

FOR FISCAL YEAR 2001-2002



A Division of the University of Arkansas System



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This report was edited and produced by Deborah Sabo, December 2002 Cover by M. Jane Kellett

### UNIVERSITY OF ARKANSAS SYSTEM



## Arkansas Archeological Survey

# ANNUAL REPORT FOR FISCAL YEAR 2001-2002

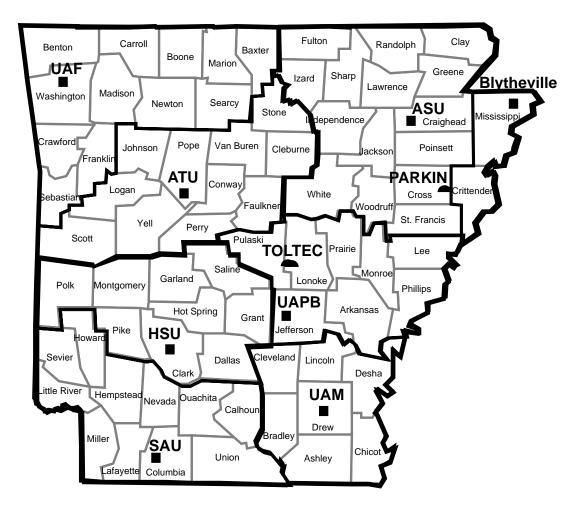
The Arkansas Archeological Survey is a part of the University of Arkansas System. Our mission is to study and protect archeological sites in Arkansas, to preserve and manage information about those sites, and to communicate what we learn to the people of Arkansas. Cooperative agreements with seven state universities, two state parks, and the community of Blytheville enable scholars at ten research stations around the state to carry out this mission. The Survey has been a model for statewide archeological programs around the country, and even around the world.

The Coordinating Office in Fayetteville is the Survey's administrative body. The Director, the State Archeologist, the Survey Registrar, the fiscal officer, publications staff, and outreach program 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, a combined curation area specifically designed to house both Survey and University Museum holdings. 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 the Sponsored Research Program (SRP) and the 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.

The ten station archeologists teach courses in anthropology and assist their university museums, or develop materials for public interpretation at the state parks, in addition to conducting primary 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; school teachers and students; tourists; fellow scholars; landowners; amateur archeologists; and all Arkansas residents interested in the archeology, prehistory, and early history of the state are beneficiaries of the Survey's programs and expertise.

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

### **Arkansas Archeological Survey Research Stations**



Cooperative agreements between the Survey, seven state universities, two state parks, and the community of Blytheville establish the ten research stations, with office, laboratory, and collection storage facilities. The station archeologists provide appropriate services to their hosts: teaching, student advising, committee work, and museum support 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 and a new archeology curriculum for the public schools. All station archeologists and other 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 even international organizations.

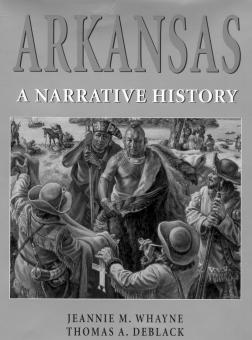
### THE DIRECTOR'S PAGES

Dr. Thomas J. Green

Since its inception, 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 reputations of our professional staff are top-notch, yet our accessibility and close cooperation with amateur archeologists, teachers, landowners, American Indian Tribes, and various agencies have prevented us from becoming an "ivory tower" institution. 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. Highlights for 2001-2002 are outlined below.

