's effort to analyze UA Museum collections excavated in the 1930s. The pottery vessels are decorated with motifs that reflect Mississippian and Caddo artistic traditions.

Walker also began to inventory and analyze the large collection from Eden's Bluff, another late prehistoric rock shelter with burials excavated in the 1930s.

Civil War Sites in Northwest Arkansas

Hilliard continued field studies of several area Civil War sites with the help of SRP archeologists Mike Evans, Jared Pebworth, and Aden Jenkins, and Arkansas Archeological Society volunteer Sam Littrell. Of particular importance was Mr. Littrell's research, under Hilliard's direction, at Lindsey's Prairie in Benton County.

During the month of November 1862, over 5000 Union troops under the command of General James G. Blunt camped at Lindsey's Prairie prior to engagements at Cane Hill and later at the Battle of Prairie Grove. Despite the fact that relic hunters have taken large numbers of bullets and other artifacts from the site in past years, archeology has documented troop activity areas through precision mapping of artifact locations during systematic metal detecting surveys.

St. Anne's Convent/Zachary Taylor Site

In 1853 a group of Irish nuns established one of the first schools in Arkansas at the frontier of Western Civilization in Fort Smith, Arkansas—yet the City of Fort Smith had largely forgotten them. Excavations in 2004 and 2005 at the site of what traditionally has been called the Zachary Taylor chimney on the grounds of the Immaculate Conception Church in Fort Smith recovered over 13,000 artifacts. Analysis by Jerry Hilliard and the Survey's newest station archeologist Dr. Jamie Brandon (SAU) reveals the lives and ministry of these immigrant nuns in the wild west town of "Hanging Judge Parker." Hilliard and Brandon explore the history of the site and apply theories of cultural memory to explain why the Sisters of Mercy and St. Anne's Convent School had been forgotten. <<u>www.projectpast.org/som/index.html></u>



Students from Immaculate Conception Elementary School visit the excavations at St. Anne's Convent site in Fort Smith on St. Patrick's Day. Paul Knapp is at the screen.

UAF STATION PERSONNEL

George Sabo III (Ph.D., Michigan State University, 1981) joined the Survey in 1979 as UAF station archeologist, 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, ethnohistory of Arkansas Indians, and development of New Media educational resources.

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. He also manages the Arkansas Archeological Society's Training and Certification Program.

Grants, Honors, and Awards

The station continued a multi-year research project funded by Sabo's \$175,000 grant from the National Endowment for the Humanities, "Rock Art and the Southeastern Ceremonial Complex"

Dr. Sabo was presented with a plaque in appreciation for service to the Caddo Nation at the 2006 Caddo Conference in Nacogdoches, Texas

Academic Service and Activities (Sabo)

By agreement with the University of Arkansas System, Dr. Sabo has a faculty title of Professor in the UAF Anthropology Department, where he normally teaches one course per year and serves on numerous student committees. Service to the UAF host institution this year:

- Dr. Sabo is Assistant Director of the interdisciplinary Environmental Dynamics Program
- taught ANTH 3263, Native People of Arkansas and the South, 21 students
- taught ANTH 5263, Indians of Arkansas and the South, 11 students
- chaired one M.A. committee and three Ph.D. committees in Anthropology; chaired two Ph.D. committees in Environmental Dynamics; served on five additional graduate student committees in Anthropology and Environmental Dynamics

Professional Service and Activities

- reviewed one article manuscript submitted to The Arkansas Archeologist (Sabo)
- book reviewer for Arkansas Historical Quarterly (Sabo)
- traveled to Washington, D.C. to serve on a review panel evaluating 25 major grant applications to the NEH Collaborative Research program (Sabo)
- Arkansas Humanities Council Board of Advisors (Sabo)
- Personnel Committee, Arkansas Archeological Survey (Sabo)

Public Service and Outreach

- contributed an exhibit of the station's rock art research to the joint Survey/ENDY/Anthropology Department booth at Fayetteville Springfest (Hilliard, Walker, Sabo)
- presented a public program at the UA System's Winthrop Rockefeller Center on Petit Jean Mountain, audience of 25 (Sabo)
- presented programs to the Carroll County Historical Society, the Lincoln Kiwanis Club, and the Searcy County Historical Society, combined audiences of 75 (Hilliard)
- presented "Artifact Identification Day" at the Shiloh Museum during Archeology Month, 25 attendees (Hilliard, Jamie Brandon)
- four presentations at public schools (Flippin Middle School; Randall Lynch Middle School, Farmington; Mathias Elementary, Rogers; Westwood Elementary, Springdale), combined audiences 342 students (Sabo, Hilliard)

- presented a hands-on show-and-tell to children enrolled in the UA Nursery School, 12 students (Sabo)
- presented a talk in the Fayetteville Public Library's "Teen Summer Scene" program, 25 students (Hilliard)
- presented a workshop on online educational resources at the Arkansas Archeological Survey station at UA Fort Smith for Fort Smith public school teachers, 6 attendees (Sabo)
- Vice-Chairman of the Caddo Heritage Museum Board of Trustees (Sabo)
- consultant to the Fayetteville Botanical Garden Board concerning archeological sites on City of Fayetteville property, and to the City of Lowell concerning archeological survey of a half-mile pedestrian trail linking residential areas to a city park (Hilliard)
- consultation with Arkansas State Parks on archeological and historic resource development at Hobbs State Park-Conservation Area (Sabo, Hilliard)
- assistance to Immaculate Conception Church regarding archeology at St. Anne's Convent in Fort Smith, and plans to exhibit some of the recovered artifacts (Hilliard, Jamie Brandon)
- assistance to Joan Gould with documentation of several historic properties in northwest Arkansas as part of an Arkansas Humanities Council grant project (Hilliard)

Service to the Arkansas Archeological Society

- hosted monthly workshops for the Ko-ko-ci Chapter (Hilliard)
- presented programs to the Central Arkansas River Valley (Russellville) and Ark-Homa (Fort Smith) chapters, combined audiences of 75 (Sabo, Hilliard, Jamie Brandon)
- co-directed excavations at Immaculate Conception Church in Fort Smith, with Society volunteers (Hilliard)
- coordinator of the Arkansas Archeological Society Certification Program (Hilliard)
- taught independent studies of the Human Osteology and Establishing Time seminars for one participant in the Certification Program (Hilliard)

Volunteer Hours

• volunteers contributed 197 hours to station research projects in the field and laboratory

UNIVERSITY OF ARKANSAS AT MONTICELLO

Dr. Marvin D. Jeter, Station Archeologist Robert J. Scott, Station Assistant

The UAM station territory covers seven counties in southeastern Arkansas. The eastern portion consists of delta landforms deposited by the ancestral Arkansas and Mississippi rivers and their tributaries and contains numerous small to moderate habitation sites and occasional mound 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 appears to be the oldest known Indian mound in Arkansas. At the opposite end of the time scale are the Taylor/Hollywood Plantation, a National Register site with habitation remains recording the lifeways and culture of African-American slaves, and Lakeport Plantation in Chicot County, the sole remaining pre-Civil War plantation house in the Arkansas Delta.

NEWS AND RESEARCH

The Taylor Site

Dr. Jeter directed Training Program excavations at the Taylor site in 1991 and 1992. The site has several mounds and reveals a thousand years of prehistoric culture history, during which it changed from a village to a "vacant" ceremonial center—a place where people living at outlying farmsteads and hamlets gathered periodically for community rituals and other important events.

Most of the ceramics and stone tools were analyzed in subsequent years (the ceramics by John Belmont, formerly of Harvard University's Lower Mississippi Survey, and the lithics by Jeter), but a complete site report was put off for many years due to lack of funding for specialized analyses, lack of laboratory space, and lack of a station assistant to help.

The Taylor site has now been returned to top priority among Jeter's UAM station projects. Bob Scott has been working on the faunal remains, including vertebrates and mussel shell. Dr. Ed Jackson and Susan Scott at the University of Southern Mississippi, Hattiesburg, and Dr. Evan Peacock at the Cobb Institute of Archaeology, Mississippi State University, Starkville, allowed access to these institutions' extensive comparative collections and shared their expertise to help the analysis. There are tens of thousands of animal bones and mussel shells to be identified, plus additional samples from flotation heavy-fractions.

Jeter began going through the old field notes and other excavation records, putting the data into tables. By the end of 2005, Jeter had begun writing some preliminary drafts for a final report.

The Saline-Fifteen Site

Another project Jeter has been able to return to after a long hiatus is this very significant late prehistoric to protohistoric site overlooking the Saline River in Bradley County. It was seriously damaged by highway construction in 1990, after which Jeter conducted small-scale excavations that produced the first maize ever found on an archeological site in that region.

Bob Scott completed a preliminary analysis of mussel shell from the site. He also worked on the decorated, grog-tempered pottery, focusing on paste characteristics.

Jeter retrieved charred maize samples from the lab in Missouri where they had been identified over a decade ago, and sorted them for possible use as dating samples. He sent one specimen in June for AMS radiocarbon dating with funds from AHTD.

The data from this site can be compared with the Gary site, another long-running project coming to fruition.

The Gary Site

This site, near the Saline River in Ashley County, was excavated by amateur archeologists in the 1980s. Bob Scott has been doing the analysis and writing a report, under Jeter's supervision. SAU station archeologist Frank Schambach, who devised the descriptive classification system for ceramics in this region, visited the UAM station to confer with Scott and Jeter about the Gary site pottery.

Bob Scott finished a paper on this site which he read at the 2006 meeting of the Arkansas Archeological Society. He concludes that people mainly lived at the site between the late Cypress Swamp phase (c. A.D. 1000) and the early Gran Marais phase (c. A.D. 1300) on a multiseasonal, if not year-round basis. Based on the clustering of features and the distributions of artifacts and other material, he argues at least two separate family groups lived at the site during this period, probably contemporaneously.

A second major occupation was during the Caney Bayou phase (c. A.D. 1500), when the site might have been a simple farmstead inhabited by a single family or extended family group.

The Mangum Site: A Plaquemine Necropolis

The Mangum site in southwest Mississippi was excavated in 1963–64 by Charles F. Bohannon (now retired), whose 1964 report to the National Park Service was never published. Mangum, which has archeological links to some of the most important sites in Southeastern prehistory, including Etowah and Spiro, merits greater attention. Jeter has been working for several years to put together a publication of collected papers by Bohannon, Misty Penton (a Native American bioanthropologist who studied skeletal remains from Mangum for her 1995 University of Oregon Master's Paper), himself, and others.

Jeter organized a mini-symposium on Mangum at the annual Mid-South Archaeological Conference in Jackson, Mississippi in June of 2006. Related papers were by Jeter, Penton, Dr. Marie Danforth, physical anthropologist at the University of Southern Mississippi, and Danforth's students. Presentations about the site were also made to the Tunican Chapter of the Arkansas Archeological Society, and the annual meeting of the Louisiana Archaeological Society.

Eagle Lake Mounds

Jeter directed controlled surface collections and test excavations at this significant ceremonial center and habitation site in southern Bradley County during the 1990s. With Robert Scott's able help, he has recently revived the project. Scott completed basic analysis of the ceramics and lithics and produced computer printouts of the artifact classes by provenience unit. Jeter used these to begin spatial and stratigraphic analysis. Jeter and Scott are working with the collections and excavation records to write a preliminary report which they will submit to *The Arkansas Archeologist*.

A Plaquemine Book Chapter

Jeter completed the final revision of his chapter "The Outer Limits of Plaquemine Culture: A View from the Northerly Borderlands" for a book on Plaquemine culture edited by Mark Rees (University of Louisiana – Lafayette) and Patrick Livingood (University of Michigan). The volume is slated for publication by the University of Alabama Press in late 2006 or early 2007.

The Tillar Farms Site

Robert Scott reanalyzed pottery and animal bone from 1973 salvage excavations at the Tillar Farms site. His interest was sparked the previous year while pulling mussel shell from the site collection to send to Dr. Evan Peacock at the Cobb Institute at Mississippi State University – Starkville, for analysis. It is the first assemblage of Tillar complex material and associated faunal remains that is not from burials. Scott traveled with some of the pottery to confer with Dr. Ian Brown at the University of Alabama and Dr. Edwin Jackson at the University of Southern Mississippi about the site's possible relationship to regions south and east of UAM station territory. He gave a presentation on his research at a Tunican Chapter meeting in March.

Borderlands Project

Robert Scott visited sites on Potlatch Corporation property in conjunction with Jeter's Borderlands Project to examine the little-known archeology of the "boundary area" between Fourche Maline peoples of the Trans-Mississippi South, and Lower Mississippi Valley cultures farther east.

One site in Bradley County had been discovered by a UAM surveying student working with a metal detector to locate the brass cap corner section marker; instead, he found several large pieces of magnetite. Scott and Arkansas Archeological Society member Don Bragg returned to the site but found little else. Intensive logging in the area would have destroyed any archeological deposits.

Two other sites are in Cleveland County. One, reported by the landowner, has evidence of Archaic period through late prehistoric use. Decorated pottery sherds include Fourche Maline and later Caddoan types, as well as Coles Creek and Mississippi period types associated with the Lower Mississippi Valley, a combination that is extremely interesting for the Borderlands Project. More work is planned for fall 2006.

The other Cleveland County site, on Potlatch Corporation property, had been recently looted. Potlatch employees reported the site to the Survey so it could be recorded, and to get an estimate of the damage. Scott found looting activity over 15 acres. This site, too, shows tremendous potential for the Borderlands Project,


This remarkable "serpentcat" carved stone effigy pipe found in 1886 in Chicot County, Arkansas (now at the Gilcrease Museum, Tulsa, Oklahoma) was the basis for naming the Bellaire phase of Plaquemine culture. According to Jeter's reanalysis in a forthcoming University of Alabama Press volume, the pipe was probably associated with Mississippian culture.

with one Coles Creek Incised rim sherd and other pottery similar to Fourche Maline ceramics. Most of the chipped stone was novaculite, with some Pitkin and local gravel cherts.

Lower Creek Indian Research

Robert Scott continued revising his Master's thesis to an article-length paper he will submit for publication. He is also working on a manuscript on glass trade beads discovered at Kasita. A paper on historic Creek Indian architecture was presented at the 2005 Southeastern Archaeological Conference and is to be included in a University of Alabama Press volume later in 2006.

Indian Slavery

Jeter was an invited participant in a symposium titled "Mapping the Shatter Zone: The Colonial Indian Slave Trade and the Southeastern Indians" at the 2005 annual meeting of the American Society for Ethnohistory in Santa Fe. He presented a paper analyzing possible movements of indigenous protohistoric ethnic groups in response to the impact of European colonization and Iroquoian expansion that was a consequence of the ensuing alliances and demographic pressures.

He first explored the Shatter Zone concept as it is used in several disciplines, with the most useful ideas coming from geopolitical definitions of disputed regions between competing cultural traditions. But in the New World case, the shatter zone was "between the colonial beachheads" of competing European powers, and moved inland as colonization progressed.

Jeter explores the evidence for slaving among warring

indigenous groups, finding possibly equivocal mentions in some early documentary sources. There is also intriguing bioarcheological evidence in a case of healed cut marks at the back of the knee, which could suggest cutting of the tendons to prevent escape.

Whether Indian slaving was widely practiced, and whether it was a symptom of the "shatter zone," i.e., influenced by the disruptions wrought by European expansion, or found its roots in pre-contact practice, are the questions Jeter explores. With the passage of time, the system of alliances and enlistment of Indian groups as raiders and slavers was replaced by American military buildup, imported African slaves, and Indian removal to make room for American exploitation of the land and its resources.

Invited Contribution on H. J. Lewis

Jeter was invited by Dr. Joshua Brown (Executive Director of the Center for Media and Learning/American Social History Project, City University of New York) to contribute an essay on H. J. Lewis, the Black artist who drew illustrations of Indian mounds in Arkansas in the 1880s for the Smithsonian Institution's Edward Palmer, and later became the first Black political cartoonist. Jeter has continued to research Lewis's life, first explored as part of his study of Palmer's archeological explorations in Arkansas (*Edward Palmer's Arkansaw Mounds*, edited by Marvin D. Jeter, 1990, University of Arkansas Press). Jeter's essay will appear in *Common-Place*, an interactive online journal sponsored by the American Antiquarian Society and the Florida State University Department of History (www.common-place.org).



Members gather at the UAM station for a meeting of the Tunican Chapter of the Arkansas Archeological Society.

UAM STATION PERSONNEL

Marvin D. Jeter (Ph.D., Arizona State University, 1971) 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 extensive archeological experience in the Southeast, Southwest, and Midwest reflects eclectic interests. His research 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 region and various aspects of African-American culture in the Southeast.

Robert J. Scott (M.A., University of Alabama, 2004) has previously worked for the Illinois State Museum, the Center for Archaeological Investigations at Southern Illinois University – Carbondale, and Panamerican Consultants, Inc. of Tuscaloosa. He was a teaching assistant at the University of Alabama, and for the archeological field school there. His past experience includes work with WPA-era museum collections, studies of historic artifacts including glass trade beads, and faunal analysis. He joined the Survey in July 2004.

Academic Service and Activities

- By agreement with the University of Arkansas System, Dr. Jeter has a faculty title of Associate Professor in the UAF Anthropology Department and teaches in the UAM School of Social and Behavioral Sciences. Service to the UAM station host institution this year:
 - taught ANTH 2203, Cultural Anthropology, 16 students (Jeter)
 - taught ANTH 2223, World Prehistory, 5 students (Jeter)
 - served on the UAM Museum Committee and planned a new exhibit of fossil hominid casts (Jeter)

- acted as Teaching Assistant and supervised students in field and lab work (Scott)
- provided information on the Mosaic Templars of America to a Northwestern State University (Natchitoches, LA) graduate student

Professional Service and Activities

- provided commentary on draft papers sent to him by various colleagues (Jeter)
- invited participant in a conference on Middle and Late Archaic artifacts held at Poverty Point, and in a symposium on Alabama archeology at the joint Southeastern Archaeological Conference/Midwest Archaeological Conference in St. Louis (Jeter)
- invited participant in a symposium on "Indian Slavery" at the 2005 American Society for Ethnohistory meeting in Santa Fe (Jeter)
- organized and led a tour of Pecos Pueblo National Monument for attendees at the American Society for Ethnohistory meeting in Santa Fe (Jeter)
- symposium organizer, Mid-South Archaeological Conference, Jackson, Mississippi (Jeter)
- assisted Blytheville station excavations at the Eaker site in October (Scott)

Public Service and Outreach

- continued consultation with Michael Baker Jr., Inc. on their archeological work in southeastern Arkansas related to the "Interstate Connector" project between Pine Bluff and Monticello, and plans for I-69 construction (Jeter)
- shared information on the historic Taylor Log House (built c. 1844) with Mr. Curtis Merrell of Bayou Bartholomew Alliance, UAM administrators, regional historians, and the Archaeological Conservancy concerning a possible purchase of the house (Jeter)
- at the request of Potlatch Corporation, presented a program on archeology to Potlatch foresters and officials at their regional headquarters in Warren, audience of 55 (Jeter, Scott)
- presented a talk in Clarksdale, MS during Mississippi Archeology Month, audience of 12 (Jeter)

Service to the Arkansas Archeological Society

Jeter and Scott support the Tunican Chapter of the Society by acting as officers, planning programs and field trips, responding to reports of archeological sites, and providing opportunities for volunteers to work in the field and lab.

- Tunican Chapter Corresponding Secretary and Program Chair (Jeter)
- Tunican Chapter Treasurer (Scott)
- presented two programs at Tunican Chapter meetings and one at the Ouachita Chapter, combined audiences of 40 (Jeter)
- led Tunican Chapter field trip to visit sites in Louisiana (Jeter)
- presented three programs at Tunican Chapter meetings, combined audiences of 53 (Scott)
- attended the annual Training Program; taught the Arkansas Archeology seminar (Jeter)
- attended the annual Training Program; assisted excavations and taught Site Survey seminar (Scott)

Volunteer Hours

• volunteers contributed 28 hours to station research projects in the field and laboratory

UNIVERSITY OF ARKANSAS AT PINE BLUFF

Dr. John House, Station Archeologist Mary V. Farmer, Station Assistant (half-time)

The UAPB station is responsible for 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 bestknown site in station territory is the Menard-Hodges site 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 AND RESEARCH

The Menard Locality & Arkansas Post

Since 1997 the Menard Locality—at the southern tip of the Little Prairie in Arkansas County—has been the main focus of research for the UAPB station. This area is believed to contain the late 17th century Quapaw village Osotouy and the first Arkansas Post established by Henri de Tonty in 1686. Within the Menard Locality are the Menard-Hodges mound site and its outlier the Lake Dumond site (together the Osotouy Unit of Arkansas Post National Memorial), and the closely related Wallace Bottom site in White River National Wildlife Refuge. Work at these sites is ongoing in cooperation with the National Park Service and White River National Wildlife Refuge, with the help of Arkansas Archeological Society volunteers and the interest and support of the Quapaw Tribe.

Pigment at Lake Dumond is Vermilion

Research at Lake Dumond focused on material samples from colonial era Indian graves excavated in 1997. Jeff Mitchem (Parkin station archeologist) began analysis of 1427 beads from the graves. His final report will be submitted to the Quapaw Tribe in 2006–07.

House and Glen Akridge completed a study of red pigment from two of the graves, confidently identifying the substance as vermilion, a commodity frequently traded between Europeans and Indians during the colonial era. Akridge, a professional chemist, employed atomic absorption spectroscopy to determine the presence of significant amounts of mercury in the tiny samples that were available for analysis, which formed the basis for the identification. Their joint article was published in *The Arkansas Archeologist*.

"Cooperation Then & Now" Complete

The Wallace Bottom site, with its mix of Native American and early French Colonial artifacts, is a prime candidate for the late 17th century Quapaw village Osotouy and the sites of the 1686–1749 Arkansas Post. Following the site's discovery in 1998, the Survey has conducted a series of field studies, including geophysical mapping, systematic surface collection in the

cultivated field, systematic bucket auger sampling on the wooded lake bank, and small-scale excavations. The Survey's final report for "Cooperation Then and Now," a project funded by a 2003 National Park Service historic preservation grant awarded to the Quapaw Tribe, was submitted in 2005 (see Appendix A). The report is authored by House and Jami Lockhart, the Survey's archeogeophysical applications specialist.

Wallace Bottom Analysis Continues

The station's major research focus during the year was continued laboratory work and preliminary analyses following up on the "Cooperation Then and Now" project. House and Farmer sorted and prepared botanical samples from the excavations and sent them to Dr. Gayle Fritz, paleoethnobotanist at Washington University, St. Louis. House also completed coding and entry of 1328 artifact data records in the DELOS computer cataloging system, and generated a comprehensive inventory of specimens from the 2003 fieldwork. Jared Pebworth, at the Survey coordinating office, completed



Robert Scott (UAM station assistant) and John Riggs (National Resources Conservation Service Archeologist for Arkansas) record artifacts and features in Unit 8 during spring fieldwork at the Wallace Bottom site.

conservation of approximately 103 metal artifacts, including objects of iron, cuprous metal, and pewter, also from the 2003 excavations. Parkin station archeologist Jeffrey Mitchem joined the effort in 2006, carrying out an analysis of the 157 glass beads recovered at Wallace Bottom through 2003. Among the fragments, Mitchem identified a tiny piece of turquoise, perhaps representing trade across the Plains with Puebloan Indians.

New Fieldwork at Wallace Bottom

Fieldwork at this important site resumed in May and June under a permit from the Fish and Wildlife Service Regional Archeologist's Office. In addition to House, Farmer, and other Survey personnel, 19 Arkansas Archeological Society members and other volunteers contributed 236 hours. The goal was to extend earlier excavation units to get a better view of cultural features in the ground. Further excavations (Unit 8) revealed only a shallow artifact-bearing horizon or "midden" below the plowzone.

New excavation in Unit 25 also revealed undisturbed cultural strata below the plowzone. A small embossed

lead object in this locale may be a portion of a seal from a bundle of cloth or furs from the early trading post.

The Madonia Collection – A Worthy Gift

In 2005–06, long-time Arkansas Archeological Society member Joe Madonia of Helena began the process of donating to the Arkansas Archeological Survey a large and meticulously documented artifact collection that is the fruit of more than 40 years of avocational archeology in Phillips and adjacent counties. House has worked closely with Mr. Madonia, inventorying specimens and verifying the locations of more than 100 sites where the specimens were collected. Many of these sites have been severely impacted, if not completely destroyed, by agriculture since Madonia collected at them. The Madonia collection will be curated at the UAPB station, where it will be an irreplaceable resource for archeological studies for generations to come.

Historic Quapaw Villages-Where Are They?

In early 2006, House resumed the search for sites along the lower Arkansas River that were occupied by the Quapaws during the colonial and early American eras, from 1686–1824. Reconnaissance on Sample Island in Jefferson County indicated that river action has probably obliterated all traces of settlement that may have been associated with an extensive "Indian Improvement" (abandoned Indian agricultural field) recorded by U.S. General Land Office surveyors in 1829.

In April, House began a survey of the banks of Belcoe Lake in Desha County on the south side of the Arkansas River opposite the Menard Locality. Belcoe (originally Belle Couer) Lake may correspond to the place where, in 1687, survivors of LaSalle's Texas colony stayed the night with Quapaws in huts in fields that extended for a league along a river which "did not have much current." One location yielded a small quantity of chert flakes: this would be consistent with expectations for a Quapaw site of the late 17th century. House also identified a number of 19th and early 20th century sites in the vicinity. Field survey at Belcoe Lake will resume in the coming year.

Interview with the Collector

Of many smaller research efforts throughout the year, one highlight was an extended interview with a private collector about his participation in the 1960s excavation of a mound in Desha County that produced the stone "Corn Goddess" figurine/pipe that was displayed in the Art Institute of Chicago's 2005 exhibition of ancient American Indian art, "Hero, Hawk, and Open Hand." The exhibit also traveled to the St. Louis Art Museum.

Other Research

In January, House, joined by Arkansas Highway and Transportation Department archeologist John E. Miller III, recorded surface data at a prehistoric site temporarily exposed by low water at Lake Maumelle. House also recorded two abandoned historic cemeteries, a 19th century cotton gin, and two prehistoric mounds in the vicinity of Gilette, Arkansas County.

House conducted archeological reconnaissance and a preliminary records search on tracts scheduled for development at Pine Bluff Harbor to assist the Arkansas Historic Preservation Program advise the Alliance for Economic Development for Jefferson County on cultural resource compliance for the project.

Mary Farmer, in addition to her work in support of the UAPB station, assisted the Survey's SRP excavations at Old Davidsonville, and the SAU station's Gateway II project in Texarkana. She also helped supervise Training Program excavations and lab at the Eaker site.

UAPB STATION PERSONNEL

John H. House (Ph.D., Southern Illinois University at Carbondale, 1991) 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 a research assistant at the UAPB station. He served as station archeologist at UAM from 1983 to 1985, and again during 1988. In 1989 he returned to UAPB as station archeologist. His research 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 Survey position as UAPB station secretary in 1994 after 17 years of service. She is a long-time member of the Arkansas Archeological Society and veteran of the Society Training Program. She has studied historic and prehistoric sites in Arkansas over many years, with special interests in historic domestic artifacts and prehistoric ceramics.

Academic Service and Activities (House)

By agreement with the University of Arkansas System, Dr. House has a faculty title of Professor in the UAF Anthropology Department, and teaches in the UAPB Department of Social and Behavioral Sciences. Service this year to the host institution:

- taught SOCI 2330, Introduction to Anthropology, 51 students
- taught SOCI 3360, Peoples and Cultures of Africa South of the Sahara, 12 students
- presented "Gifts of the Great River: Arkansas Effigy Pottery in the Edwin S. Curtiss Collection," based on his 2003 Peabody Museum Press book, at the UAPB Student/Faculty Research Forum

Professional Service and Activities

• reviewed one manuscript submitted to the journal American Antiquity (House)

Public Service and Outreach

- consultant to Arkansas Post National Memorial, National Park Service (House)
- consultant to the Quapaw Tribe of Oklahoma; completed final report for "Cooperation Then and Now," a project funded by a National Park Service grant to the Tribe (House)
- assisted Larry Wallace of the Nady community, Arkansas County, prepare materials to nominate the Wallace-Menard Cemetery to the Arkansas Register of Historic Places; placement was approved on August 2, 2006 (House and Farmer)
- consultant to Trustan Holder Wildlife Management Area, Arkansas Game and Fish Commission; White River National Wildlife Refuge, U.S. Fish and Wildlife Service; the Archaeological Conservancy; the Arkansas Historic Preservation Program (House)
- Acquisitions Committee, Pine Bluff-Jefferson County Historical Museum (House)
- cleaned and reconstructed ceramic vessels in a collection on long-term loan to the Pine Bluff-Jefferson County Museum by the family of the late Hudgins Jeter (Farmer)
- assisted ATU Museum Director Judith Stewart-Abernathy with an exhibit of WWII era artifacts (Farmer)
- prepared an article on Edwin S. Curtiss for the Butler Center's *Encyclopedia of Arkansas History & Culture* project; participated in the review and fact-checking process for articles prepared by others (House)
- presented lectures at the Pine Bluff-Jefferson County Historical Museum during Archeology Month; the Keenagers senior citizen group at Lakeside Methodist Church; Arkansas Post, in conjunction with AHPP's "Delta Destinations: Four Centuries of Delta History" Preservation Ramble; and Toltec Mounds State Park, in conjunction with the Memphis District Corps of Engineers Tribal Consultation tour; combined audiences of 104 (House)
- presented school talks at St. Joseph Catholic School, Pine Bluff, and Coleman Elementary, Pine Bluff; combined audiences of 60 students (House)
- presented the Discovery Box archeology activity to a kindergarten class at Hot Springs Community Services Office, Inc., 25 students (Farmer)
- presented "Careers in Archeology" at the annual Career Day, Phillips Community College UA DeWitt campus (House)

Service to the Arkansas Archeological Society

- presented the Ouachita Chapter's Archeology Month program on "Traders & Merchants of Novaculite" in Hot Springs, audience of about 30 (Farmer)
- presented program to the Toltec Chapter, audience of 8 (House)
- participated in excavations during the Training Program at the Eaker site (Farmer)
- assisted supervision of students in Basic Excavation, and in the laboratory at the Training Program (Farmer)

Volunteer Hours

• volunteers contributed 236 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 spring 2005 at the request of the University of Arkansas Fort Smith campus. The University purchased the Drennen-Scott House, 1836 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 newly formed 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 ATU stations.

NEWS AND RESEARCH

Station Development

The Survey's newest research station is not yet fully equipped, but this did not prevent Tim Mulvihill from making progress with planned research projects, thanks to support from UAFS, loans of equipment from other Survey stations, donations, and the assistance of volunteers. The campus administration provided a room with a sink that could be used as a temporary laboratory area to process artifacts. Some lab equipment (such as a digital scale and calipers) was purchased. Mr. Alan Berry of Franklin, Tennessee, donated a binocular microscope. Additional funding is being sought to outfit the station.

The Drennen-Scott House Project

Investigations at the Drennen-Scott House began early in 2006 in conjunction with development of a master plan for the site by a team of historic architects and planners from John Milner Associates, led by John Mott. In March the station team excavated three test units into the porch area along the front wall of the house, which revealed information on the type and condition of the foundation. The front porch was originally wooden but had been replaced by brick. These test units also showed original ground surface elevations prior to porch construction.

During February and March, we mapped the property immediately surrounding the house using a *Topcan GTS-225 total station* and a *Trimble 5600 Robotic Theodolite*, the latter provided by the Center for Advanced Spatial Technology (CAST) of the University of Arkansas – Fayetteville. This produced a contour map and site feature map, and also established a metric coordinate grid system for the entire site, which will be used to reference all excavations and geophysical surveys.

Jami Lockhart, the Survey's archeogeophysical applications specialist, conducted the first such survey in the front, side, and back yards of the house. The remote sensing equipment revealed subsurface anomalies suggesting the locations of possible outbuildings and other site features no longer extant. Identifying former structures and their possible uses in this area will be an important aspect of the master plan and interpretation of the site.

Test excavations in April and May followed up on some of the geophysical results. Crews consisted almost entirely of volunteers—members of the local Ark-Homa Chapter of the Arkansas Archeological Society: Bob Dalton, Jay Gill, Phil Hayden, Aden Jenkins, Ken Rearden, Alan Smith, and Midge Stouffer—and were supervised by Mulvihill. Other Society members, volunteers, and some Survey personnel helped at various times.

At least two structures are visible in historic photos of the terraced area east of the house. Unfortunately, the geophysical survey was unable to pick up any likely foundation or structure remnants in this area. The test excavations produced small pieces of historic ceramics and glass, though not in large quantities. During most of the 20th century, this area was used as a garden, so evidence of preexisting structures may have been plowed away over the years.

The geophysical survey did locate remains of a stone walkway leading from one side of the house to the terraced area, and the location of a structure known from a photograph to have stood just north of this walkway. Future excavation is planned to determine the period of use and function of this outbuilding.



The Drennen-Scott House, now owned by UAFS, will be developed as a museum and training center for the University's Historical Interpretation degree program. Excavations in the yard around the house during spring 2006 were the beginning of the UAFS station's long-term research commitment to help the campus learn more about this important historic property.

Most of the features identified during the geophysical survey were in the backyard, showing it to be an area of intense activity. There are no early photographs of the backyard, so archeology is the only means to interpret this part of the property. Test excavations uncovered the foundation of a previously unknown structure there. Further excavation is needed, but initial artifact finds suggest it may be one of the earliest outbuildings on the property.

From the limited amount of work completed so far, it is apparent that a wealth of archeological information is available on the site, and fruitful research will continue for years to come.

Archaeological Conservancy Visits Northwest Arkansas Mound Sites

Rapid population growth in northwest Arkansas, and the explosive development of residential and commercial properties, puts more and more archeological sites in imminent danger of destruction. A portion of one of the area's rare ceremonial mound centers—the Goforth-Saindon site in Benton County—was developed as a residential subdivision during the last five years. Half the site was impacted, with half of the largest mound bulldozed away for a road.

In December, Tim Mulvihill arranged for a representative of the Archaeological Conservancy to tour this and two other mound centers in northwest Arkansas, in the hopes that one or more of these sites could be acquired for preservation. Ms. Amy Espinoza-Ar accompanied Mulvihill and Dr. George Sabo III of the Survey's UAF research station to the Goforth-Saindon, Huntsville, and Collins mound sites. Ms. Espinoza-Ar agreed they were important prehistoric American Indian sites that deserve protection. The Conservancy is presently exploring the idea with each landowner.

Mapping of Archeological Sites

During the first week of the annual Training Program—jointly managed by the Survey and the Arkansas Archeological Society and held this year in Blytheville at the Eaker site—Mulvihill completed extensive contour mapping of four sites in Mississippi County. More sites than ever are being destroyed due to construction and



Arkansas Archeological Society member Robert Dalton volunteers in the UAFS station's temporary lab. Here, he cleans and restores a pre historic ceramic vessel.

land-leveling activities, and most sites in the state have never been mapped in detail. It is important to have a record of these sites before they disappear. Newer mapping technology, such as total stations and robotic total stations, allow for faster and more accurate capabilities. With older equipment it could take two to three people several days or weeks to make a detailed map of one archeological site. Mulvihill borrowed the *Trimble 5600 Robotic Theodolite* from the UAF campus Center for Advanced Spatial Technology (CAST), an instrument that one person can operate, and mapped four sites in five days, recording nearly 30,000 data points covering an area of approximately 270,000 square meters.

Other Projects

Mulvihill visited an unrecorded rock art site in Fort Chaffee with UAF station archeologist George Sabo's rock art research team and Tammy Hilburn, cultural resources manager for the Arkansas National Guard. This site was first reported to Mulvihill by one of the local Society chapter members. Hilburn then proposed a rock art survey be done in other likely areas of the Fort Chaffee property. Mulvihill also visited an unrecorded rock art site along the Mulberry River, again reported by one of the local Society chapter members. Sabo's rock art team later documented this site as well.

Mulvihill assisted as a crew member with archeological survey at the UA System's Winthrop Rockefeller Center on Petit Jean Mountain, and with excavations at Old Davidsonville State Park and Historic Arkansas Museum. He also collected burned clay samples for archeomagnetic dating during a salvage archeology project by the HSU station.

In addition to these projects, Mulvihill still retains some responsibilities to the Parkin research station, where he was station assistant for many years before being reassigned to Fort Smith. He is continuing with artifact analysis, database development, and a GIS project to construct a comprehensive map for the Parkin site. He is also analyzing artifacts from the Graves 3 site, excavated during the 1996 Arkansas Archeological Society Training Program.

UAFS 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, and still retains some duties in that capacity. In late spring of 2005, Mulvihill moved to Fort Smith to establish the new UAFS research station. His research interests include Woodland and Mississippian period archeology, site survey methodologies, and mapping.

Academic Service and Activities

• attended a reception on the UAFS campus for the representatives of SEDL (Southwest Educational Development Laboratory) during its evaluation of the Education Renewal Zone

Professional Service and Activities

• Publications Committee, Arkansas Archeological Survey

Public Service and Outreach

- created a display for the Fort Smith Public Library during Archeology Month
- arranged a talk by Kathy Cande on her research at Old Davidsonville during American Heritage Week on the UAFS campus
- identified artifacts for seven members of the community
- presented a talk to preschoolers, audience of 12 students
- presented a talk to 4th graders in Greenwood, audience of 220 students
- prepared and presented a two-hour workshop on Arkansas archeology and prehistory for teachers attending an Alternative Learning Environment conference on the UAFS campus, attendance 20
- assisted Dr. George Sabo with a focus workshop for science teachers about the Survey's online resources, attendance 6
- consultant, Fort Smith Police Department, on identification of possible human remains
- visited a possible mound site at the landowner's request

Service to the Arkansas Archeological Society

- continued to assist with formation of the new local chapter of the Society (the Ark-Homa Chapter); arranged monthly meetings, invited guest speakers, sent press releases through UAFS
- hosted monthly lab sessions for Ark-Homa Chapter members
- provided lab and field opportunities for Society members and other volunteers
- attended the Society's annual Training Program and completed contour maps of four sites
- assisted Society members in filling out site forms

Volunteer Hours

• volunteers contributed 543 hours to station research projects in the field and laboratory

HENDERSON STATE UNIVERSITY, ARKADELPHIA

Dr. Mary Beth Trubitt, Station Archeologist Matthew Reynolds, Station Assistant Jeffrey Gaskin, Laboratory Assistant (part-time)

The HSU station is responsible for archeological resources in nine counties of southwestern Arkansas. Station territory 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 novaculite, mined extensively in the 19th century as "Arkansas whetstone," and also quarried by prehistoric American Indians for tool-making and trade, is a resource that affected early settlement and land use in the upland areas. In the river basins, salt-making was an industry pursued by American Indians and later by settlers. Novaculite mining and salt-making are represented in station territory by important archeological sites.

NEWS AND RESEARCH

Novaculite: A Ouachita Mountain Resource

The station team continued researching the procurement, use, and exchange of novaculite, an important raw material for tool-making by ancient inhabitants of this region. Small testing projects in recent years at various archeological sites along the Ouachita River drainage have added basic chronological and settlement data. By studying the stone artifacts from these sites and comparing how the different types and sizes of flakes and other debitage are distributed, we can study the activities involved in reducing the novaculite from large pieces of raw material to smaller artifact "blanks" and usable tools.

Trubitt, Reynolds, Gaskin, and volunteers completed cataloging the artifacts from the 2004 HSU archeological field school at 3GA23, where people lived and made stone tools during the Archaic, Woodland/Fourche Maline, and Caddo periods. Trubitt is analyzing the novaculite tools and tool manufacturing debris from this site and comparing the residues of tool-making with other sites in the region.

Analysis was completed for the Lake Ouachita site testing project in Montgomery County. Trubitt and former station assistant Kate Wright coauthored a final report that was submitted to the U.S. Army Corps of Engineers, who funded the project.

Trubitt and Reynolds conducted background research and planned a new project on novaculite tool production and exchange systems that will involve source-analysis of the stone as well as new excavations at Jones Mill, a novaculite workshop and dwelling site. The fieldwork will be part of next summer's Arkansas Archeological Survey/Arkansas Archeological Society Training Program, and the HSU/UA Archeological Field School.

Trubitt submitted grant proposals to the National Science Foundation for funding of specialty analyses and graduate assistantships, and to the University of Missouri Research Reactor for funding neutron activation analysis. These procedures would provide a chemical signature telling the archeologists exactly where the stone used for making tools was originally quarried. This, in turn, reveals how prehistoric groups used the land, how far they traveled, and how their networks of trade and alliances were constructed.