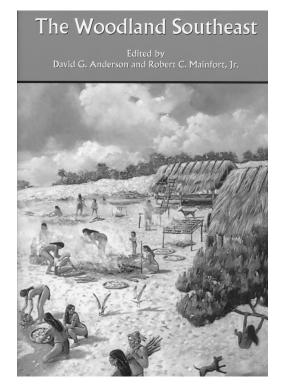
### EFFORTS IN EDUCATION FOR K-12 & BEYOND

- Survey staff gave **43 presentations** on archeology, American Indians, and early Arkansas to K-12 school children and their teachers, with combined audiences of approximately **2775 pupils**.
- We distributed more than 275 Teacher Packets containing information, activities, and lesson ideas for use in Arkansas classrooms.
- Survey staff members, including our education specialist Mary Kwas, State Archeologist Ann Early, and station archeologists Martha Rolingson and George Sabo gave presentations at **teacher workshops and conferences** around the state, reaching 172 Arkansas public school teachers. The UAF station's George Sabo demonstrated his NEH-funded "First Encounters" educational CD-ROM.
- To date, more than 1500 copies of the "First Encounters" CD-ROM have been distributed free-of-charge to teachers and educational institutions.
- Our Blytheville station archeologist Claudine Payne continued to work with the Blytheville school district in their NEH-funded Schools for a New Millennium project to develop a middle school curriculum incorporating archeology and information technology.
- With a Preservation Education grant from Arkansas Humanities Council, UAF station archeologist George Sabo and the Survey's Internet applications specialist Deborah Weddle constructed an educational website on Arkansas Rock Art that supplies information, exercises, lesson plans, and a searchable database for study of ancient art and culture via the Web.
- ◆ 18 college courses were taught to 332 undergraduate and graduate students at seven university campuses in Arkansas by Survey professional staff.
- Survey archeologists served on the thesis committees of 30 UAF graduate students in Anthropology, History, and Environmental Dynamics.
- ◆ UAF station archeologist George Sabo **co-authored** *Arkansas, a Narrative History* with Jeannie Whayne (UA History Department), Thomas DeBlack (ATU History Department), and Morris Arnold (United States Circuit Judge). Published by the UA Press, the volume is aimed at college and general reader audiences.



THOMAS A. DEBLACK GEORGE SABO III MORRIS S. ARNOLD

UAF station archeologist George Sabo co-authored *Arkansas, a Narrative History*, a new textbook published by the UA Press for college classroom use and general readers.



SRP Administrator Robert Mainfort co-edited *The Woodland Southeast*, published in 2002 by the University of Alabama Press.

### 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. These include:
  - 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
  - U.S.D.A. Forest Service
  - U.S. Natural Resources Conservation Service
  - U.S. Army Corps of Engineers
- Survey staff provided consultation, service, or assistance to over 121 agencies, firms, museums, schools, parks, civic groups, and other bodies, in addition to service rendered at research station host institutions.
- Staff members served as officers, members of various committees, or in other capacities for more than a dozen professional organizations.
- Our website received, on average, more than 900 visits per month.
- Nearly 40,000 visitors attended Toltec Mounds and Parkin Archeological State Parks.

- The Survey Director and State Archeologist convened a new Outreach and Public Education Committee to identify our various audiences and develop ways to better serve their needs and interests. Some of these audiences include public school teachers and students, government agencies, land-use planners and developers, American Indian tribes, professional scholars, tourists, and the general public.
- 132 public lectures and other presentations by Survey staff reached audiences of more than 5583 persons.
- A new initiative to publish brief summaries of archeological phases identified for Arkansas in *Field Notes*, the Arkansas Archeological Society's newsletter, will also provide a basis for updating the *State Plan for the Conservation of Archeological Resources in Arkansas*, thus combining public education and cultural resource management goals.
- Volunteers contributed more than 4270 hours to Arkansas archeology in the field and laboratory at the 10 research stations.
- ◆ 109 Arkansas Archeological Society members attended the annual **Training Program**, sponsored in part by the Arkansas Game and Fish Commission and the U.S. Forest Service, at Grandview Prairie Wildlife Management Area.
- 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 certain items of cultural patrimony. These objects must be returned to modern representatives of the culturally affiliated American Indian Tribe. The Survey works in close cooperation with Quapaw, Caddo, Osage, and other tribal groups to fulfill NAGPRA requirements. We host joint meetings of archeologists, government agency and tribal representatives to discuss NAGPRA progress. We have met every deadline imposed by the law and developed new procedures for current fieldwork and analytical projects that respect Tribal wishes with regard to these matters.