Part of planning for the Training Program (and other projects) is to make sure the station is well equipped. The station vehicle was replaced at the end of 2005. Thanks to Rep. Tommy Roebuck, the station was awarded General Improvement Funds to purchase a new laptop computer and digital projector—important tools for the educational part of our mission.

Ancient Caddo Lifeways on the Saline, Caddo & Ouachita Rivers

Analysis of old collections plus new archeological fieldwork at Caddo period sites is contributing to our understanding of Caddo lifeways, chronologies, and settlement patterns, and providing new information on the production and exchange of pottery, stone tools, and marine shell.

In the laboratory, Reynolds and Trubitt have been working on ceramic and stone artifacts from the Hughes site, a Caddo period mound tested during the 2002 HSU/UA Archeological Field School. Changes in the artifacts associated with a series of burned structures or



Jeffrey Gaskin records a Caddo vessel from the Hodges Collection.

surfaces near the mound can be studied in more detail aided by new radiocarbon dates funded by an HSU Faculty Research Grant.

The Hughes research is part of the larger Borderlands Project, a collaborative effort by the UAM and HSU stations to target archeological investigations on the middle Saline River and Moro Creek drainages. Reynolds has done background research, collected basic environmental data for GIS, and made several site visits as part of the Borderlands Project.

Trubitt and Reynolds, assisted by numerous volunteers from the Arkansas Archeological Society and the Ouachita Chapter, conducted salvage excavations to document a series of burned structures that made up a Caddo mound at 3CL593, a site on private land that was impacted by development. Following initial shovel tests and observations, fieldwork between January and June 2006 included hand excavation and machine excavation of the mound. Trubitt and Reynolds coordinated a meeting with the landowner, representatives of the Caddo Nation, and Arkansas Historic Preservation Program staff on this project. Reynolds and Trubitt presented a coauthored paper summarizing their work at this and another Caddo mound site (3SA11) at the Caddo Conference in March 2006. Processing of artifacts and samples in the laboratory for a full analysis is ongoing, under Reynolds' direction.

Finally, Reynolds, aided by an Arkansas Archeological Society volunteer, made a topographic map of the Barkman site (3CL7) using the electronic total station.

Mississippian Period Research

Trubitt continued her research interests in complex Mississippian period societies in the Southeast. She corresponded with coauthors on a manuscript reporting results of fieldwork and analysis at a Mississippian site in middle Tennessee. The article has been accepted by Southeastern Archaeology. Ongoing research interests in marine shell prestige goods at the premier Cahokia site (Illinois) has been summarized in an article to appear shortly in North American Archaeologist. Trubitt also corresponded with a colleague who obtained a grant for specialty analysis of faunal material from a large refuse pit superimposed by the east wall of Cahokia's palisade, as part of an effort to complete publication on this project. Trubitt wrote a short article for the Society for Bead Research Newsletter on marine shell from this pit. Trubitt also continued analysis and preparation of a final report on the Cahokia Palisade Project.

The Hodges Collection

Thanks to Ross Foundation funding, the project to document ceramic vessels in the Joint Educational Consortium's Hodges Collection, curated at HSU, continued this year, after a hiatus. Trubitt supervised Jeffrey Gaskin in the lab. Vessels from two specific sites will answer questions about Caddo ceramic production as it varied in time and space. Other vessels from unspecified locations can be used as part of future exhibits (including "virtual exhibits") to educate the public on the history and heritage of this part of Arkansas.



Salvage excavations at the 3CL593 mound, January 2006. Above (left to right): Matt Reynolds, Marion Haynes (Blytheville station), Mildred Grissom (Arkansas Archeological Society volunteer), Larry Porter (ATU station), Chester Shaw (Arkansas Archeological Society volunteer), Mary Beth Trubitt.

HSU STATION PERSONNEL

Mary Beth Trubitt (Ph.D., Northwestern University, 1996) joined the Survey in 2000 as the HSU station archeologist, following a teaching position at Western Michigan University. She has field experience in ten states and Belize, including work in southern Arkansas in the 1980s. Before coming to the Survey, most of her own research was 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 the prehistoric shell bead industry, which was one element of a huge network of long-distance trade during the Mississippi period. In Arkansas her research focuses on the production and exchange of other kinds of materials, including novaculite.

Matthew Reynolds (M.A., University of Mississippi, 2002) came to the Survey in 2005 after five years as Geospatial Technician for the Center for Archaeological Research at the University of Mississippi. He brings extensive experience in geophysical applications, spatial analysis, and ceramic analysis. He has prior field experience in several southeastern states and El Salvador.

Grants, Honors, and Awards

- \$915 from the Henderson State University Faculty Research grant program for "Caddo Chronology: A Proposal for Radiocarbon Dating Samples from the 2002 HSU Archeological Field School Excavations" (2005)
- \$5123 from the Ross Foundation, Arkadelphia, for "Documenting Ceramic Vessels in the JEC's Hodges Collection" (2005)
- \$27,500 from the Archaeometry Laboratory at the University of Missouri Research Reactor, Columbia, for "Investigating Ancient Production and Exchange Systems Using Ouachita Mountain Novaculite" (2005)
- \$1300 from the Arkansas Archeological Society, Marcus Quinn Memorial Fund, for "Radiocarbon Dating Activity at 3GA48, a Novaculite Quarry in the Ouachita Mountains" (2006)

Academic Service and Activities

- By agreement with the University of Arkansas System, Dr. Trubitt has a faculty title of Assistant Professor in the UAF Anthropology Department, and teaches in the Sociology and Human Services Department at HSU. Service this year to the host institution:
 - taught ANT 3043, North American Indians, 33 students (Trubitt)
 - taught ANT 2023, Introduction to Physical Anthropology and Archeology, 5 students (Trubitt)
 - completed evaluation of Terri Menafee's work for ANT 5083, Readings and Research in Anthropology, during Summer Session I, 2005 (Trubitt)
 - advisor and member of one Master of Liberal Arts (MLA) project committee at HSU; attended the student's (Terri Menafee) thesis defense and art exhibit "Smoke Signals" (Trubitt)
 - revised web pages for HSU classes and for the research station (Trubitt)
 - participated in Sociology Department and HSU campus meetings and functions such as senior thesis presentations and HSU Founder's Day convocation (Trubitt)
 - curation of artifacts and records from HSU Museum collections and the Joint Educational Consortium's Hodges Collection (Trubitt, Reynolds, Gaskin)

Professional Service and Activities

- Publications Committee Chair, Arkansas Archeological Survey (Trubitt)
- participated in Survey search and hiring process for new SAU station archeologist (Trubitt)
- reviewed a manuscript submitted to Southeastern Archaeology (Trubitt)
- reviewed a grant proposal submitted to the National Science Foundation (Trubitt)
- Planning Committee and Local Arrangements Co-Chair for 2006 Southeastern Archaeological Conference, November 8–11, Little Rock (Trubitt)
- participant on an IGERT pre-proposal to the National Science Foundation by W. Fredrick Limp, Director of UA-CAST (Trubitt)
- assisted with fieldwork on other Survey projects: Howard County Rural Water Project (SRP); Wallace Bottom (UAPB); a site visit in Yell County (ATU) (Reynolds)
- attended a meeting with representatives from the Caddo Nation, the Corps of Engineers, the Arkansas Highway and Transportation Department, the Federal Highway Administration, and the Archeological Survey, about plans to develop a Caddo KeepSafe Cemetery in Arkansas for reburial of repatriated skeletal remains (Trubitt)
- assisted fieldwork at a Montgomery County site under excavation by U.S. Forest Service archeologists (Reynolds)

Public Service and Outreach

- assisted the Vaden Cemetery Committee in Clark County, as part of the Arkansas Humanities Council/ Arkansas Archeological Survey initiative to document and preserve historic African-American cemeteries (Trubitt)
- wrote two articles for the *Encyclopedia of Arkansas History and Culture* (Trubitt)
- station personnel recorded nine new sites in station territory during the year
- prepared a portable artifact display and staffed an information table for Arkadelphia Founder's Day (Reynolds, Trubitt)
- Trubitt presented talks to the Benton chapter of the Daughters of the American Revolution; the Hot Springs chapter of the Daughters of the American Revolution; the Bismarck Business Association; the Arkadelphia Rotary; and the Clark County Historical Association; combined audiences of 122
- Trubitt presented a talk on archeology to children at the Rising Stars Daycare in Sheridan, 12 students

Service to the Arkansas Archeological Society

- attended monthly meetings and planned programs (Trubitt, Reynolds)
- newsletter editor for the Ouachita Chapter; produced informational brochure for distribution by the Ouachita Chapter (Trubitt)
- assisted the Ouachita Chapter's Archeology Day (an Arkansas Archeology Month event) by presenting a short talk (Trubitt) and staffing an "Ask an Archeologist" table (Reynolds)
- attended the annual Training Program and assisted with excavations (Trubitt, Reynolds)
- taught Lithics Seminar to 11 students at the annual Training Program (Trubitt)
- presented a program to the Ouachita Chapter, audience of 25 (Trubitt)
- presented programs to the Ouachita and Tunican Chapters, combined audiences of 69 (Reynolds)
- · hosted lab sessions and fieldwork opportunities for Ouachita Chapter and other Society volunteers

Volunteer Hours

• volunteers contributed 787 hours to station research projects in the field and laboratory

SOUTHERN ARKANSAS UNIVERSITY, MAGNOLIA

Dr. Frank F. Schambach, Station Archeologist David R. Jeane, Station Assistant

The SAU 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. The late prehistoric and protohistoric inhabitants within station territory were members of the Caddo archeological culture (in the west) and Plaquemine culture (in the east). Among many important sites in SAU station territory is Crenshaw, the earliest known Caddo ceremonial center.

NEWS AND RESEARCH

The Grandview Project

Schambach's major research again centered on the Tom Jones site excavations performed during the 2001–2003 Arkansas Archeological Survey/Arkansas Archeological Society Training Programs. Tom Jones is a Caddo mound group located within the Grandview Wildlife Management Area in Hempstead County. This year the focus was on getting all the faunal and floral remains from the floors of the three structures (all radiocarbon dated to around A.D. 1400) analyzed by qualified experts.

The most unusual of the three structures appears to have been a small "cook house" adjacent to a temple mound. It had been deliberately burned (as had the other two buildings, which evidently were dwellings) with 23 whole ceramic pots and other artifacts and goods left in place on the floor. The floors of all three structures yielded large, well-preserved collections of artifacts and organic remains.

The animal bones are being studied by two experienced zooarcheologists, Dr. H. Edwin Jackson and Ms. Susan Scott of Jackson, Scott and Associates in Hattiesburg, Mississippi, with funding from an ANCRC grant. Work was delayed last fall by flooding caused by Hurricane Katrina (but the site collections were not damaged). The number of identifiable animal bones in the collection is unusually large, which means that analysis will take longer, but the results will be especially important and informative archeologically.

The faunal analysis and interpretations so far support the archeologists' conclusions that the floors of the two dwellings represent, not ordinary Caddo houses, but were occupied by the elite class in Caddo society. The occupants had been provisioned with the better cuts of venison and had significant amounts of turkey and quail to eat—this is different from the ordinary domestic food refuse found in typical Caddo houses. There was an unusually large number of deer scapulae (shoulder blades), which supports the archeologically based hypothesis that these bones had ceremonial importance for the prehistoric Caddos. Jackson and Scott also report a surprising number of bones of small song birds, likely taken for their colorful feathers rather than as a food source. Prairie chicken was also part of the avian assemblage. Though the site is located on the edge of a 500-acre blackland prairie, this is the first evidence that prairie chickens were part of this habitat in Arkansas in prehistoric times.

Botanical remains were sent to Dr. Gayle Fritz (Washington University, St. Louis), for analysis by Fritz's advanced graduate student Dr. Jocelyn Turner. The Arkansas Game and Fish Commission supplied funding.

It is only thanks to the efforts of volunteers at the Magnolia station, who spent hundreds of hours doing the tedious work of preparing the samples over the last few years, that these important collections are now in the hands of expert specialists. Vernon Perry, Julian Cranfill, and Anthony Clay Newton deserve special thanks for their major contributions to the Grandview Project.

Schambach began sorting and classifying the pottery sherds and whole pots from the three house floors and other contexts at the Tom Jones site. He also spent many hours putting the photographic files in order and examining and re-sorting hundreds of photos of pots excavated by M. R. Harrington and others at neighboring sites in the Ozan Creek drainage, especially the nearby Washington and Mineral Springs sites. Most of the pertinent comparative material has never been published. One of the great contributions of the Grandview Project to the study of Caddo pottery is that at least a Julian Cranfill carefully restores a prehistoric ceramic vessel during a Wednesday volunteer day at the SAU station.

dozen pottery types common to the Ozan Creek-Little Missouri drainage are now securely radiocarbon dated for the first time.

Field drawings of the floor plans are being converted to publishable maps by Michael Evans at the Survey coordinating office in Fayetteville. Schambach looks forward to assembling a final report on the Grandview Project near the end of the fiscal year.

The Crenshaw Project

Crenshaw is a large, very complex, Late Fourche Maline and Early Caddo ceremonial center located on the Red River east of Texarkana. The site has a long history of scientific excavation, beginning with the work of C. B. Moore in 1912, and an equally long history of

looting by relic hunters. There were at least six mounds, of which three survive, and also extensive midden and cemetery areas yielding evidence of mortuary and ceremonial activities that have yet to be reported from any other site in the Caddo area or anywhere else in eastern North America. Crenshaw was occupied from about A.D. 700 through 1200, thus subsuming the transition from the Woodland to the Mississippian cultural pattern, and is the only surviving Caddo ceremonial center to have been occupied throughout this transitional interval.

Progress on Crenshaw research was interrupted by the Grandview Project in recent years. Another major impediment has been the need to find (and fund) a bioanthropologist to study and report on the unique complex of mortuary features discovered at Crenshaw. Among these features was a cemetery consisting entirely of skulls representing severed heads, and of detached



mandibles. The skulls (which retain their mandibles) were buried singly or in small clusters in shallow pits. The separated mandibles were buried in clusters of up to 100 in pits interspersed among the skull burials. More than 400 individuals are represented by the excavated remains, which were removed to preserve them from destruction by plowing and looting. Schambach believes at least 1000 people were buried there originally.

A major question in the interpretation of this unique mortuary pattern is whether the detached skulls and mandibles represent a burial custom of the Caddo ancestors, or were trophy skulls reflecting the warfare that was on the rise throughout the Southeast in this time period.

During the past year, Barbara Farley, a Ph.D. candidate in the Department of Anthropology at the University of Arkansas – Fayetteville, began work on a dissertation project on Caddo bioarcheology which will include



The recently completed topographic map of the Crenshaw site, made by Michael Evans and Jared Pebworth, assisted by David Jeane.

analysis of the Crenshaw human remains. The Caddo Nation agreed to allow studies that could determine ethnic affiliation of the detached skulls. Schambach, Survey Director Tom Green, and Ms. Farley applied for (and in July 2006 were awarded) a grant from the National Park Service under NAGPRA to perform isotopic analysis of the human bones.

Another element of progress was completion of a detailed topographic map of the Crenshaw site. David Jeane helped Mike Evans and Jared Pebworth, from the Survey's coordinating office, make the map with a total station transit. Jeff Girard and Dr. Joe Saunders of the Louisiana Regional Archeology Program also lent a hand. Thanks are due the landowners (Mr. and Mrs. Larry Head, Mr. Elmer Rayburn, and Mrs. Joyce Nottingham) for permission to work on their property.

Schambach and David Jeane also paid a visit to Natchez, Mississippi to examine and photograph pottery in private collections from the Feltus Mounds site (formerly called the Ferguson Mounds), a site in Jefferson County, Mississippi which has yielded some French Fork Incised pottery sherds similar to the French Fork pots found at Crenshaw. Schambach hopes to discover whether the pottery at Crenshaw is imported from the Lower Mississippi Valley, and by what route the trade may have occurred.

Osage Orange Research

Schambach has long pursued an interest in the Osage orange (*Maclura pomifera*) as an important raw material that was widely traded by Indians in North America at the time of European contact. The wood of this tree produced superlative bows and was highly prized for this purpose. He believes its natural range in late prehistory was restricted to certain Black Prairie refugia in the Red River area, which allowed advantages in trade relationships to groups who controlled access to the trees and wood products.

Schambach communicated with a student of Dr. Evan Peacock (Mississippi State University), who reported finding pieces of carbonized Osage orange wood at the Lyon's Bluff site, a Mississippian ceremonial center located on the Black Prairie area of Mississippi. Schambach believes this instance of Mississippi period Osage orange outside the native range is an example of traded material, probably a fragment of a bow stave.

He also cites evidence the Indians may have tried to naturalize the tree in appropriate habitats beyond the Red River Valley as early as the seventeenth century. A 1732 text by DeBatz includes a description and drawings of a "sacred tree" growing near a "temple" that the French had destroyed in 1730. The drawing and a specimen branch appear to be Osage orange. This observation was among the Natchez in the Lower Mississippi Valley. Lewis and Clark also document that by the late 1700s the Osage of Missouri had naturalized the tree to that area.

The Gateway Project

For a second year David Jeane participated in the Gateway Project to reveal Texarkana's early history through archeology. He did archival and on-the-ground research in Texarkana to determine locations for the 2006 Project Dig. Field crews included Texarkana College students, members of the Arkansas Archeological Society and Texas Archeological Society, and other community volunteers. He taught basic archeological laboratory procedures to students from Dr. Beverly Rowe's anthropology classes at Texarkana College, and monitored their work one day a week for six weeks as they sorted and processed Gateway Project artifacts from the previous year's excavations. He directed fieldwork for the two-week spring excavation, and followed up by finishing processing of the material in the lab.

Sulphur Fork Factory

A site on the Red River, recorded as 3MI266, appears to be the site of the 1817–1822 U.S. Government trading post known as Sulphur Fork Factory. One of Schambach's UA graduate students, Theresa Russell, is considering this site as the subject of her doctoral dissertation. Schambach recently examined a collection made from the site around 1985 and subsequently donated to a local museum. He photographed about 140 artifacts, which need to be labeled and cataloged.

Some Historic Cherokee Sites

Schambach—accompanied by John Riggs, archeologist for the Natural Resources Conservation Service, Claude McCrocklin, Ruth Rainey, and landowner Ken Cullipher—visited some sites in Miller County that were reported as historic Cherokee occupations. The group tried to relocate a site originally reported by Mr. McCrocklin 14 years earlier as having early nineteenth century artifacts, and in a location that is now scheduled for land-leveling. The site they visited, however, yielded only later artifacts, and the team determined the site had been misplotted on the original maps. Further survey is needed to resolve the problem.

Another possible historic Cherokee site nearby probably is a mixed occupation. The historic Cherokee component might be represented by early nineteenth century Anglo trade goods (e.g., hand-painted ceramics and a coin pierced for use as an ornament). There are also ceramics indicating sixteenth or seventeenth century Caddo occupation, and Civil War era occupation.

The Move to Bruce Center

The station's move to new quarters at the Bruce Center on the SAU campus is a work in progress. Much unpacking and arranging of station collections and office material remains to be done. David Jeane was busy with this work, as well as sorting and analysis of flotation samples from the three structure floors at the Tom Jones site. He also began separating all the bone from the excavated material from these structure floors and packing it for analysis.

SAU hopes to develop a museum in the Bruce Center, with Survey participation. David Jeane attended the Arkansas Museum Association three-day workshop in museum studies to gain background for this enormous undertaking.

SAU STATION PERSONNEL

Frank Schambach (Ph.D., Harvard University, 1970) has been station archeologist at SAU since 1968. His research has emphasized prehistoric Caddo and pre-Caddo cultures of the Trans-Mississippi South, including questions of Caddo relationships with the complex mound-building cultures of the Mississippi Valley. He is an expert on ceramic typology and on trade networks linking the Southeast, Southern Plains, and Southwest culture areas.

David 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.