### SCIENTIFIC ACHIEVEMENTS & ARCHEOLOGICAL MISSION

- Survey professional staff authored or co-authored 44 publications and reports, and presented 35 papers or workshops at professional meetings.
- SRP administrator Robert Mainfort co-edited (with David G. Anderson of the National Park Service) *The Woodland Southeast.* The University of Alabama Press volume is the first major synthesis of the dramatic cultural developments in this region and time period.
- 848 new archeological sites were recorded, bringing the total number of sites in Arkansas site files to 36,239.
- We helped the Arkansas Archeological Society launch its long-envisioned **Stewardship Program**, with training provided to individuals who volunteer to monitor important archeological sites and keep us informed of potential threats to site integrity.
- Our Sponsored Research Program administered grants and contracts with budgets totaling \$336,838.
- Sponsored Research published 8 final project reports.
- ◆ 215 researchers visited the Registrar's Office to use information in the Arkansas site files.



UAPB station archeologist John House at a meeting with Flossie Mathews and Marilyn Rogers, representatives of the Quapaw Tribe of Oklahoma. The Tribe received a grant from the National Park Service to study sites related to the late 17th century Quapaw village of Osotouy, which was the location of the original Arkansas Post. The archeological project will involve cooperation between the Quapaw Tribe, the Survey, U.S. Fish & Wildlife's White River Refuge, Arkansas Post National Memorial, and the Arkansas Archeological Society.

• Archeological **research projects** were carried out with support and cooperation of various agencies, including the Arkansas Game & Fish Commission, the U.S. Forest Service, U.S. Fish & Wildlife, the U.S. Army Corps of Engineers, Arkansas State Parks, the National Park Service, and the Quapaw Tribe of Oklahoma.

• Wallace Bottom. An early French settlement in Arkansas is suspected at the Wallace Bottom site in White River National Wildlife Refuge, near the Osotouy Unit of Arkansas Post National Memorial, where UAPB station archeologist John House has identified Quapaw artifacts in association with late 17th century European artifacts. Working with the Quapaw Tribe, who received a National Park Service Heritage Preservation grant, the Survey developed a research program to explore these sites. The original 1686 Arkansas Post was established to trade with the Quapaw Indians and was the earliest European settlement in the Lower Mississippi Valley. Read more on page 29

• Jarrett. Salvage archeology brought together a crew of Survey staff, Arkansas Archeological Society members, and community volunteers, led by ASU station archeologist Juliet Morrow, to explore this Mississippian village and cemetery site on land in Randolph County that was being leveled for agriculture. The project was another excellent example of a successful alliance between scientific, cultural, and economic goals. With help from the land-owner, the site was leveled in stages, allowing the archeologists time for hand excavation of features, mapping, and other data recovery. The human remains were claimed by the Quapaw Tribe for reburial. *Read more on page 22* 

• Fort Smith Cemeteries. Protection of graves and historic cemeteries is an issue of growing importance in many communities where rapid development threatens to wipe out links with preceding generations. The Survey was contracted by the City of Fort Smith to excavate two small historic cemeteries on land to be inundated by the expansion of Lake Fort Smith. The graves and headstones were moved to a new location. *Read more on page 56* 

• Tinsley 1. Geologists and archeologists teamed up to explore sites in the New Madrid Seismic Zone. Archeogeophysical survey established that remote sensing can be used to identify ancient earthquake features below the ground surface. Excavations directed by Blytheville station archeologist Claudine Payne verified the results. This project was a cooperative effort of the Archeological Survey, the U.S. Geological Survey, the Geological Survey of Japan, and the Center for Earthquake Research and Information of the University of Memphis. A team of archeologists, geologists, seismologists, and engineers used a new "geoslicing" technique, developed by the Fukkon Corporation of Japan, to gather information on earthquakes from ancient contexts more deeply buried—and thus deeper into the past—than has been possible before. *Read more on page 26* 

• Van Winkle. Peter Van Winkle established his saw and grist mill complex within presentday Beaver Lake State Park in northwest Arkansas before the Civil War, and returned after hostilities had ceased. Lumber for Old Main and other historic northwest Arkansas buildings was milled at this important site, which offers the opportunity to study an early Arkansas industry as well as pivotal social and cultural issues. A former slave—Aaron Anderson Van Winkle—became mill foreman. Archeology of Aaron Anderson's family residence offers a rare glimpse of early African-American life in the South beyond the Plantation experience. UA field school students and volunteer crews, Arkansas State Parks, and the U.S. Army Corps of Engineers have contributed to this ongoing research, led by UAF station archeologists George Sabo and Jerry Hilliard. Former UA graduate student Jami Brandon will use the data for his Ph.D. dissertation at University of Texas-Austin.

### Read more on page 50

• Grandview Prairie. For the second year, SAU station archeologist Frank Schambach conducted excavations at the Tom Jones mound and other sites in Grandview Prairie Wildlife Management Area as part of the Arkansas Archeological Society Training and Certification Program. The unique and innovative Program provides professional training for amateur archeologists, which promotes and ensures protection for Arkansas archeological sites by raising awareness and expertise and building a close working relationship between professional and avocational archeologists in the state. The Program has been widely admired and copied around the country. Cooperation and support from the Grandview Management Area staff, Arkansas Game & Fish Commission, and the U.S. Forest Service make this project possible.

Read more on pages 37, 77

• Searching for Sequoyah. One of the Cherokee Nation's most illustrious leaders lived in Arkansas during the 1820s. Sequoyah invented a syllabic alphabet for Cherokee, paving the way not only for literacy and education but also the preservation of the language. ATU station archeologist Leslie Stewart-Abernathy worked with colleagues and volunteers who studied documentary sources and surveyed archeological sites in an ongoing search for Sequoyah's Arkansas homesite. Read more on page 46

• Ancient Stone Quarries. HSU station archeologist Mary Beth Trubitt continued a cost-share project with the U.S. Forest Service to study ancient novaculite quarrying sites in the Ouachita Mountains. Quarries are some of the largest and most complex prehistoric sites in the country. Arkansas Archeological Society volunteers helped with a mapping project at one quarry site in Hot Springs National Park to provide a test case for devising a workable field approach. Read more on page 42

• Trash Pits: Old or New? Parkin station archeologist Jeff Mitchem worked with Survey archeogeophysical specialist Jami Lockhart to evaluate remote sensing results at the Parkin site. Many subsurface prehistoric features were located, but this year's project also proved that excavation still has the last word in some cases. Read more on page 15

• Venison Feasts at Toltec Mounds? Toltec Mounds station archeologist Martha Rolingson is evaluating the results of 1988-1990 excavations at Mound S—one of the smallest mounds at the site. She has found evidence of ceremonial feasts from the period around A.D. 700.

Read more on page 19

• Arkansas's Oldest Indian Mound. UAM station archeologist Marvin Jeter continued investigations at Lake Enterprise Mound in extreme southeastern Arkansas, which appears to be the oldest known Indian mound in the state. Charred cane from the site has now been dated by radiocarbon to around 1200 B.C. The site is part of the Poverty Point culture, centered in nearby Louisiana, and one of North America's most intriguing archeological manifestations. Read more on page 33

### **A**RCHEOGEOPHYSICAL **A**PPLICATIONS

• Our program of archeogeophysical research—remote sensing—is growing by leaps and bounds under the direction of Jami Lockhart. This technology is at the leading edge of archeological fieldwork. It allows archeologists to "see" beneath the surface, maximize labor, time and dollars by planning their excavation units accordingly, and in some cases interpret certain aspects of a site without any excavation at all. Why would archeologists want to limit excavation? Because excavation effectively destroys the site. Remote sensing is a non-invasive technique with the potential to revolutionize archeological research design. It does not replace excavation, but makes it more efficient and cost-effective at a time when research dollars are becoming ever more precious and scarce. Read more on pages 62-65

• Archeogeophysical applications were part of over 14 field projects during 2001-2002.