Grants, Honors, and Awards

• \$5000 from Arkansas Game and Fish for specialist analysis of floral samples from the Tom Jones site

Academic Service and Activities

By agreement with the University of Arkansas System, Dr. Frank Schambach has a faculty title of Professor in the UAF Department of Anthropology and teaches in the School of Liberal and Performing Arts at SAU. This year's service to the host institution:

- taught SOC 1003, Introduction to Anthropology, 32 students (Schambach)
- taught SOC 3143, Indians of North America, 16 students (Schambach)
- prepared and directed a reading course on Caddo area archeology (ANTH 500V, Advanced Problems in Anthropology) for UAF Ph.D. candidate Barbara Farley (Schambach)
- member of two Ph.D. committees for UAF students in the Environmental Dynamics and Anthropology programs (Schambach)
- advised one UAF anthropology graduate student on a possible dissertation project in the station area (Schambach)
- presentation on the Ferguson site to the Southeastern Archeology Lunch Group, UAF Department of Anthropology (Schambach)
- guest instructor for Dr. Beverly Rowe's anthropology students at Texarkana College in connection with the Gateway Project (Jeane)

Professional Service and Activities

- Personnel Committee, Arkansas Archeological Survey (Schambach)
- Publications Committee, Arkansas Archeological Survey (Schambach)
- peer reviewed an article submitted to American Antiquity (Schambach)
- provided comments and supporting data for an article by George Lankford (Emeritus Professor, Lyon College) published in *The Arkansas Archeologist* (Schambach)
- corresponded and shared research results with colleagues: Roger Coleman (archeologist, Ouachita National Forest); Dr. Robert Ricklis (Coastal Environments, Inc., Corpus Christi, Texas); Prof. Thomas Albrecht Schmitt (Auburn University); Dr. Gary D. Schaffer (Archaeologist/Cultural Resources Specialist, USDA/ NRCS); Dr. Dayna Bowker Lee (Louisiana Regional Folklife Program); Mary Souter (Curator of Collections, UA Museum); Dr. David Kelley (Coastal Environments, Inc.); Dr. Bruce Albert (palynologist); John Riggs (archeologist, Natural Resources Conservation Service)
- assisted HSU station excavations at the 3CL593 Caddo mound site (Jeane)
- consultant to Federal Highway Program, AHTD, and Caddo Nation on proposed I-69 route through station territory (Jeane)
- assisted Jeffrey Girard of the Louisiana Regional Archeology Program in completing a total station map of the Mounds Plantation site (16Cd12), a major Caddo ceremonial center in northwest Louisiana that is a "sister site" to the Crenshaw Mounds in Arkansas (Jeane)

Public Service and Outreach

- presented invited lecture to the Central Louisiana Chapter of the Louisiana Archaeological Society, audience of 17 (Schambach)
- provided information on sites to landowners to assist them with issues about land-use permits (Schambach)
- peer-reviewed articles for the online Encyclopedia of Arkansas project and wrote one article (Schambach)
- humanities scholar for the Washington Hill Cemetery Project in Nevada County, funded by Arkansas Humanities Council and directed by Ms. Juanita Hopson (Schambach)
- artifact identification booth at the 38th Annual Jonquil Festival in Old Washington State Park (Jeane)
- participated in the Gateway II public archeology project, Texarkana (Jeane)

Service to the Arkansas Archeological Society

- hosted Wednesday "lab days" for volunteers of the Kadohadacho Chapter (Schambach, Jeane)
- presented a program at the Kokoci Chapter monthly meeting, audience of 19 (Schambach)
- attended the annual Training Program and taught Basic Lab seminar (Jeane)
- the station provided field and lab work opportunities for interested Society volunteers

Volunteer Hours

• volunteers contributed 610 hours to station research projects in the field and laboratory

ARKANSAS TECH UNIVERSITY, RUSSELLVILLE

Dr. Leslie (Skip) Stewart-Abernathy, Station Archeologist Larry Porter, Station Assistant Theresa Johnson, Station Assistant (half-time)

The ATU research station covers 11 counties of mountainous west-central Arkansas, including the southern fringe of the Ozarks (the Boston Mountains) and a large chunk of the Ouachitas. The two ranges incorporate varied upland and river valley environments and are separated by the Arkansas River corridor, which roughly bisects station territory. Archeological resources in the station area range from rockshelters 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 Bottom in Yell County, to the early 19th century town of Cadron in Faulkner County, also on the National Register of Historic Places.

NEWS AND RESEARCH

Cherokee Site Archeology

The ATU station and the Arkansas River Valley Chapter continued to work on the Cherokee project. Stewart-Abernathy pressed for further information on a gravestone in the Galla Rock Cemetery that has inscribed letters in the Cherokee syllabary, and presented recent findings on Cherokee research at the Arkansas Trail of Tears Association meeting in Russellville in July 2005.

As part of the Intermodal Project being planned for South New Hope Bottoms along the Arkansas River in Pope County, a report was published regarding National Register assessment for the Cherokee site (2PP449), where test excavations by the station and volunteers from the Arkansas River Valley Chapter of the Arkansas Archeological Society turned up artifacts that may represent early nineteenth century occupation by Cherokee Indians. Stewart-Abernathy was a coauthor of the report.

Stewart-Abernathy continued to work with the Arkansas Trail of Tears Association, contributing to efforts to mark and commemorate the routes taken by the Cherokee and other tribes through Arkansas during Indian Removal.

Historic Sites and Cemeteries

Porter continued his successful explorations of the antebellum Widow Logan site (3LO696), with surface survey, test excavation, and mapping. Nearby, he recorded additional sites and monitored known sites on Arkansas Game and Fish Commission land at Blue Mountain Wildlife Demonstration Area.

Additional field trips by Stewart-Abernathy and Porter included revisits or recording new sites in Faulkner, Johnson, Logan, Pope, Van Buren, and Yell counties. The team continued to concentrate as well on the State Archeologist's initiative to record historic cemeteries into the Survey's archeological site files and to assist local cemetery preservation efforts. Field trips in Faulkner, Johnson, Logan, Pope, and Van Buren counties involved historic cemeteries. Stewart-Abernathy agreed to serve as humanities scholar on two Arkansas Humanities Council proposals for further work at African American cemeteries.

Station staff assisted Mary Brennan (UAF Ph.D. candidate in anthropology and Forest Service archeologist) with test excavations at the Scott Page Farmstead. This was part of Brennan's dissertation research. The fieldwork was conducted as a Passport in Time project by the U.S. Forest Service. Station support included loan of most of the field equipment. Stewart-Abernathy also acted as site supervisor and digital photographer.

Stewart-Abernathy coordinated with Lynita Langley-Ware, Director of Faulkner County Historical Museum, to conduct excavations at a proposed ramp location behind the Blockhouse reconstruction at Cadron Settlement Park. He loaned field equipment, visited the ongoing work, helped identify finds, and co-wrote a summary article for *Field Notes*. The 2005 fieldwork recovered fragments of British-made ceramics of various types, glass beverage and medicine bottles, and also prehistoric American Indian artifacts.



Fieldwork at the Nehemiah Scott Page Farmstead was part of a Forest Service sponsored Passport in Time project that also gathered data for UAF Ph.D. candidate Mary Brennan's dissertation. Left to right are Frank Skinner, Dub Page, Paul Page, and Steve Page. The Pages are descendants of Nehemiah Scott Page's younger brother.

Riverboats, Plantations & Log Houses

The popular report of the 1988 fieldwork at the West Memphis Boatwrecks site, published in 2003 as *Ghost Boats on the Mississippi* (Survey Popular Series 4), set off a round of promotion and follow-up public programs. This continued during the 2005–2006 year with a reworking of the data added to other discoveries and presented as a Legacies and Lunch lecture at the Butler Center in Little Rock titled "Ghost Boats in Arkansas: The Search for Our Riverine Heritage." Four posters assembled by Terry Johnson and Larry Porter plus the steam gauge from the West Memphis site accompanied Stewart-Abernathy as exhibits to this public presentation. When not on the road, the posters and steam gauge are on display at the ATU Museum of Prehistory and History.

Stewart-Abernathy's interest in riverine heritage took him to the site of the catastrophic wreck of the steamboat *Sultana*. He visited with the landowner to confirm site location and ongoing interest by the Survey in this important piece of Arkansas Civil War era heritage.

As a member of the Lakeport Plantation Research Team, as consultant for archeological needs, Stewart-Abernathy continued background research on historic photographs and follow-up on oral histories recorded from family members. He attended a Team meeting at Lakeport in July. The several posters that were assembled by the ATU station staff with results of the oral history and photographic research to date remain on display in the temporary on-site headquarters at Lakeport.

Stewart-Abernathy assisted Joan Gould with documentation of early log houses in Randolph County as part of Ms. Gould's Early Arkansas Settlement Project funded by Arkansas Humanities Council. Two of the houses, Looney-French and Rice-Upshaw, were acquired by Black River Technical College, Pocahontas in the Fall of 2005, to be used as educational centers. Stewart-Abernathy worked with Gould to develop new grant proposals for archeological investigations at the two sites during winter of 2006.

Curatorial Matters

Station equipment and collections had to be moved in accordance with building plans on the ATU campus. Larry Porter spent time packing and unpacking the station library to prepare for a planned move from Tucker Hall that was later postponed. Field equipment and collections were moved to new space. Volunteers from the ARV Chapter helped Porter with the move, and construction of shelving.

Larry Porter led the effort, greatly assisted by ARV Chapter volunteers, to completely re-box extensive collections excavated during fieldwork at Carden Bottom in 1991–1994. Theresa Johnson ensured the correct curation supplies were on hand. These artifacts will need to be accessible for exhibits the Survey plans to install at the UA System's Winthrop Rockefeller Center on Petit Jean Mountain.

Theresa Johnson began a major project to scan the station's 35 mm color slides to turn them into digital form for PowerPoint presentations, and also to provide a digital archival format as backup in case the originals are damaged. This effort had immediate useful results. Stewart-Abernathy incorporated the digital images into PowerPoint presentations for public talks across Arkansas, and on to Chengdu, China.

Chinese Culture and Heritage Project

Stewart-Abernathy enjoyed the extreme good fortune of participating in the Local Chinese Culture and Heritage Project, run by Director Martha Morton, of Arkansas Global Programs at UALR. His role began with an invitation to give a presentation on ethnicity and archeology to eight visiting Chinese museum professionals in Arkansas as part of a Department of State grant for cultural exchange on heritage preservation.

Stewart-Abernathy's presentation, "Historical Archeology and Ethnicity in Arkansas," was on November 11, 2005. He also accompanied the group on a tour of Toltec Mounds Archeological State Park. He was later invited to be on the team of museum consultants to visit Chengdu, China, as part of the exchange effort. He attended several planning meetings in the spring, prepared two PowerPoint presentations for the trip based on his research at Old Washington Historic State Park (with much assistance from Terry Johnson and Larry Porter), and went to Chengdu June 27–July 6, 2006.

While in China, Stewart-Abernathy took over 2000 digital photos (becoming de facto trip photographer), and extended his stay for personal visits to such important historical and archeological sites as Emperor Qin's Mausoleum with the terra cotta army in Xian, the site of the Peking Man discoveries, and the Great Wall at Mutianyu near Beijing.



Skip Stewart-Abernathy poses with a life-sized reproduction of one of Emperor Qin's terra cotta warriors. Xian, Shaanxi Province, China.

ATU STATION PERSONNEL

Leslie Stewart-Abernathy (Ph.D., Brown University, 1981) joined the Survey in 1977 as UAPB station archeologist and moved to the ATU position in 1989. He is a graduate of Jonesboro High School and Arkansas State University. His archeological 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 underwater archeology, especially 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 in 1991. That same year she also took on a part-time position as education coordinator at the ATU Museum of Prehistory and History.

Larry Porter is a native of Logan County, Arkansas, and has been a member of the Arkansas Archeological Society since 1979. He participated in summer Training Programs and spent eight years doing contract archeology for various private firms, mostly in the Ouachita National Forest, before joining the Survey in 1999 as a half-time assistant at ATU. He was appointed full-time assistant in 2004. His interests include the prehistoric Woodland and Mississippi periods of the northern Ouachita Mountains and Petit Jean River Valley area, as well as early historic settlement in Arkansas, especially southern Logan County. He is an accomplished artist and has created many original depictions of archeological subjects, some of which have appeared in publications and museum displays.

Academic Service and Activities

- By agreement with the University of Arkansas System, Dr. Stewart-Abernathy has a faculty title of Associate Professor in the UAF Department of Anthropology and teaches in the Behavioral Sciences Department at ATU. Both courses taught this year are part of ATU's Basic Education curriculum. This year's service to the host institution:
 - taught ANTH 2003, Cultural Anthropology, 71 students (Stewart-Abernathy)
 - taught ANTH 1213, Introduction to Anthropology, 72 students (Stewart-Abernathy)
 - supervised Independent Study in archeological field methods and techniques, one student (Stewart-Abernathy)
 - supervised five ATU students attending the annual Survey Training Program as a for-credit field school (Stewart-Abernathy)
 - served on three Ph.D. committees for graduate students at UAF in the Anthropology and Environmental Dynamics programs (Stewart-Abernathy)
 - served as Curator of Anthropology, member of the Museum Acquisitions Committee, and advisor on policies and grant applications for the ATU Museum of Prehistory and History (Stewart-Abernathy)
 - assisted Series of Discovery events, tours, and special activities for local students at the ATU Museum (Stewart-Abernathy, Johnson, Porter)
 - participated in design committee for World War II exhibit "Home Front and Battlefront" which opened at the ATU Museum in September 2005; station staff helped construct and install exhibits, wrote text for exhibit panels and labels, and helped with related Discovery Series events (Stewart-Abernathy, Johnson, Porter)
 - served as Teaching Assistants for Stewart-Abernathy's classes (Johnson, Porter)

Professional Service and Activities

- assistance to Mid-Continental Research Associates and Intermodal Transportation Facility project (Stewart-Abernathy, Johnson, Porter)
- assistance to the State Historic Preservation Officer, Arkansas Highway and Transportation Department, Hot Springs National Park, Ozark-St. Francis and Ouachita National Forests on historical archeology (Stewart-Abernathy)
- advised Arkansas State Parks on historical archeology issues, especially related to Old Washington and Old Davidsonville (Stewart-Abernathy)

- served as crew member and/or site supervisor on projects around the state, including Old Davidsonville in Randolph County and the Drennen-Scott House in Van Buren, Crawford County (Porter)
- Proceedings editor for the South Central Historical Archeology Conference (Stewart-Abernathy)
- Discussant to symposium "A Hidden Diversity: Historical Archaeology in the Arkansas Ozarks," at the annual meeting of the Society for Historical Archaeology in Sacramento, California (Stewart-Abernathy)

Public Service and Outreach

- hosted a joint Open House with the ATU Museum and the Arkansas River Valley Chapter of the Arkansas Archeological Society for Archeology Month, attendance 70 (Stewart-Abernathy, Porter, Johnson)
- about 25 packets of informational flyers mailed out by request to teachers and others (Johnson, Porter)
- presented programs to the Arkansas Trail of Tears Association meeting, Russellville; the African American Cemeteries workshop, Russellville; Pottsville Middle School; Faulkner County Historical Society; and the Butler Center Legacies and Lunch Series, Little Rock; combined audiences of 300 (Stewart-Abernathy)
- authored or coauthored four articles for the online *Encyclopedia of Arkansas History & Culture* project (Stewart-Abernathy)
- advised citizens on documentation of Hopewell Cemetery in Van Buren County and Frauenthal Cemetery in Faulkner County (Porter)

Service to the Arkansas Archeological Society

- the ATU station hosted the Arkansas River Valley Chapter of the Society, with 10 monthly meetings and eight lab nights during the year
- ARV Chapter Secretary/Treasurer, meeting arrangements, newsletter preparation, and publicity manager (Johnson)
- coordinator for lab volunteers (Johnson)
- ARV Chapter Program Chair (Stewart-Abernathy)
- presented four programs to the ARV Chapter, and one each to the Ark-Homa (Fort Smith), and Ouachita (Hot Springs) chapters, combined audiences of 105 (Stewart-Abernathy)
- excavation area supervisors at the annual Training Program (Stewart-Abernathy, Porter)
- designed the Training Program t-shirt (Porter)

Volunteer Hours

• volunteers contributed 468 hours to station research projects in the field and laboratory

ARKANSAS STATE UNIVERSITY, JONESBORO

Dr. Juliet Morrow, Station Archeologist John Thomas, Station Assistant (through December 20, 2005)

The ASU research station covers 15 counties in northeastern Arkansas. American Indian cultural development from 12,000 B.C. to historic times and early Euroamerican settlements are all part of the archeological record. Among the well-known sites are Sloan, a Dalton period mortuary that is 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 ecological adaptations in Arkansas prehistory.

NEWS AND RESEARCH

Ice Age Animals of Arkansas

Arkansas is rich in fossil remains of extinct Pleistocene (Ice Age) fauna, and Juliet Morrow plans to write a book about these finds. Her interest rises partly from her long involvement with Paleoindian archeology—the Paleoindians were nomadic hunters who first entered the Americas in pursuit of large game animals, such as the mastodon, that later became extinct. But Morrow also has first-hand experience excavating Pleistocene megafauna in Arkansas.

In 1999 she directed excavation of the King Mastodon site in Craighead Country, extracting a 50 per cent complete skeleton of a Pleistocene mastodon (*Mammut americanum*) from waterlogged deposits. The 14,000year-old bones and tusk fragments had been discovered during dredging of Little Bay Ditch. Although no artifacts or evidence of hunting by Paleoindians was found at the site, the good preservation and completeness of the skeleton make it an important find. The excavation was briefly covered in *National Geographic* magazine.

Morrow has continued to work on the King Mastodon material, with progress made this year toward a final report on the project. The late Dr. Roger Saucier, premier geomorphologist of the southeastern U.S., paleobotanist Dr. Stephen Jackson (University of Wyoming), and radiocarbon expert Dr. Tom Stafford also worked on the project. The ASU Museum loaned the lower jaw of the King Mastodon to the Crowley's Ridge Nature Center in Jonesboro, where it is on display. This year, at the request of the chairman of ASU's Biology Department, Morrow had another encounter with an Arkansas mastodon fossil—a femur found in a ditch near Jonesboro. She applied preservative to the fossil and attempted a visit to the site, which was under water. Morrow later discovered that the bone had been retrieved from Little Bay Ditch and likely belongs to the King Mastodon.

The Anzick Site: A Clovis Culture Burial

Clovis is the name given by archeologists to the earliest widespread and successful occupation of the Americas, and is commonly recognized by the distinctive and beautiful fluted projectile points made from various kinds of fine-grained flint and chert. Morrow's expertise in Paleoindian archeology has taken her across the country for comparative study of these distinctive stone tool forms, collecting information for a database of Paleoindian artifacts.

Anzick, in southwestern Montana, is one of the most important site discoveries in the history of North American archeology, but there has never been a unified publication documenting the entire Anzick find. It is the only Clovis culture site known to the world that contains a human burial—the fragmentary remains of a one to two year old child.

The site was discovered by accident in 1968 and the artifacts separated into several privately owned collections. Professional archeologists have analyzed various

Adult American mastodon (Mammut americanum). A specimen from Little Bay Ditch in Craighead County, excavated by Morrow and others in 1999, is known as the King Mastodon.



groups of the artifacts and obtained radiocarbon dates showing the human remains to be between 11,000 and 12,000 years old. The many artifacts include a variety of finely worked stone tools and some "rods" or foreshafts originally thought to be made of bone—all thickly dusted with red ochre.

Morrow has visited Montana twice to examine the site and the collections and to interview the last surviving witness to the original discovery. She has been able to put together a picture of the complete assemblage: a 115-piece tool kit that was included in the infant's grave. This tool kit contained 84 stone cores or preforms (pieces that could be worked into finished tools), eight



Clovis fluted points from the Anzick site.

dart points, two shatter fragments, and 15 of the "bone rods." Studies of the implements show they were not made specially to put into the grave, but were tools in everyday use before being placed with the infant's burial.

One of Morrow's contributions is a closer examination of the so-called bone rods. Viewing them under a stereo-microscope and comparing them to various samples, she found they are most similar to antler, probably elk antler. Use of antler as a raw material was common in the Old World Upper Paleolithic, but had never previously been reported from a Clovis assemblage. The beveled ends of the rods are covered with crosshatch incisions. Though there are other possibilities (for example, hide-working flensors), these artifacts are probably the foreshafts of spears. Morrow was able to determine that as many as, but not more than, eight separate foreshafts are represented in the assemblage. Interestingly, this is the same number as the finished dart points. The cross-hatching might have provided "purchase" for the beveled elements to be joined together and bound to make a longer shaft.

Archeologists have always been intrigued by burial sites. The array of artifacts included as gifts or as grave furnishing for the afterlife can be dazzling, but the real reason for our interest is that so much can be learned by the insight this gives into the belief systems of long ago. It can be tempting to assume that life was simple for nomadic people living off the land more than 10,000 years ago, and that the struggle for survival left little time for expressive behavior. But the Anzick find raises intriguing puzzles. The 100 stone tools came from at least six different quarry sources spanning an area from western Montana to eastern Wyoming. Did one small Clovis group travel to all these quarries, or did they obtain the stone through trade? Why was it important to include this range of exotic stone in the grave of a one to two year old infant?

Evidence from the Anzick site suggests that Clovis people believed in an afterlife and conducted burial rituals in accordance with their beliefs. As the only known Clovis burial, the Anzick site offers archeologists a special opportunity, and a special responsibility to make the most of this important find.

Morrow published a brief report on Anzick, coauthored with Stuart Fiedel, in the *Central States Archaeological Journal* in 2006. A chapter on Anzick is also included in Morrow's soon-to-appear University Press of Florida volume *Paleoindian Archaeology*, co-edited with Cristobal Gnecco.

ASU STATION PERSONNEL

Juliet Morrow (Ph.D., Washington University, St. Louis, 1996) joined the Survey as ASU station archeologist in 1997, after a position with the Office of the State Archeologist of Iowa's Highway Archeology Program and earlier work for private 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.

John Thomas joined the Survey as a part-time lab assistant in 1993, while a student in history at ASU. He later became lab supervisor and finally archeological assistant. Thomas helped with all aspects of general station operation, field and laboratory work, outreach activities, and service to the ASU Museum. He assisted Morrow with class preparations and regularly contributed guest lectures to other classes at ASU. Thomas also worked with the Central Mississippi Valley Chapter of the Arkansas Archeological Society.

Grants, Honors & Awards

• \$4000 from MURR (University of Missouri Research Reactor) for neutron activation analysis of ceramic sherds from Greenbrier phase sites, Independence County, Arkansas

Academic Service and Activities

By agreement with the University of Arkansas System, Dr. Juliet Morrow has a faculty title of Assistant Professor in the UAF Department of Anthropology. She teaches in the Department of Criminology, Sociology, Geology and Social Work at ASU. Morrow's service to the host institution this year:

- taught ANTH 2233, Introduction to Cultural Anthropology, 60 students
- taught ANTH 3203, Introduction to Archaeology, 16 students
- taught Physical Anthropology as a Readings course, 5 students
- mentored ASU McNair scholar Shaun McGaha; Research Project: Instrumental Neutron Activation Analysis of Greenbrier Phase Ceramics
- mentored ASU Ph.D. candidate in the Heritage Studies Program, Akita Guillory, working on Lakeport cemeteries as part of her dissertation project
- served on graduate committee for ASU Biology student Betsy Ashcroft; M.S. thesis: *Use of Relic Unionid valves to estimate time since mortality*
- developed course description and syllabus for a new class, Forensic Anthropology, for the new Forensic Science program at ASU
- Thomas was a guest lecturer for Richard Burns's Introduction to Cultural Anthropology classes, 90 students
- assisted the ASU Biology Department with a find of a mastodon bone: treated the fossil with preservative and accompanied a Biology graduate student on a visit to the site
- at request of the ASU CSG Department, Morrow gave a tour of the University to a candidate being interviewed for the position of Chair of the Department

Academic Service Beyond ASU:

• Morrow was a guest lecturer for Environmental Sciences at UAF

Professional Service and Activities

- Discussant at conference "Clovis in the Southeast," sponsored by the South Carolina Department of Archaeology and Anthropology (SCIAA) and the Center for the Study of the First Americans at Texas A&M University (Morrow)
- peer reviewed an article submitted to American Antiquity (Morrow)





Public Service and Outreach

- demonstrated flintknapping for the Arts in the Air festival on Petit Jean Mountain, attendence around 100 (Morrow)
- assisted City of Jonesboro with location and advice about unmarked graves in three locations, including a cremation at Oaklawn Cemetery, and numerous unmarked graves at Knights of Pythias Cemetery (Morrow)
- worked at an "Artifact Identification Day" at Parkin Archeological State Park during Arkansas Archeology Month 2006 (Morrow)
- Vice President, Board of Directors of the Missouri Archaeological Society (Morrow)
- presented talk on peopling of the New World to the Missouri Archaeological Society, audience of 80 (Morrow)
- job-shadowed by a Douglas MacArthur Junior High School 8th grader (Morrow)
- wrote two articles on paleoanthropology and post-Pleistocene extinctions for the *Jonesboro Sun* newspaper (Morrow)
- judge for the Northeast Arkansas Science Fair (Morrow)
- wrote two articles for the online Encyclopedia of Arkansas History & Culture project (Morrow)
- presentations over six days at Parker Pioneer Homestead in Whitehall, Arkansas, 6200 students (Thomas)
- presentation at Parkin Archeological State Park, audience around 800 (Thomas)

Service to the Arkansas Archeological Society

- advisor, program chair, and meeting organizer for the Central Mississippi Valley Chapter in Jonesboro (Morrow)
- provided research opportunities for volunteers in the lab and field
- presented one program at CMV chapter meetings, audience of 30 (Morrow)
- attended the Training Program and taught Zooarcheology seminar, 5 students (Morrow)

Volunteer Hours

• volunteers contributed 145 hours to station research projects in the field and laboratory

BLYTHEVILLE AEROPLEX RESEARCH STATION

Dr. Claudine Payne, Station Archeologist Marion Haynes, Station Assistant

The Blytheville 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 Mississippi and Crittenden counties in northeast Arkansas, which together contain well over 1000 recorded archeological 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 and seismologists 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 AND RESEARCH

Mississippian Architecture & Community Patterns: The Eaker Site

Research on Mississippian community patterns along the Lower Pemiscot Bayou continued. Claudine Payne submitted an interim report on the 2005 investigations at the Eaker site and published three articles in *Field Notes* (Newsletter of the Arkansas Archeological Society) on Eaker site investigations. Remote sensing covered an additional 5600 square meters at the site. There was a third year of excavations during the 43rd annual Training Program in Archeology, plus additional excavations in October 2005, and lab processing of artifacts. Finally, three radiocarbon samples run by Beta Analytic yielded dates between A.D. 1200 and 1400.

The multi-year Eaker project is focused on understanding Mississippian communities in the St. Francis basin. Information about the site serves several purposes aside from "pure research." The Quapaw Tribe of Oklahoma have designated Eaker a Quapaw Sacred Site. Results of the archeological investigations are shared with the Tribe. The site is owned by the City of Blytheville, and there are hopes to one day interpret it as an archeological park. Clearly, all of the archeological research is essential to the realization of this goal.

Although research at Eaker will continue as a longterm project for the Blytheville station, 2006 was the third (and final) year of fieldwork as part of Arkansas' annual Training Program for amateur archeologists, jointly sponsored by the Survey and the Arkansas Archeological Society. A great deal of work was accomplished under the auspices of this program. Geophysical remote sensing allowed the archeologists to "see" features below the surface and to place their excavation units accordingly. A number of houses, and also cracks and dislocations caused by past earthquakes, were investigated in this way. It is not yet certain when these earthquakes occurred.

Aspects of community pattern suggested by previous research at the site include houses aligned in neat rows as in a small town, a possible palisade, and hints of community features such as a plaza and a flat-topped mound (no longer present but possibly represented by a large magnetic anomaly). The last three years of fieldwork call into question some of these conclusions. Despite considerable effort, AAS crews have found no evidence of a palisade. Even the nature of the site is now uncertain. Remote sensing reveals individual clusters of houses that suggest multiple small villages rather than one town. These findings open up new and exciting directions for research at the Eaker site.

Work at Eaker was not confined only to the Training Program. Geophysical survey concentrated on looking for the site's boundaries, trying to determine whether there was a palisade or moat. The Fall 2005 excavations, again with volunteer crew, collected more data from a part of the site that appeared older than the rest of the village. One of the stand-out features at Eaker is the large amount of earthquake disturbance.

Claudine Payne's goals for the Eaker project are to answer some basic questions about the community it represents. When and how long was it occupied? How was it organized? What were the houses like? What was the environment like around the site at the time people were living there? With the data collected in the last three seasons of work, she can begin to offer answers to these and other questions, and lay out a long-term program of research that will aid development of this National Historic Landmark site as a possible heritage park, interpreting its 700-year-old community for visitors to Northeast Arkansas today.

Remote Sensing & Earthquake Archeology at Tinsley 1

The Tinsley 1 site, on the south bank of Pemiscot Bayou in northern Mississippi County, was investigated in 2001 and 2002. Tinsley 1, and neighboring sites, had received little prior attention from archeologists, despite a long history of research in the general area. The site contains the remains of a small village, or perhaps a series of sequentially occupied farmsteads or tiny hamlets, all dating to the post-A.D. 1400 period. There was no evidence of European contact. Payne and Survey archeogeophysical specialist Jami Lockhart recently published their report on the fieldwork, which combined several types of remote sensing with detailed topographic mapping and excavation in areas where the geophysical survey indicated subsurface features.

The project demonstrated that geophysical prospection could identify not only archeological features below the ground, but also earthquake effects, including cracks and "sand blows." These were revealed as dramatic anomalies in the geophysical signatures, and equally dramatically during excavation of a sand-filled earthquake fissure cutting across a house floor. (The earthquake probably occurred after the site had been abandoned.)

The excavation recovered plentiful wall plaster (fired clay impressed with grass and cane), decorated pottery, arrowpoints and other tools, and fragments of a ceramic figurine.

Eaker, Quakes & the Media

The combination of earthquakes and archeology is drawing attention to northeast Arkansas and to the research being done in the Blytheville area. A science writer commissioned by *Archaeology* magazine interviewed Marion Haynes and Claudine Payne for an article on earthquakes and archeology in the January 2006 issue. In October, seismologists attending the Eastern Section of the Seismological Society of America meeting in Memphis toured the Blytheville research



Claudine Payne takes notes during the 2006 Training Program at the Eaker site in Blytheville.

station. A film crew from The History Channel, making a documentary about the New Madrid earthquakes called "Earthquakes in the Heartland" for the series *Mega Disasters*, shot footage at the Eaker site in February. Marion Haynes appears in the documentary, as does Jami Lockhart, conducting remote sensing on the Eaker site. The filmmakers also used an excavation unit in Area H at Eaker as a backdrop for seismologist Martitia Tuttle to explain the mechanics of earthquakes on camera. Finally, a Canadian film crew shot footage at the Eaker site in June during the Training Program, and interviewed Marion Haynes for a documentary that will appear on The Discovery Channel.

What Makes a Chief?

The popular image of a "chief" is probably fairly similar to the image presented by the "standard model" of Mississippian social and political structure. This is because so much Mississippian period archeology has concentrated on the largest sites, the major mound centers such as Cahokia (Illinois), Moundville (Alabama), Etowah (Georgia), and Spiro (Oklahoma). Here, the material characteristics of chiefly status in a ranked society are expressed by elaborate symbols of authority, exotic prestige goods restricted to the elite, and elaborate burial programs. But this is not the whole story. The "average" Mississippian chiefdom was on a smaller scale.

Claudine Payne's comparative study of two Mississippian chiefdoms—published this year in an edited volume by the Center for Archaeological Investigations, Southern Illinois University—analyzes the "archeological signatures" of large and petty chiefdoms using the Lake Jackson site in Florida and the Upper Nodena site in northeast Arkansas as examples. The Lake Jackson site, a large chiefdom, typifies the standard model and reflects a leadership strategy based on external social and exchange networks. The small chiefdom at Upper Nodena reflects a corporate strategy of leadership, based on promoting internal bonds through communal ceremonies and rituals. Payne's article details how the two strategies of leadership are expressed through contrasting patterns of monumental architecture, artifact distributions, and art styles.

Facility Improvements

Improvements to the Blytheville station facility made this year included repairs to the building exterior, painting, a new entry door, and a new sign. The station owes thanks to Sen. Steve Bryles for obtaining General Improvement Funds for these repairs, and also to purchase some much needed equipment for the office and laboratory.

BLYTHEVILLE STATION PERSONNEL

Claudine Payne (Ph.D., University of Florida, 1994) joined the Survey in 1999 to run the new Blytheville research station. 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.

Academic Service and Activities

By agreement with the University of Arkansas System, Dr. Claudine Payne has a faculty title of Assistant Professor in the UAF Department of Anthropology. She has no regular teaching duties but may advise and assist students with research projects.

 Claudine Payne is named as a co-researcher in a pre-proposal submitted to the National Science Foundation's IGERT program, Principal Investigator Dr. W. Fredrick Limp of the UAF Center for Advanced Spatial Technology (CAST). If funded, Payne and the Blytheville Research Station would provide field and research opportunities for students participating in the program.

Professional Service and Activities

- Secretary, Southeastern Archaeological Conference (Payne)
- Public Outreach Committee, Southeastern Archaeological Conference (Payne)
- Program Chair, SEAC 2006 Annual Meeting, November 8–11, Little Rock (Payne)
- Editorial Advisory Board for *American Archaeology*, a magazine published by the Archaeological Conservancy (Payne)

- member, Arkansas Governor's Earthquake Advisory Council (Haynes)
- participated in Survey research projects at Old Davidsonville (SRP) and mound salvage excavations at Caddo Valley (HSU) (Haynes)

Service to the Host Communities

• attended meetings called by the City of Blytheville to plan a new heritage museum (Payne, Haynes)

Public Service and Outreach

- contributed one article to the online Encyclopedia of Arkansas History & Culture (Payne)
- presented a talk to 3rd grade ALERT class at Rice Creek Elementary School, 13 students (Payne)
- presented talks to 2nd and 3rd graders attending the Arkansas Northeastern College summer enrichment programs, 70 students (Payne)
- presented talks to the Blytheville Kiwanis Club, Mississippi County Historical and Genealogical Society, and the Memphis Corps of Engineers, combined audiences of 60 (Payne)
- presented talk to the Blytheville Kiwanis Club, audience of 40 (Haynes)
- attended and assisted Artifact Identification Day at Parkin Archeological State Park (Haynes)
- provided opportunities for archeological field and laboratory experience by volunteers (in addition to the Training Program)
- hosted 44 visitors to the research station (in addition to the Training Program Open House)

Service to the Arkansas Archeological Society

- hosted and directed the 2006 annual Training Program at the Eaker site, 70 participants and 40 visitors (Payne, Haynes)
- presented evening lecture at the Training Program, audience of 60 (Haynes)
- presented three evening lectures at the Training Program, combined audiences of 110 (Payne)
- presented talks to the Ouachita Chapter (Hot Springs) and Central Mississippi Valley Chapter (Jonesboro), combined audiences of 55 (Payne)

Volunteer Hours

- volunteers contributed 138 hours to station research projects (other than the Training Program) in the field and laboratory
- Training Program participants contributed 5640 hours to the Eaker project

SPONSORED RESEARCH PROGRAM

Dr. Robert C. Mainfort, Jr., Administrator Kathleen Cande and Randall Guendling, Project Archeologists Michael Evans and Jared Pebworth, Archeological Assistants Aden Jenkins, Technical Assistant Lindi Holmes, Report Editor and Office Manager

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, to resource overviews of large regions of the United States, to assisting with interpretation at state and national parks. To date, SRP has completed nearly 1000 studies within Arkansas and neighboring states. SRP also provides service to the university community through teaching, graduate committee membership and advising, and employment opportunities for qualified students as field and laboratory technicians. SRP staff members routinely serve as consultants to various state and federal agencies.

NEWS AND RESEARCH

Old Davidsonville State Historic Park

With funding generously provided by the Arkansas Natural and Cultural Resources Council, Kathleen Cande directed a third year of archeological and archival research into the history of Old Davidsonville. The goal of the long-term project is to uncover new information about the town to assist public interpretation at Old Davidsonville State Historic Park, located near Pocahontas in Randolph County.

The town of Old Davidsonville, platted in 1815, was a county seat and commercial center until it was abandoned around 1830. No standing structures survive. Most of the town site is included within Old Davidsonville Historic State Park, created in 1957 and managed by the Arkansas Department of Parks and Tourism.

After additional geophysical imaging by Jami Lockhart (geophysical survey in 2004 had revealed foundation remnants of the old courthouse, post office, and two streets bordering the square), the SRP field crew completely excavated a large trash pit on Lot 35, also discovered in the 2004 season. The crew then widened the excavation area, revealing pockets of refuse and building rubble surrounding the trash pit. A major surprise was the discovery of 11 more U.S. and Spanish coins (eight coins were found in 2004).

In the laboratory, technicians processed, sorted, and analyzed approximately 3400 artifacts found during the 2004 excavations. Over 60 whole or reconstructable ceramic and glass vessels were recovered in 2004 and 2005, including all types of tablewares, tumblers, storage jugs, wine glasses, and liquor bottles. Ceramic types



Aden Jenkins excavates a large redware jar at Old Davidsonville State Park. The restored vessel is shown on page 73.
include decorated pearlware, plain creamware, redware, and stoneware. There were also 100 glass beads, a silver earring, tinkling cones, and wampum: objects traditionally classified archeologically as "trade goods" because early European and American entrepreneurs traded these kinds of artifacts to American Indians.

The quantities of food-related artifacts (including a large number of animal bones) suggest that more than one family lived on Lot 35. Archival research revealed that, in fact, several individuals were licensed to operate taverns, or "public houses of entertainment" on Lot 35 during the 1820s. The lot is across the street from the public square where the courthouse stood.

This pit feature is unique in Arkansas, not only

because of the outstanding condition of the artifacts, but also the completeness of the vessels and the variety of objects found. It was a sealed, undisturbed deposit, and all of the artifacts date prior to 1820.

Pea Ridge National Military Park Collections Curation

The staff of Pea Ridge National Military Park has decided to transfer all of their archeological collections to the University of Arkansas Museum Collections Facility. The National Park Service contracted with the Sponsored Research Program to receive the collections and associated records, do a complete inventory, update artifact information in the Automated National Catalog System, properly package the objects, and prepare them for permanent curation. Kathleen Cande is supervising this work. Collections of objects previously had been housed at the Military Park, at the University of Arkansas Department of Anthropology, and at the National Park Service's Midwest Regional Office in Lincoln, Nebraska. The Pea Ridge park staff donated five metal storage cabinets, a map case, and a quantity of curatorial supplies to the Sponsored Research Program to accommodate the collections.

Brown Bluff Mitigation

Randall Guendling continued analyzing the site documentation and artifacts produced during two excavations conducted at the Brown Bluff Shelter by two separate organizations in the early 1990s. Listed on the National Register of Historic Places, Brown Bluff was endangered by the construction of I-540. The Arkansas Highway and Transportation Department contracted with SPEARS, Inc., and the Sponsored Research Program to conduct excavations at the shelter before it was damaged by road construction. Unfortunately, the supervising archeologists found other employment prior to completing analyses or final project reports. Both wrote summary reports for management purposes, but without

> editing the primary documentation for inconsistencies and missing information, or analyzing the records and artifacts.

A final, comprehensive report on the excavations at this important site is scheduled for completion in the new fiscal year. The report will include Jerry Hilliard's analysis of artifacts collected from Brown Bluff by the University of Arkansas Museum in 1932.

Ft. Smith National Historic Site Artifact Cataloging

At the request of the National Park Service, Kathleen Cande is directing a project to catalog and package nearly 44,000 artifacts from archeological excavations conducted in 1987 at Ft. Smith

National Historic Site. The excavations were done prior to construction of a paved pedestrian trail connecting the parking lot to the park visitor center and to the first fort site on Belle Pointe.

Data on the artifacts (both prehistoric and historic) are being entered into the NPS Automated National Catalog System. All project records, including field notes, photographs, excavation data, and analysis notes, have been indexed and scanned. The database will be provided to the Park Service on a CD-ROM, so that all the original records can be placed in secure storage.



NEW GRANTS AND CONTRACTS IN 2005-2006

Project No. & Name	Firm or Agency	Budget
06-04 Carroll County Electric 06-06 Pea Ridge NMP Curation 06-07 Brownlee Kitchen 06-08 Cane Creek Trail 06-09 Botanical Garden Testing 06-11 Springdale Sewer Phase II 06-13 Cross Hollow Dirt Mine	Allgeier, Martin & Associates National Park Service Historic Arkansas Museum Arkansas Dept. of Parks & Tourism City of Fayetteville McGoodwin, Williams & Yates Haz-Mert, Inc.	\$3,532.35 \$23,959.00 \$3,749.38 \$3,696.98 \$2,521.43 \$2,989.02 \$4,799.60 \$7,421.88
06-14 North Howard County Water 07-01 Old Davidsonville Year 3 07-02 Documenting Bluff Shelters	SW Arkansas Planning & Development District ANCRC ANCRC	\$7,431.88 \$111,500.00 \$82,450.00 \$246,629.64

* ANCRC = Arkansas Natural & Cultural Resources Council

SRP TITLES FOR 2005-2006

Cande, Kathleen H. (with a contribution by Jami J. Lockhart)

2005 Davidsonville: The Search for Arkansas' Oldest County Seat Town, Randolph County, Arkansas. Final Report, Project 04-07. Submitted to Arkansas Department of Parks and Tourism, Little Rock.

Cande, Kathleen H., and Jared S. Pebworth

2006 A Phase I Cultural Resources Survey of the Proposed Northwest Arkansas Regional Airport Intermodal Access Road Realignment 4A, Benton County, Arkansas. Final Report, Project 04-08. Submitted to Barnard Dunkelberg and Company, Tulsa, Oklahoma.

Guendling, Randall L.

- 2006 Phase I Metal Detector Survey of the Prairie Creek to Beaver 69K Transmission Line Right-of-Way at the Cross Hollows Site, 3BE649, Benton County, Arkansas. Final Report, Project 06-04. Submitted to Allgeier, Martin and Associates, Inc.
- 2006 A Cultural Resources Survey of Springdale North Side Phase II Sewer Facilities, Benton County, Arkansas. Final Report, Project 06-11. Submitted to McGoodwin, William and Yates.
- 2006 Archeological Survey of a Proposed Red Dirt Mine Area, Benton County, Arkansas. Final Report, Project 06-13. Submitted to Haz-Mert, Inc.

Mainfort, Robert C., Jr.

2006 Test Excavations at 3WA1124, City of Fayetteville and Botanical Garden Society of the Ozarks, Washington County, Arkansas. Final Report, Project 06-09. Submitted to the City of Fayetteville and the Botanical Garden Society of the Ozarks.

SRP PERSONNEL

- Robert C. Mainfort, Jr. (Ph.D., Michigan State University, 1977) joined the Survey in 1994 as SRP administrator. He also serves as Series Editor and Professor of Anthropology, University of Arkansas, Fayetteville. His research interests include mortuary studies, archeological systematics, historical archeology, and archeology and public education.
- Kathleen H. Cande (M.A., University of Arkansas, 1984) joined the Survey in 1987. Her research specializations include archeological textile analysis, archival research, 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 research specializations include historical archeology, Arkansas history, and prehistoric lithic analysis.
- Michael Evans and Jared Pebworth contribute varied skills to SRP, the coordinating office, and station research projects, including all phases of archeological fieldwork, survey and precision mapping, flotation, production of CAD and other computer graphics, artifact analysis, and conservation of metal artifacts.
- Lindi Holmes is SRP office manager and production editor of SRP reports.
- Aden Jenkins is a member of the Arkansas Archeological Society and veteran of the jointly sponsored Survey/ Society Training Programs. He is a skilled archeological field and laboratory technician.

SRP SERVICE ACTIVITIES

Academic Service and Activities

By agreement with the University of Arkansas System, Dr. Mainfort has a faculty title of Professor in the UAF Department of Anthropology, where he teaches one donated course per year. Service to the UA in 2005–2006:

- taught ANTH 4243, Archeology of the Midsouth, 6 students (Mainfort)
- taught two Independent Studies (Mainfort)
- chaired one graduate committee and served on four others (Mainfort)
- led tours of SRP Laboratory/Curation Room for UAF anthropology classes (Introduction to Archeology, two classes, 15 students each), Anthropology Department graduate students, and visiting Stigler lecturers (Cande)
- assisted Eric Proebsting, NWACC instructor, with type collection materials (Cande)

Professional Service and Activities

- Current Research-Arkansas editor for the Southeastern Archaeological Conference Newsletter (Cande)
- Current Research–Gulf States editor for the Society for Historical Archaeology Newsletter (Cande)
- prepared written peer review of a historic site excavation report for a private cultural resource management consulting firm (Cande)
- Editorial Board, Midcontinental Journal of Archaeology (Mainfort)
- National Historic Landmarks Committee, Society for American Archaeology (Mainfort)
- reviewed two manuscripts for *Southeastern Archaeology*, one each for *American Antiquity* and *Latin American Antiquity*, one book manuscript for a university press, and one National Science Foundation proposal (Mainfort)
- organized and co-chaired (with Mark Seeman of Kent State University) a workshop called "The Hopewell Space/Time Continuum" at the Boonshoft Museum of Discovery in Dayton, Ohio (Mainfort)
- Series Editor, Survey Publications Program (Mainfort)

Public Service and Outreach

- led tours of SRP Laboratory/Curation Room for State Parks personnel from Little Rock, Old Davidsonville, Parkin, and Devil's Den; Forest Service personnel; National Park Service staff; and other visitors (Cande)
- judge, Senior Behavioral Section, Northwest Arkansas Science Fair (Mainfort)
- consultant: Arkansas Department of Parks and Tourism (Cande)
- participated in Media Day at Old Davidsonville State Park (Cande)
- consultant: UA Collections Facility, Arkansas Department of Parks and Tourism, Department of Arkansas Heritage, the Quapaw Tribe's NAGPRA representative (Mainfort)
- represented the Survey at the annual Arkansas Teacher's Conference, Little Rock (Mainfort)
- guest curator for "Raiders of the Lost Arkansas," an exhibit on the legacy of Samuel C. Dellinger, at the Old State House Museum (Mainfort)
- member, Benton County Historical Preservation Commission (Evans)

Service to the Arkansas Archeological Society

• presented two talks to the Ko-ko-ci Chapter in Fayetteville (Cande, Mainfort & Kwas), and one to the CMWAS Chapter in Jonesboro combined audiences about 80 (Cande)

Volunteer Hours

• students and other volunteers contributed 195 hours to SRP projects in the field and laboratory

COMPUTER SERVICES AND ARCHEOGEOPHYSICAL RESEARCH

Jami J. Lockhart, CSP Coordinator and Director of Archeogeophysical Research Deborah Weddle, Information Technology Support and Internet Applications John Samuelsen, Research Assistant

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 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 AND RESEARCH

Computer Equipment & Support

Most of Deborah Weddle's time was devoted to computer systems security, end-user support, Web server administration, computer repairs and upgrades, and acquisition and deployment of equipment and software. These activities support the entire Survey organization—eleven research stations and the coordinating office.

The Survey purchased 21 new computers in 2005–2006. General Improvement Funds from the Arkansas Legislature in support of the Blytheville and HSU stations paid for six of these computers. Another three were purchased for the self-supporting Publications Program. Thirteen of the 21 machines were portable notebook computers for use in field data collection, and to use with digital projectors when presenting talks about archeology to the public.

The majority of the Survey's computers are between six and seven years old, but shortfalls in funding have prevented replacements. Most of the new computer-related equipment acquired over the last several years has been purchased with funds from various grants.

The Survey maintains a UNIX-based database server (available to authorized users) and a Microsoft Windows-based Web server hosting the "Rock Art in Arkansas" website and databases (<u>http://rockart.uark.edu</u>). A new Apache-based Web server capable of delivering more graphics-intensive applications was purchased with grant funds in spring 2005 and will replace the Windows server after the redesigned website is complete.

The Survey on the Web

The Survey's website (<u>www.uark.edu/campus-</u><u>resources/archinfo</u>) had 17,737 homepage visits in 2005–2006 (monthly average, 1478). The site provides information serving various audiences. There is a section on state laws that protect archeological resources, a catalog of Survey publications, news about excavations and projects, and instructions on how to contact our research stations to report sites or request information about archeology.

Also available is a downloadable Teacher Packet that contains various materials to help Arkansas teachers bring information about archeology, American Indians, and the early history of Euroamerican settlement in Arkansas into the classroom.

"Standards for Fieldwork and Report Writing" provides guidelines for private research firms and agency archeologists working in the state. Information about the annual Training Program tells how any interested citizen can participate in Arkansas archeology under the guidance of Survey professionals (see the Partners in Preservation chapter of this Annual Report).

The new "Crossroads of the Past" web portal eventually will integrate all our educational materials and several databases into one cohesive and easily accessible product.

Interactive Educational Websites

The CSP also maintains two interactive educational websites: *Rock Art in Arkansas* (rockart.uark.edu) and *First Encounters: Native Americans and Europeans in the Missispipi Valley* (www.uark.edu/depts/contact). *Rock Art* had 4265 homepage visits during the year (monthly average 355), and *First Encounters* had 12,627 homepage visits (monthly average 1053).

The *First Encounters* website is a product of Dr. George Sabo's NEH-funded project to develop a multimedia educational software package for classroom use at middle school through college level using primary historical documents to teach students about cross-cultural experience. The Survey distributed 2000 CD-ROMs to teachers across Arkansas, the U.S., and internationally, free-of-charge. Several modules are accessible on the website.

New Developments for Rock Art Website

Rock Art is a product of Arkansas Humanities Council and NEH funded projects (see the UAF station chapter in this Annual Report). Work continued to improve the Rock Art website as both an educational and a research instrument. Samuelsen, Weddle, and UAF station archeologist George Sabo III, along with the entire rock art research team, planned and began implementing a thorough redesign of the website, with all new content. Samuelsen created a new database for the content, and an online interface for the database.

Service Websites

The Archeological Parks in the U.S. website (<u>www.</u> <u>uark.edu/misc/aras</u>)had 8955 homepage visits (monthly average 746). We also host a service website for the South Central Historical Archaeological Conference (<u>www.uark.edu/campus-resources/archinfo/schac.html</u>).

CSP PERSONNEL

Jami J. Lockhart (M.A., Geography, University of Arkansas, 1988) is currently a doctoral candidate in the Environmental Dynamics program at UAF. His research specializations include integrated data management, GIS, archeogeophysics, 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 (B.A. in Anthropology & B.S. in Computer Science, University of Florida, 2004) is currently working on a master's degree in Anthropology at UAF. His specializations include web application development, database management, GIS, 3D visualizations, and southeastern archeology.

ARCHEOGEOPHYSICAL APPLICATIONS

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

Archeogeophysical Research Projects, 2005–2006:

- Old Davidsonville State Park, Randolph County, Arkansas
- the Eaker prehistoric archeological site, Blytheville, Arkansas
- site of the oldest known bridge in Arkansas (ca. 1830), Carroll County, Arkansas
- Historic Quapaw Cemetery, Quapaw Tribe of Oklahoma, Quapaw, Oklahoma
- Historic Drennen-Scott House, Van Buren, Arkansas

Academic Service & Activities

• demonstrations of digital data management and geophysical remote sensing for UA Department of Anthropology classes

Professional Service & Activities

- provided intensive training in geophysical remote sensing to visiting scholar Muwafaq Bataineh, Faculty of Archaeology and Anthropology, Yarmouk University, Irbid-Jordan
- demonstrated geophysical remote sensing of earthquake features at the New Madrid Seismic Zone for a documentary film produced by The History Channel
- consultation to National Guard Cultural Resource Manager Tammy Hilburn on digital data management and archeogeophysical remote sensing at Fort Chaffee and Camp Robinson
- geophysical and archeological data support to Ouachita National Forest

Public Service & Outreach

- directed archeogeophysical survey and mapping at the Eaker site, resulting in discovery of prehistoric structures and other features at the 2006 Training Program attended by 73 amateur archeologists from across Arkansas and the United States
- crime scene investigations, as requested by the Benton County Sheriff's Office and Siloam Springs Police Department



Magnetometry (Gradiometry) at the Eaker Site, South Area

Eaker Site Geophysical Survey. Magnetometry (gradiometry) is a technique that measures very small variations in the earth's magnetic properties. Although it changes over space and time, at any given moment and place, the earth has a consistent magnetic alignment. Soil that has been disturbed will show up as an "anomaly" in terms of magnetic alignment with the surrounding deposits. Importantly for archeology, materials that have been fired or burnt likewise have a measureably different magnetic alignment than their surroundings. Thus, hearths or burned structures—frequent features of archeological sites—can be identified below the surface with this technique. The illustration shows magnetic anomalies at the prehistoric Eaker site in Blytheville that reveal both archeological features, and cracks and "sand blows" caused by ancient earthquakes.

Quapaw Cemetery: Ground Penetrating Radar



Quapaw Cemetery Project. This project was undertaken at the request of the Quapaw Tribal Committee. The purpose of the survey was to map the cemetery by conventional methods and to investigate the possibility of unmarked graves using geophysical remote sensing technology.

Ground penetrating radar emits continuous pulses of radar energy into the ground that are then reflected back by buried features. Antennae determine the depth of signal penetration. The continuous pulses, combined with advanced processing software, provide potential for very high resolution data sets. The GPR imagery is processed as a series of maps. At the Quapaw Cemetery, many discrete anomalies similar to those associated with marked graves were observed, often in alignment. The results helped the Tribe determine that no large vacant areas remained at the Cemetery. The unmarked grave anomalies can be confirmed with simple subsurface testing, and markers placed for future caretaking.

CSP SERVICE ACTIVITIES

Student Support

- data sets, demonstrations, and training in digital applications and geophysical techniques for undergraduates, graduate students, and interns in the UAF Anthropology Department and the Environmental Dynamics Program
- supervision of UAF graduate students working on grant-funded projects, and student interns
- facility tours and demonstrations for UAF anthropology classes

Campus Service

• participant in the Information Technology Support Program of the UA Computing Services division

Public and Professional Service

- demonstrations of Survey computer facilities, resources, and current projects to K-12 students, visiting scholars, research professionals, and various agencies
- technical support, instruction, and graphics assistance for projects by several Arkansas Archeological Society members (Weddle)
- connectivity, training, and data access for users of the Survey's archeological databases representing numerous state and federal agencies (Weddle, Lockhart)
- learning opportunities for amateur archeologists during field research projects (Lockhart)
- various consultation, assistance, and digital data products for: Dr. Robert Brooks, Oklahoma State Archeologist; Dr. Charles McNutt, University of Memphis; Dr. Neal Lopinot, Center for Archaeological Research, Missouri State University
- archeogeophysical investigation of crime scenes for Benton County Sheriff's Office and Siloam Springs Police Department (Lockhart)

Internet Service

• maintenance of the South Central Historical Archeology Conference (SCHAC) website (Weddle)

OFFICE OF THE REGISTRAR

Lela Donat, Registrar Marian Kunetka, Assistant Registrar Crystal Masterson & Dusti Stephens Audrey Baker & Aaron Linglebach (students, part-time)

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 AND 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, and curating new archeological collections. Another major function of the office is public relations and assistance to researchers at all levels, including archeological contractors, state and federal agencies, University faculty, staff and students, the 11 Survey research stations, and others.

The AMASDA (Automated Management of Archeological Site Data in Arkansas) computerized database is a potent research tool with over 100 data fields that can be linked to various GIS programs. The staff work daily to keep this resource current. This year 1260 new sites were added, bringing the total for the state of Arkansas to 40,944. New information for 357 previously known sites was added. New archeological projects numbered 183, bringing the projects total to 5254. Finally, 18 archeological collections were accepted for curation.

Approximately 179 researchers visited the office. In addition, the office received over 540 requests for site information. These calls primarily came from the Arkansas Highway and Transportation Department; the State Historic Preservation Office; the Memphis, Little Rock, and Vicksburg Corps of Engineers; and the National Forests. Responses were by email, fax, phone, or post.

Teaching Service

The registrar's office participates in the UA Department of Anthropology's graduate level Archeology Internship by providing active learning opportunities in archeological site data management. Interns learn how

Site File Activity	-	
New Sites Recorded	1260	Total no. of sites in Arkansas site files: 40,944
New Data for Known Sites	357	site mest 10,711
Access to Site Records	179	
Collections Accessioned	18	Total no. of
New Projects Entered in AMASDA	183	projects in AMASDA: 5254

2005-06: Arkansas Archeological Survey

the Survey's computerized databases are constructed and used by working on ongoing projects. There was one intern this year, Amber Horne.

The registrar's office conducted guided tours of its facilities for students in the fall and spring semester "Approaches to Archeology" classes at UAF, and worked with numerous undergraduate and graduate students. The number of students using the site files for class projects has increased steadily due to growth in the Anthropology Department and Environmental Dynamics Program at UAF. The Survey registrar's office also employed two UAF students, one in the work-study program and one anthropology graduate student on hourly payroll.

Grants and Contracts

The registrar's office pursues outside funding to support several projects for upgrading and improving database delivery for various agency users. Total grant funds during 2005–2006 were \$215,969.

1.Scanning Site Forms

A multi-year grant awarded in 2001 by the Arkansas Highway and Transportation Department provided \$88,218 to scan digital images of all paper site forms and add them to the main site database. This will allow convenient online access to the full range of information on known sites without the need to visit the Survey coordinating office—a big savings in time and expense for major agency users of the site files such as AHTD.

Work-study student Aaron Linglebach, plus Dusti Stephens and Amber Horne worked on the project. As of May 2006, site records for all 75 counties had been scanned, copied to CD-ROMs, and transferred to the SUN server as tif files. But since new site records are added daily, the project is never "finished." This grant was extended through May 2007.

2. NAGPRA for NPS

With a \$74,709 grant from the National Park Service, awarded summer 2004, the registrar's office conducted a study to determine the cultural affiliation and ultimate disposition of artifacts collected by the former UA Museum and now under the control of the University of Arkansas Collections Facility. This activity supports the University's compliance with the federal Native American Graves Protection and Repatriation Act. The grant covers 525 of the 1571 pottery vessels requiring documentation. Most of the vessels have been documented. Target date for completion is September 30, 2006. Additional grants will be sought for the remaining vessels.

3. Mack-Blackwell Transportation Center

UAF station archeologist George Sabo and registrar Lela Donat co-directed the "Cost Efficient Management Tools for Assessing Cultural Resources" project with \$53,042 awarded in 2002. The final report was submitted March 2006. Under this grant, several databases were consolidated within a single integrated web application that permits users such as the Arkansas Highway and Transportation Department efficient access to a wealth of information about archeological sites.

In the final year, graduate assistant John Samuelsen converted the access file of the Radiocarbon database to the web application. Crystal Masterson kept the Citation database current and learned to record Project information in AMASDA.

Dr. and Mrs. Charles R. McGimsey again volunteered their time and expertise to compile the photographic documents database, which will be incorporated in this project. The McGimseys have provided identifying captions for slides and photographs. This year they contributed 800 hours, finishing slides dated through 2005. Ms. Kathy Alsobrook worked on the CO slides database from 1993, entering data into the computer.

4. Camp Robinson and Fort Chaffee

A Department of Defense grant to scan and update information on archeological sites within the Camp Robinson and Fort Chaffee areas allowed purchase of a new scanner. The final report was submitted January 2006.

5. Vicksburg Curation

At the end of the fiscal year, the registrar submitted a proposal for curation of artifacts from sites controlled by the Vicksburg Corps of Engineers. The proposal was approved and will allow upgrades of substandard storage containers for the older collections.



Fifth graders visiting the registrar's office during a tour of the Archeological Survey ask questions about old coins or arrowheads they may have found, and learn how an archeologist would go about cataloging the items.

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 several 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 in 1994 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.

Crystal Masterson (M.A., University of Arkansas, 2005) has worked part-time in the registrar's office since 2003. She earned her Master's degree in Geography with a specialization in cartography, GIS, and remote sensing. She has archeological field and lab experience in Louisiana, Mississippi, Alabama, Texas, Arkansas, and Belize.

Dusti Stephens (B.A., University of Arkansas, 2006) worked in the registrar's office while completing her degree in Anthropology at UAF.

SERVICE ACTIVITIES: THE REGISTRAR PROVIDED ASSISTANCE TO THE FOLLOWING GROUPS OR AGENCIES DURING 2005–2006

Federal

Buffalo National River, Harrison, Arkansas Bureau of Land Management, Jackson, Mississippi Corps of Engineers – Memphis, Little Rock, and Vicksburg Districts U.S. Army Garrisons, Fort Chafee, Camp Robinson National Park Service

- Department of Consulting Archeologist, Washington, D.C.
- Fort Smith Museum
- Hot Springs National Park
- Midwest Archeological Center, Lincoln, Nebraska
- Southeast Regional, Atlanta, Georgia
- National Park Service, Tallahassee, Florida
- National NAGPRA Program, Washington, D.C.
- Natural Resources Conservation Service, Little Rock, Arkansas

U.S. Fish & Wildlife, Savanna, Georgia

State

Arkansas Highway & Transportation Department Arkansas History Commission Arkansas Historic Preservation Program Old State House Museum Arkansas Department of Parks & Tourism – State Parks Office

American Indian Tribes

The Quapaw Tribe of Oklahoma (NAGPRA representative – Fayetteville, Arkansas) The Caddo Tribe – Binger, Oklahoma The Osage Tribe – Pawhuska, Oklahoma

Private Firms

Approximately 28 archeological consulting firms doing Section 106 compliance work within Arkansas contacted or visited the office

Tours: Visitors to the Survey who toured the Registrar's Office in 2005-06

UAF "Approaches to Archeology" classes, Fall and Spring semesters ElderHostel, led by Gloria Young State Parks personnel (Old Davidsonville, Village Creek) American Indian Tribal representatives (Choctaws Cheryl Smith and Christine Nuegent of Louisiana, and a group of 13 Quapaws with Carrie Wilson of Fayetteville) Tammy Hilburn, Arkansas National Guard, Camp Robinson Rogers Middle School (East Side) 5th grade Tulsa District Corps of Engineers staff Arkansas Post staff person Mullins Library faculty & staff, UAF Pea Ridge Military Park interns, 8 students Visiting scholars: Stigler lecturers Dr. Kathryn Klar (UC Berkeley) & Dr. Terry Jones (CA Polytechnic State); Maria Zedeno (University of Arizona)

EDUCATION SPECIALIST

Mary L. Kwas, Research Associate

The Arkansas Archeological Survey has been a leader in public education—in the state, nationally, and worldwide—since its inception. To make this effort more effective, a position was dedicated in 1999, and Mary L. Kwas was appointed education specialist. Kwas manages the state's Archeology Month, develops educational and interpretive materials, 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 serves as liaison with the Public Education Committee of the Society for American Archaeology, and works closely with the Arkansas Archeological Society.

NEWS AND RESEARCH

Old Washington State Park Manuscripts

Last year Kwas completed a two-year project, funded by a grant from the Arkansas Natural and Cultural Resources Council, to produce a manuscript for a popular publication on the Survey's 20 years of archeological work at Old Washington Historic State Park. During 2005–2006 she sought publishers for the book and spinoff academic articles. Ultimately she submitted the book manuscript to the UA Press, where it was accepted for publication. One of the academic articles was accepted by *Arkansas Historical Quarterly*. The second is still undergoing review.

Encyclopedia of Arkansas History & Culture

Kwas coordinated all the Survey's 40 or so contributions to the online *Arkansas Encyclopedia* project, which duties largely concluded this year. She reviewed an entry on Devil's Den, assisted retired ASU station archeologist Dan Morse move his article on King Crowley through the system, and coauthored an entry on Historical Archeology with ATU station archeologist Skip Stewart-Abernathy (published online this year). Kwas also wrote and submitted for review an article on William E. Woodruff for the *Encyclopedia*.

Old State House Museum 175th Anniversary Publication

The Old State House Museum will celebrate the 175th Anniversary of Arkansas' original capitol building in 2008. In honor of the event, Kwas proposed a popular publication that could be sold in the museum giftshop. Museum Director Bill Gatewood liked the idea, so Kwas began a revision of her earlier research on the history of the Old State House. The Museum will publish this book.

Arkansas Historical Quarterly Special Issue on Historical Archeology

Kwas proposed to Patrick Williams, editor of Arkansas Historical Quarterly, the possibility of a special issue on historical archeology in Arkansas. Williams agreed and approved the titles and abstracts of eight papers. Kwas will write the overview article and serve as guest editor of the special issue.

Arkansas Archeology Month

A major effort throughout the year is coordination of the state's Archeology Month, a diverse celebration of archeology and its contribution to knowledge and enjoyment of Arkansas' past. Kwas works with the Society Executive Committee each year to determine a theme and prepares and sends advance notices with ideas for programs. Museums, libraries, parks, state agencies, the Arkansas Archeological Society chapters, Survey archeologists, and others plan their own activities, programs and exhibits related to archeology. Kwas compiles and edits all submissions into an Events Brochure that is distributed around the state. She keeps the Archeology Month pages updated on the Survey's website, and supervises mailing of the Brochure and press releases.

The theme of Archeology Month in March 2006 was "Traders & Merchants." The 30 programs at 22 venues included seven at museums and seven at state parks. Arkansas State Parks co-sponsored the poster this year which featured artifacts from Old Davidsonville. A summary article is on the Survey's website at <<u>www.uark.</u> <u>edu/campus-resources/archinfo/archmonth2006.html></u>.

Arkansas Archeological Society

Another of Kwas' major roles is co-coordinator, along with the Survey's Barbara Scott, of the Annual Meet-



Mary Kwas (left) leads a tour at Old Washington Historic State Park for participants in a State Parks-sponsored "Basic Skills in Interpretation" workshop to earn Certified Interpretive Guide status. Kwas led the students on an informal walk around the town, discussing how archeological research can be effectively interpreted for park visitors.

ing of the Arkansas Archeological Society. Since 2003, Kwas also has served as Program Chair. The entire effort involves several stages of work at different times of the years, and most intensively in the July through September period for the late September meeting. In 2005 there were problems when the original meeting location had to be changed at short notice. The meeting ultimately was cancelled due to Hurricane Rita.

Society for American Archaeology Public Education Committee

Kwas serves as editor of the SAA's Public Education Committee's electronic *Archaeology & Public Education* newsletter, which is in the process of transitioning to "current news" pages within the PEC's new website. Kwas also is Arkansas' representative for the Network of State and Provincial Archaeology Education Coordinators. She is active in developing the PEC website and in Heritage Tourism work group projects, and is a member of the SAA Excellence in Public Education Award Committee.

Dellinger Exhibit

Kwas was asked to serve on the exhibit review committee for "Sam Dellinger & Raiders of the Lost Arkansas," an exhibit developed by the Old State House Museum in Little Rock on the life and work of the first person to organize a program of archeological research in Arkansas. The committee edited and rewrote exhibit panels, and prepared press releases and articles. The exhibit opened on April 7 with a reception attended by 190 people.

SERVICE ACTIVITIES

Mary L. Kwas (M.S., University of Wisconsin-Milwaukee, 1980) has over 25 years' experience in public education and archeology. Before joining the Survey in 1996, she worked as 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. Her research interests include historical archeology and archeological parks.

Service to the Arkansas Archeological Society

- editor of northwest Arkansas Ko-ko-ci Chapter newsletter, and publicist for Chapter events
- co-manager (with the Survey's administrative assistant Barbara Scott) of the Society's annual meeting
- Program Chair for the annual meeting
- coordinator of Archeology Month
- contributor to the Society website
- contributor and proofreader for *Field Notes*, the Society newsletter
- presented program to the Ko-ko-ci Chapter, audience of 20

Professional Service and Activities

- Chair, Southeastern Archaeological Conference, Public Outreach Grant Committee
- member and newsletter editor, Society for American Archaeology, Public Education Committee
- member, Society for American Archaeology, Excellence in Public Education Award Committee

Service to Arkansas Public Schools

- Lead Judge, Behavioral/Social Science junior division, Northwest Arkansas Science Fair
- contributor to the newsletter of the Arkansas Museums Association and the Department of Parks and Tourism's *Interpretation News*
- table displays of teaching resources, Arkansas Conference on Teaching, Little Rock, attendance 1000+
- presented two "Trash Box Archeology" workshops, Arkansas Conference on Teaching, Little Rock, combined attendance 32
- presented "Trash Box Archeology" workshop for representatives of 12 Centers for Math and Science Education, UAF campus, attendance 13
- presented six sessions of "Trash Box Archeology" for teachers at University Days, UAF campus, combined attendance 64
- led a tour of the Survey for Rogers Eastside Middle School students, attendance 100+

Other Outreach Service

- Review Committee, Samuel C. Dellinger Exhibit, Old State House Museum, Little Rock
- presentation and tour for participants in a State Parks Interpretive Workshop at Old Washington State Park, attendance 25
- assisted Kathleen Cande in organizing a meeting for State Parks administrators at the Survey to discuss future research at Old Davidsonville and Old Washington

THE PUBLICATIONS PROGRAM

Robert C. Mainfort, Jr., Series Editor Mary Lynn Kennedy, Editor Lindi Holmes, Research Reports Editor & Reprints Deborah Sabo, Popular Series Editor Mary Worton, Accounting, Sales & Distribution

The Survey's Publications Program consists of four series. The Research Series, Research Reports, 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 for the Research and Popular Series. Staff of the Publications Program are part-time employees, or full-time employees with additional responsibilities in other capacities at the Survey. The Publications Program generates its own revenue and is self supporting.

NEW PUBLICATIONS

Rock Art in Arkansas, edited by UAF station archeologist George Sabo III and Deborah Sabo, was published in 2005 as Popular Series No. 5. This first comprehensive treatment of Arkansas' important body of prehistoric rock art is suitable for general readers and students as well as specialists. The book is the culmination of George Sabo's Arkansas Humanities Council-funded project to compile a database of Arkansas rock art sites, create educational resources, and begin a systematic program of rock art research in the state.

Also published in 2005 was Research Reports No. 32, *Ceramic Variability within the Parkin Phase: A Whole Vessel Metric Analysis from Northeast Arkansas*, by Teresa Lynn Brown. The volume is a revision of Ms. Brown's Master's thesis, which used collections from four Late Mississippian period sites curated by the University of Arkansas Museum.

Slated for late Fall 2006 is Research Series No. 63, *Two Historic Cemeteries in Crawford County, Arkansas*, edited by Robert C. Mainfort, Jr. and James Davidson. This volume sets new standards of reporting for historic cemeteries. The authors present detailed descriptions and analysis from a socioeconomic perspective of two cemeteries which had to be moved prior to expansion of Lake Fort Smith. The book comes at a time when preservation of historic cemeteries is a major issue for many communities in Arkansas.

REPRINTS AND OTHER PRODUCTS

Research Series No. 44, *Standards for Data Collection from Human Skeletal Remains*, went into its seventh printing and continues to be widely used in university classrooms around the country. The spiral-bound manual sets guidelines for quantitative and qualitative data recording, especially in time-constrained settings.

Also being reprinted was Research Series No. 9, *Prehistoric Plies*, by Sandra Scholtz, one of our most enduring titles. This classic study of plant fiber artifacts excavated in the 1930s from dry rock shelters in northwest Arkansas is a favorite with audiences as wide-ranging as museum curators and textile specialists, fiber artists, and modern basketmakers.

SALES AND DISTRIBUTION

Publication sales were down over the previous fiscal year (in part because the Survey did not exhibit at the annual meeting of the Society for American Archaeology), but nonetheless netted \$21,787.72 in gross profits. Demand for *Standards* and the *Soils Handbook* (TP 11) continued to be high.

Survey archeologists sold books at the annual meetings of the Southeastern Archaeological Conference, the Caddo Conference, and the Arkansas Archeological Society, and also at the Arkansas Archeological Survey/Society Training Program.

	Research Series	Research Reports	Popular Series	Technical Papers	Total
No. of Titles	62	32	5	11	110
Sold	1162	44	347	183	1736
Free	21	112	211	3	347
Total	1183	156	558	186	2083

Publication Sales and Distribution for 2005–2006

SURVEY BOOKS GET GOOD REVIEWS

CRM on CRM (Research Series No. 61) was included in a "Heritage Matters" section of New Books reviewed by Madeleine Hummler in the British journal *Antiquity* (volume 79, 2005, pp. 984–991). In Hummler's assessment, given dominant political environments favoring corporate interests and development, the book becomes more than simple retrospective, but "gives insights into how this field [cultural resource management] has developed or may develop in a deregulated world."

CRM was also reviewed in *The Public Historian* (Vol. 27, No. 4, 2005, pp. 134–135) by Robert M. Yohe II, who praised the volume as an excellent text for courses on cultural resource management by one of the "founding fathers" of public archeology. As a compendium and reference work, organization is particularly important, and Yohe singles out this feature as particularly useful (long-time Survey Editor Mary Lynn Kennedy deserves credit here).

NEW DEVELOPMENTS FOR THE PROGRAM

Mary Lynn Kennedy, Survey Editor for over 20 years, retired at the end of 2005–2006. Ms. Kennedy's efforts did much to improve the program and to broaden the audience for Survey publications.

During the year, Mainfort proposed to merge Research Reports and Research Series, effective July 2006. This means that all Survey publications will undergo the same review process and receive the same care in printing and binding.

STAFF ACTIVITIES

- Series Editor **Robert Mainfort** solicited manuscripts and worked with several authors whose books are in various stages of production. Special efforts will be made in the next fiscal year to expedite publication of several older manuscripts.
- **Mary Lynn Kennedy** edited digital copies of older publications. **Lindi Holmes** completed layout of Research Report 32 (published 2005) and Research Series 63 (Fall 2006). She also prepared edited digital copies of the following publications: Research Series 1, 2, 3, 6, 7, 9, 15, 20, 25, 31, 37 and Research Reports 1, 10, and 20. Ms. Holmes will serve as production editor for the revamped Research Series.
- **Deborah Sabo** completed the *Annual Report for 2004–2005* and Popular Series 5, *Rock Art in Arkansas* (published 2005). She also worked on reprints for TP 10 (Caddo Bibliography) and RS9 (Prehistoric Plies), and created the Publications Catalog.
- Mary Worton effectively managed publication sales, distribution, and accounting for the program.
- The Survey's publications committee—Mary Beth Trubitt (chair), Jamie Brandon, Julie Markin, Mary Kwas, and George Sabo—worked with Mainfort regarding several issues, including the merger of Research Reports and Research Series, and monograph design and production. The Publications Program greatly appreciates the efforts of the committee.

PHOTOGRAPHIC AND GRAPHIC ARTS SUPPORT

M. Jane Kellett, Graphic Artist

Photographic and graphic arts support at the Survey incorporates 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 SRP, 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, SRP contract reports, and staff publications in professional journals and books. She does layout and graphics for a variety of outreach materials produced by the Survey.

2005-2006 ACTIVITIES

- 50 rolls of black-and-white film and 200 negatives processed and catalogued
- 1000 image scans from negative film, color slides, digital images, and prints for research, teaching aids, Survey publications and reprints, Arkansas Archeological Society and professional society newsletters, SRP contract reports, journal articles, books and book chapters, outreach materials, NAGPRA, museum exhibits, and National Register nominations
- 350 slides duplicated for use in public presentations, collections records, NAGPRA requirements, and the historic cemetery project
- 10 graphic works (maps, graphs, designs for presentations, educational flyers, and publications)
- 60 photographic plates for National Register nominations, research projects, publications, and various museum requests
- ◆ 500 items photographed: pottery vessels, other artifacts, and tooth specimens for NAGPRA grant requirements; Brown Bluff, Van Winkle, Spradley Hollow, Toltec, SRP contracts, and other projects

M. Jane Kellett joined the Survey in 1977 while 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, Russellville Kadohadacho Chapter, Magnolia Tunican Chapter, Monticello Ko-ko-ci Chapter, Fayetteville Ouachita Chapter, Hot Springs Central Mississippi Valley Chapter, Jonesboro NEW IN 2005–2006: Ark-Homa Chapter, Fort Smith Toltec Chapter, Little Rock

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' past, and to present that knowledge to the public. The Society elects a Board of Advisors who conduct yearly evaluations 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 best 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 membership is around 500. Active chapters across the state work closely with the Survey research archeologists in their areas. The new Ark-Homa Chapter established in 2005 is supported by the Survey's new research station at the University of Arkansas Fort Smith, and is a joint chapter of the Arkansas Archeological Society and the Oklahoma Anthropological Society. Also new for 2006 is the Toltec Chapter in the Little Rock/North Little Rock area, supported by the Toltec Mounds research station.

Chapters have monthly meetings during the academic year, normally with a guest speaker or other program. Visitors are always welcome. Survey archeologists frequently present the program at the monthly meetings. Some also serve as chapter officers, newsletter editors, and program chairpersons to arrange for guest speakers. Survey stations also host volunteer work sessions in the laboratories, and Society members participate in station field and lab projects throughout the year.

Archeological Research Fund

The Society began awarding grants from its Archeological Research Fund (ARF) 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. There were no requests for ARF grants in 2005–2006.

Archeology Month 2006

The theme of Arkansas Archeology Month for March 2006 was "Merchants and Traders." Thirty programs were scheduled at 23 venues, including seven museums, seven state parks, several of the research stations, and other locations such as libraries and college campuses.

Survey archeologists were directly involved in at least 15 of the scheduled programs. The Survey education specialist Mary Kwas produced the Events Brochure, which was available as a printed pamphlet and on the Internet.

Hurricane Rita Defeats the Annual Meeting

The 2005 annual meeting suffered an unusual fate. Originally scheduled for September 23–25 at the Ozark Folk Center State Park in Mountain View, the venue had to be changed in July when organizer Janice Dent discovered that the meeting had accidently been deleted from the Park's computer system. Arrangements were quickly shifted for the Reynolds Center on the SAU campus in Magnolia, Arkansas. Just three weeks before the meeting, Hurricane Katrina devastated New Orleans, and evacuees poured into southeast Arkansas. Still, three weeks seemed enough time to get everyone settled, so plans continued. Then, on the day before the meeting, Hurricane Rita bore down on the Gulf Coast, sending heavy storms up the Arkansas/Oklahoma state line and straight toward Magnolia. With power outages, heavy evacuee traffic, dangerous travel conditions, and local accommodation needed for displaced families, the Society's annual meeting for 2005 was officially cancelled on September 22 at 1:30 p.m.

Society Publications

Hester Davis (Emerita State Archeologist) continued as editor of the Society's newsletter, *Field Notes*, which is published six times a year. Mary Kwas served as proofreader. Survey staff contribute many articles and features to the newsletter every year. The Society also publishes a peer-reviewed annual Bulletin, *The Arkansas Archeologist*, edited by Glen Akridge. Volume 44 appeared in 2005, with all three articles authored or coauthored by Survey archeologists. The Survey provides office space and computer support for producing Society publications.

Society Volunteers

Many Survey station projects in the field and laboratory depend on volunteers, mostly Society members. Over 11,112 hours were contributed by volunteers to archeological projects around the state in 2005–2006. These projects included (among others): excavations at the Eaker site, a Mississippian village on Pemiscott Bayou; Beaver Lake shoreline surveys; excavations on the grounds of the historic Drennen-Scott House in Van Buren; salvage excavations at a Caddo mound site in Clark County; ongoing work at Wallace Bottom (the original Arkansas Post); and many other projects.

The Site Stewards Program

Another role for Society volunteers is the Site Stewards Program, which enlists individuals to monitor important archeological sites. Stewards visit their assigned site(s) and report on their condition. Stewardship is conducted in cooperation with landowners. Stewards visit with interested landowners and tenants to discuss ways to protect the sites. The Survey provides training for potential stewards. State Archeologist Ann Early teaches a day-long Stewards workshop for interested members during the summer Training Program.



ASU station archeologist Julie Morrow (seated at right) teaches the Faunal Analysis Seminar to Society participants at the 2006 Training Program (Photo by Barbara Scott).

"SOCIETY DIG": THE TRAINING AND 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 various criteria, including ongoing research interests at the Survey stations, educational potential, and logistical needs. Survey staff spend weeks in preparation. Field and laboratory work are supervised by Survey staff, other professionals, and qualified Society amateurs. Survey archeologists 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 Certification in several categories. The Survey stations devote years afterward to analyzing the material collected, often with help from Society volunteers. Training Program participants must be members of the Arkansas Archeological Society. All ages are welcome, but children under 16 must be accompanied by an adult participant.

THE 2006 TRAINING PROGRAM AT THE EAKER SITE

Fieldwork

The 2006 Training Program took place at the Mississippian-era Eaker site in Blytheville in Mississippi County. Dr. Claudine Payne directed the program, assisted by Marion Haynes. Other Survey archeologists and experienced Society members acted as field supervisors. There were 73 registered participants.

In this third, and final, Training Program planned for Eaker, the goal was to finish excavation units begun the year before, continue examining the houses uncovered previously, and resume our search for fortifications around the presumed town.

The best tool for identifying fortifications, if they exist, is remote sensing or geophysical investigation. Jami Lockhart, who has directed geophysical research at the site for three years, returned in the spring. He and his team examined 6000 square meters in two locales on the western side of the site. One of these areas revealed some linear anomalies which hinted at possible earthworks or palisade. We called this Area J.

After removing the plow zone from two 1-meter wide trenches crossing the linear anomalies in Area J, we identified the anomalies seen in the remote sensing and placed excavation units in them. Participants in the Training Program's two Basic Excavation seminars excavated several units. Much to our disappointment, neither anomaly turned out to be fortifications. One was a large earthquake effect and the other was a chance alignment of cultural features that had been impacted by earthquakes. Nonetheless, the excavations provided valuable information about occupation at the western side of the site.

Further efforts to find out about the perimeter of the site included shovel tests (small excavation units) along the southern and western sides of the site. The shovel testing team braved the thick summer vegetation to dig 30 shovel tests at 20 meter intervals. These units, combined with previous excavations and remote sensing on the northern and eastern sides of the site, will give us more detail about activities at the edges of the site.

We finished excavations in Area G which were begun the previous year. These excavations revealed the corner of a house and provided data on the domestic life of Eaker site inhabitants.

We set out to complete excavations in a house in Area F and also to open an additional unit. We had already encountered two occupation levels in Area F, and the 2006 excavations revealed a third. Because of the three distinct layers in Area F, this part of the excavation provides important details of the site's chronology.

We continued excavations in Area D, which we knew from the previous two years to be the location of at least two sequential houses. Altogether we have opened 10 excavation units in Area D. Radiocarbon dates and artifacts from this area point to an occupation date around A.D. 1250 to 1300, much earlier than most Mississippian sites in the Blytheville area. Our excavation extended across 6 meters, allowing us to see lines of postholes representing walls, along with wall plaster, burned structural logs, hearths, and even a mass of cane thatch from a burned roof. Artifacts from Area D tell us that the residents were fishing, making pottery, and even trading for goods from locations as far away as southern Illinois.

With the indispensable help of the Training Program participants over the course of the last three years, we have been able to examine the Eaker site in close detail. Volunteers helped excavate 38 units covering 131 square meters along with an additional 30 shovel tests. They carried out controlled surface collection over 3900 square meters in the northern part of the site. The remote sensing team covered the most ground, doing geophysical investigations of 22,400 square meters (more than 5 acres) and providing us with a picture of a site with houses and cultural features scattered across an area of about 9 hectares (more than 20 acres). The next few years will be devoted to analysis of the artifacts recovered and to writing up the results of the investigations.

Seminars

Classroom instruction at the Training Program consists of five-day seminars that meet four hours each day. the Basic Excavation seminar also requires four hours per day in the field. Eight Survey archeologists taught seminars at the 2006 Training Program: Tom Green and Julie Markin (Basic Excavation); David Jeane (Basic Laboratory); Mary Beth Trubitt (Lithics); Tim Mulvihill (Mapping); Julie Morrow (Faunal Analysis); Marvin Jeter (Arkansas Archeology); and Robert Scott (Site Survey).

Skip Stewart-Abernathy, Larry Porter, Jeff Mitchem,

and Matt Reynolds worked as Field Supervisors. Qualified Society members also supervised fieldwork. Julie Markin, Mary Farmer, Mary Beth Trubitt, Matt Reynolds, and David Jeane helped with fieldwork. Barbara Scott was Office Manager. Tom Green taught the Long Orientation session required for first-timers. State Archeologist Ann Early taught a Stewards Workshop. Forest Service archeologist Smoke Pfeiffer managed the lab. Claudine Payne, project director, and Marion Haynes presented evening lectures. Larry Porter designed the Training Program t-shirt.

Certification Program

Jerry Hilliard, UAF station associate, manages the Society's database for the Training and Certification Program. There are about 60 active participants in the Certification Program at this time. Sixteen Program Certificates were awarded in 2005. Hilliard taught two of the required seminars—"Human Osteology" and "Establishing Time in Archeology"—as Independent Studies for one participant in the Certification Program.



Society members, fully absorbed in their work, during Training Program excavations at the Eaker site. (Photo by Jeff Mitchem.)

APPENDIX 1. REPORTS AND PUBLICATIONS BY SURVEY STAFF DURING 2005-2006

Applegate, Darlene, and Robert C. Mainfort, Jr. (editors)

2005 Woodland Period Systematics in the Middle Ohio Valley. University of Alabama Press, Tuscaloosa.

Hilliard, Jerry E.

- 2005 Rock Art at The Narrows. In *Rock Art in Arkansas*, edited by George Sabo III and Deborah Sabo, pp. 81–93. Arkansas Archeological Survey Popular Series 5. Fayetteville.
- Hilliard, Jerry E., George Sabo III, and Deborah Sabo
- 2005 Rock Art in the Cultural Landscape. In *Rock Art in Arkansas*, edited by George Sabo III and Deborah Sabo, pp. 44–58. Arkansas Archeological Survey Popular Series 5. Fayetteville.

House, John H.

2005 "Edwin S. Curtiss." In The Encyclopedia of Arkansas History & Culture. http://encyclopediaofarkansas.net/

House, John H., and Jami J. Lockhart

2005 "Cooperation Then and Now." Archeological Investigations at the Wallace Bottom Site, White River National Wildlife Refuge, Arkansas: 2003 Season. Submitted to the Quapaw Tribe of Oklahoma and U.S. Fish and Wildlife Service, Southeast Regional Archeologist's Office, by the Arkansas Archeological Survey.

Kwas, Mary L., and Leslie C. Stewart-Abernathy

- 2006 "Historical Archaeology." In *The Encyclopedia of Arkansas History & Culture*. <u>http://encyclopediaofarkansas.</u> <u>net/</u>
- Lafferty, Robert H., Leslie Stewart-Abernathy, Michael C. Sierzchula, and Robert F. Cande
- 2005 National Register of Historic Places Assessment of 3PP449. Mid-Continental Research Associates, Inc., Lowell, Arkansas.

Lockhart, Jami J., and Michael Evans

- 2006 Quapaw Cemetery Geophysical Survey February 27–March 2, 2006. Report submitted to The Quapaw Tribe of Oklahoma. Arkansas Archeological Survey, Fayetteville.
- Lockhart, Jami J., and Thomas J. Green
- 2006 The Current and Potential Role of Geophysics in Cultural Resource Management. In *Remote Sensing in Archaeology: An Explicitly North American Perspective*, edited by Jay K. Johnson, pp. 17–32. University of Alabama Press, Tuscaloosa.

Mainfort, Robert C., Jr.

- 2005 Some Comments on Woodland Taxonomy in the Middle Ohio Valley. In *Woodland Period Systematics in the Middle Ohio Valley*, edited by Darlene Applegate and Robert C. Mainfort, Jr., pp. 221–230. University of Alabama Press, Tuscaloosa.
- 2005 A k-means Analysis of Late Period Ceramic Variation in the Central Mississippi Valley. *Southeastern Archaeology* 24(1):59–69.
- 2005 Architecture at Upper Nodena: Structures Excavated by Dr. James K. Hampson. *The Arkansas Archeologist* 44:21–30.

McGimsey, Charles R., III

- 2006 Common Sense for Archaeologists: Archaeology in the 21st Century. *The SAA Archaeological Record* 6(3):20–21.
- 2006 Selections from *CRM on CRM, One Person's Perspective on the Birth and Early Development of Cultural Resource Management.* Privately printed for distribution to officers of the SAA, SHA, RPA, AIA, and the AD of the AAA. November, 23 pages.

Note: Survey staff members' names are shown in boldface for titles coauthored with non-Survey colleagues.

2006 Moore's Vision. Letter to the Editor. The SAA Archaeological Record 6(4):4.

Morrow, Juliet

2006 The Anzick Clovis Burial. Central States Archaeological Journal 53(1):27-32.

- 2006 "Dalton Period." In The Encyclopedia of Arkansas History & Culture. http://encyclopediaofarkansas.net/
- 2006 "Paleoindian Period." In The Encyclopedia of Arkansas History & Culture. http://encyclopediaofarkansas.net/

Morrow, Juliet E., and Brad Koldehoff

- 2005 Gainey Phase Tools from the Taylor No. 2 Site (11EF129), Effingham County, Illinois. *Current Research in the Pleistocene* 22:57–60.
- Morrow, Juliet E., Robert A. Taylor, Robert J. Speakman, and Michael D. Glascock
- 2005 Neutron Activation Analysis of Late Mississippian Period Pottery from the Greenbrier Site (3IN1), Independence County, Arkansas. *The Arkansas Archeologist* 44:1–19.

Mitchem, Jeffrey M.

2006 A Flawed Genius of Florida Archaeology. Review of *The Florida Journals of Frank Hamilton Cushing* and *The Lost Florida Manuscript of Frank Hamilton Cushing*, edited by Phyllis E. Kolianos and Brent R. Weisman. H-Florida, H-Net Reviews. Online at <u>http://www.h-net.msu.edu/reviews/showrev.cgi?path=127491144862927</u>.

Payne, Claudine

- 2005 What We Accomplished in June at the Eaker Site. *Field Notes, Newsletter of the Arkansas Archeological Society* 326:9.
- 2005 Investigations at the Eaker Site, 2005: Preliminary Report. Report submitted to Arkansas State Historic Preservation Office, Little Rock.
- 2006 One More Season at Eaker. Field Notes, Newsletter of the Arkansas Archeological Society 329:7–9.
- 2006 Three Radiocarbon Dates from the Eaker Site. *Field Notes, Newsletter of the Arkansas Archeological Society* 329:9–10.
- 2006 "Mississippian Period." In *The Encyclopedia of Arkansas History & Culture*. <u>http://encyclopediaofarkansas.net/</u>
- 2006 The Foundations of Leadership in Mississippian Chiefdoms: Perspectives from Lake Jackson and Upper Nodena. In *Leadership and Polity in Mississippian Society*, edited by Brian M. Butler and Paul D. Welch, pp. 91–111. Occasional Paper No. 33 of the Center for Archaeological Investigations, Southern Illinois University at Carbondale.
- Payne, Claudine, and Jami Lockhart
- 2005 Archeological and Geophysical Investigations at the Tinsley 1 Site, Mississippi County, Arkansas. *The Arkansas Archeologist* 44:31–64.
- Sabo, George III, and Deborah Sabo (editors)
- 2005 Rock Art in Arkansas. Arkansas Archeological Survey Popular Series 5. Fayetteville.
- Sabo, George III, and Jerry E. Hilliard
- 2005 The History of Rock Art Research in Arkansas. In *Rock Art in Arkansas*, edited by George Sabo III and Deborah Sabo, pp. 16–34. Arkansas Archeological Survey Popular Series 5. Fayetteville.

Scott, Robert J.

2006 A Cultural Resources Survey of the Proposed Cane Creek State Park Trail, Lincoln County, Arkansas (Final Report). Submitted to Department of Parks and Tourism, Little Rock, Arkansas.

Sabo, George III

- 2006 "Native Americans." In The Encyclopedia of Arkansas History & Culture. http://encyclopediaofarkansas.net/
- Sabo, George III, Lela Donat, Crystal Masterson, and John Samuelsen
- 2006 Cost Efficient Tools for Assessing Cultural Resources (Project US/DOT/NRTSC-03.08). Submitted to the Mack Blackwell Rural Transportation Authority. Arkansas Archeological Survey, Fayetteville.

Stewart-Abernathy, Leslie C.

- 2006 Review of *Black Life on the Mississippi: Slaves, Free Blacks, and the Western Steamboat World*, by Thomas Buchanan, 2004. *Arkansas Historical Quarterly* 65(1):72–74.
- 2006 "Cherokee." In The Encyclopedia of Arkansas History & Culture. http://encyclopediaofarkansas.net/
- 2006 "Cephas Washburn." In The Encyclopedia of Arkansas History & Culture. http://encyclopediaofarkansas.net/
- 2006 "Dwight Mission." In The Encyclopedia of Arkansas History & Culture. http://encyclopediaofarkansas.net/

Stewart-Abernathy, Leslie, and Lynita Langley-Ware

2005 Testing at Cadron. Field Notes, Newsletter of the Arkansas Archeological Society 325:10–11.

Trubitt, Mary Beth

- 2005 Preliminary Results of Field Work at 3HS195, an Archaic Period Site in the Ouachita River Valley. *Field Notes, Newsletter of the Arkansas Archeological Society* 326:3–8.
- 2005 Marine Shell Ornaments from Cahokia. *The Bead Forum (Newsletter of the Society of Bead Researchers)* 47:6–13.
- 2006 "Archaic Period." In The Encyclopedia of Arkansas History & Culture. http://encyclopediaofarkansas.net/
- 2006 "M. R. Harrington (1882–1971)". In *The Encyclopedia of Arkansas History & Culture*. <u>http://encyclopediao-farkansas.net/</u>

Trubitt, Mary Beth, and Kate Wright

2005 Archeological Test Excavations at Lake Ouachita, Arkansas. Limited distribution report submitted to the U.S. Army Corps of Engineers, Vicksburg District, in accordance with Archeological Resources Protection Act Permit No. DACW38-4-01-49, by the Arkansas Archeological Survey Henderson Research Station, Arkadelphia.

Valentino, Alicia, B., Jami J. Lockhart, and Jamie C. Brandon

2006 Archeo-Geophysical Prospecting at the Van Winkle Mill Complex. In Archeological Excavation and Testing at Van Winkle's Mill (3BE413), Hobbs State Park and Conservation Area, Benton County, Arkansas. Final Report submitted to Arkansas State Parks. Arkansas Archeological Survey, Fayetteville.

Venter, M. L., V. D. Thompson, M. D. Reynolds, and J. C. Waggoner, Jr.

2006 Integrating Shallow Geophysical Survey: Archaeological Investigations at Totogal in the Sierra de los Tuxtlas, Veracruz, Mexico. *Journal of Archaeological Science* 33(6):767–777.

APPENDIX 2. PAPERS, SYMPOSIA, AND WORKSHOPS BY SURVEY STAFF DURING 2005-2006

House, John H.

2006 Gifts of the Great River: Arkansas Effigy Pottery in the Edwin S. Curtiss Collection. UAPB Student/Faculty Research Forum. Pine Bluff.

Jeter, Marvin D.

- 2005 Shatter Zone Shock Waves in the Lower Mississippi Valley. American Society of Ethnohistory, Santa Fe, New Mexico.
- 2006 The Mangum Site: Resurrecting a "Plaquemine Necropolis" in Southwest Mississippi with "Southern Cult" Connections. Mid-South Archaeological Conference, Jackson, Mississippi.

Lockhart, Jami J.

2005 Environmental Similarity Modeling and Archeological Sites that Don't Fit the Model. Invited presentation, Fourth Annual GIS Day, Fayetteville.

- 2005 Paleoinformatics: Multiscalar and Multidisciplinary Approaches to Archeology in Arkansas. Invited lecture, University of Oklahoma, Department of Anthropology.
- 2006 Caddo of the West Gulf Coastal Plain in Arkansas: A Paleoinformatics Approach. 48th Caddo Conference, Nacogdoches, Texas.
- 2006 Multi-sensor Archaeogeophysics in Disparate Physiographic Regions of Arkansas, U.S. Computer Applications and Quantitative Methods in Archaeology Conference, Fargo, North Dakota.

Mitchem, Jeffrey M.

2006 The Vero and Melbourne Discoveries: Scientific Controversy in the Early Twentieth Century. 58th Annual Meeting of the Florida Anthropological Society. Stuart, Florida.

Payne, Claudine

2005 Two Mississippian Art Styles: The Cosmos and the Quotidian. Southeastern College Art Conference, Little Rock.

Reynolds, Matthew, and Mary Beth Trubitt

2006 An Update on Caddo Site Excavations in West-Central Arkansas. 48th Caddo Conference, Nacogdoches, Texas.

Reynolds, Matthew, and V. D. Thompson

- 2006 Electrical Imaging at the Sapelo Island Shell Ring. Society for American Archaeology, San Juan, Puerto Rico.
- Sabo, George III
- 2005 Origins and Evolution of Pre-Contact Southeastern Indian Art. Southeastern College Art Conference, Little Rock.
- 2005 The Southeastern Ceremonial Complex and Caddo History. Caddo History and Culture Symposium, Caddo Tribal Complex, Binger, Oklahoma.
- 2005 Southeastern Ceremonial Legacies in Osage and Quapaw Cultures. American Society for Ethnohistory, Santa Fe, New Mexico.
- 2006 Rock Art and the Study of Ancient Religions in Southeastern North America. Invited paper, 23rd Annual Visiting Scholar Conference (Religion in the Material World: A Conference on the Archaeology of Religion), Southern Illinois University – Carbondale.

Schambach, Frank, Jami Lockhart, and David Jeane

- 2006 Remote Sensing and Exploratory Excavations at the Tom Jones Site, a Fifteenth Century Caddo Ceremonial Center in Southwest Arkansas. Invited paper, 13th East Texas Archeological Conference, Tyler, Texas.
- 2006 Remote Sensing and Exploratory Excavations at the Tom Jones Site, a Fifteenth Century Caddo Ceremonial Center in Southwest Arkansas. Invited paper, 48th Caddo Conference, Nacogdoches, Texas.

Stewart-Abernathy, Leslie C.

2006 Discussant. Symposium: A Hidden Diversity: Historical Archaeology in the Arkansas Ozarks. Society for Historical Archaeology, Sacramento, California.

APPENDIX 3. SRP TITLES FOR 2005-2006

Cande, Kathleen H. (with a contribution by Jami J. Lockhart)

2005 Davidsonville: The Search for Arkansas' Oldest County Seat Town, Randolph County, Arkansas. Final Report, Project 04-07. Submitted to Arkansas Department of Parks and Tourism, Little Rock.

Cande, Kathleen H., and Jared S. Pebworth

2006 A Phase I Cultural Resources Survey of the Proposed Northwest Arkansas Regional Airport Intermodal Access Road Realignment 4A, Benton County, Arkansas. Final Report, Project 04-08. Submitted to Barnard Dunkelberg and Company, Tulsa, Oklahoma.

Guendling, Randall L.

- 2006 Phase I Metal Detector Survey of the Prairie Creek to Beaver 69K Transmission Line Right-of-Way at the Cross Hollows Site, 3BE649, Benton County, Arkansas. Final Report, Project 06-04. Submitted to Allgeier, Martin and Associates, Inc.
- 2006 A Cultural Resources Survey of Springdale North Side Phase II Sewer Facilities, Benton County, Arkansas. Final Report, Project 06-11. Submitted to McGoodwin, William and Yates.
- 2006 Archeological Survey of a Proposed Red Dirt Mine Area, Benton County, Arkansas. Final Report, Project 06-13. Submitted to Haz-Mert, Inc.

Mainfort, Robert C., Jr.

2006 Test Excavations at 3WA1124, City of Fayetteville and Botanical Garden Society of the Ozarks, Washington County, Arkansas. Final Report, Project 06-09. Submitted to the City of Fayetteville and the Botanical Garden Society of the Ozarks.

APPENDIX 4. STUDENT EMPLOYMENT DURING 2005-2006*

Graduate Assistantships:

Alicia Valentino (UAF Anthropology Ph.D. candidate)(UAF station) (partially funded by Arkansas State Parks)

Work-study Students:

Mitchell Hunt (UAF undergraduate Anthropology majo	r) (SRP lab)
Aaron Lingelbach (UAF undergraduate)	(Survey Registrar's office)
Casey Rainier (UAF undergraduate)	(CO reception & clerical)

Grant Funds:

Audrey Baker (UAF Anthropology graduate student) (Survey Registrar's office)
John Samuelsen (UAF Anthropology graduate student) (CSP & UAF station)
Leslie Walker (UAF Anthropology graduate student)(UAF station)

SRP Project Funds, Hourly Employees at the CO:

Devin Pettigrew (UAF undergraduate Anthropology major) May-August 2006
Eric Proebsting (UAF Environmental Dynamics Ph.D. candidate) July 2005
Jeremy Pye (UAF Anthropology M.A. student)November 2005-May 2006
Michael Sarhan (UAF Geography M.A. student)Fall 2005 & June-July 2006

Survey State Budget, Hourly Employees at Research Stations:

Jeffrey Gaskin (HSU student) (HSU station)

* Description of student status is during the period of Survey employment covered by this Annual Report.

HOW TO CONTACT THE ARKANSAS ARCHEOLOGICAL SURVEY

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

Arkansas Archeological Survey Coordinating Office 2475 N. Hatch Ave. Fayetteville, AR 72704 479. 575. 3556

Research Stations:

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

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

Arkansas Archeological Survey ASU-Jonesboro P.O. Box 820 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 UAPB, Mail Slot 4814 Pine Bluff, AR 71601 870.535.4509 Arkansas Archeological Survey UAM, P.O. Box 3087 Monticello, AR 71656-3087 870.460.1090

Arkansas Archeological Survey SAU, P.O. Box 9381 Magnolia, AR 71754-9381 870.235.4230

Arkansas Archeological Survey HSU, P.O. Box H-7841 Arkadelphia, AR 71999-0001 870.230.5463

Arkansas Archeological Survey ATU, P.O. Box 8706 Russellville, AR 72801-8706 479.968.0381

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

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

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