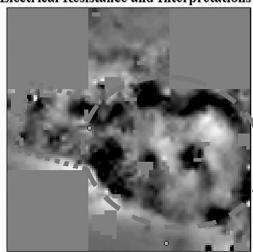
• Several of these projects were in cooperation with UA Professor Ken Kvamme, who teaches a Geophysical Near Surface Prospection course in the UA Anthropology Department, and provided field opportunities for students. One project—at Van Winkle Mill—was in conjunction with the UA archeological field school.

• Another major project was at the Tom Jones site on Grandview Prairie, in conjunction with the Arkansas Archeological Society's Training Program.

• Other projects were part of contract-funded research, or were Survey station research projects. One project was subcontracted by a local private research firm.

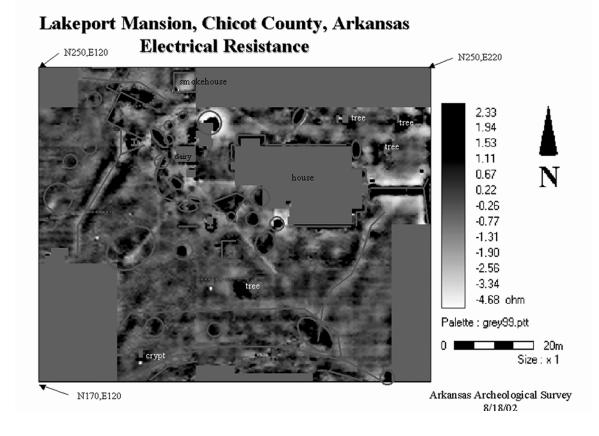
• Several projects involved cooperation with state and federal agencies such as the Forest Service, National Park Service, Arkansas State Parks, U.S. Fish & Wildlife Service, and U.S. Army Corps of Engineers.

Lake Enterprise Mound Electrical Resistance and Interpretations



Lake Enterprise: Arkansas's Oldest Known Indian Mound

Remote sensing defines the shape and limits of Lake Enterprise mound in extreme southeast Arkansas. The Poverty Point-related site is being studied by UAM station archeologist Marvin Jeter and is the oldest known mound in Arkansas.



### Lakeport: An Antebellum Plantation Mansion

Geophysical remote-sensing performed by Jami Lockhart at Lakeport Plantation identified areas of interest for archeological exploration. Work at the Lakeport site is part of a multidisciplinary project to preserve this antebellum plantation mansion. Arkansas State University, which now owns the site, received a grant from the Arkansas Natural and Cultural Resources Council (ANCRC) to stabilize the building. The Survey's Sponsored Research Program was subcontracted to conduct archeological testing prior to the construction work.

### THE STATE ARCHEOLOGIST

Dr. Ann M. Early

The State Archeologist for Arkansas is responsible for public education, outreach, and various administrative activities relating to management and protection of archeological sites and site data. 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 the Education Specialist. The State Archeologist also acts as the Survey's liason with the Arkansas Archeological Society, assisting this active amateur organization in management of their various programs.

### **CURRENT ACTIVITIES**

The State Archeologist position in Arkansas involves a wide range of duties including research, public outreach, liason with the Arkansas Archeological Society, and contacts with diverse constituenceis, from federal and state agencies to teachers and educational organizations to members of the general public.

### Louisiana Purchase Celebrations

One of the growing public outreach areas this year was preparation for the Bicentennial Commemoration of the Louisiana Purchase in 2003. Early provided information about American Indians and Colonial Arkansas to groups developing a variety of commemorative projects, including classroom lesson plans, coloring books for kids, scripts for video and multimedia productions, and participation in Teacher workshops.

### Cemetery and Other Site Preservation

Arkansas continues to grow economically, even in this uncertain year, and the impact of that growth has been felt by an increasing number of citizens who are concerned about archeological sites—especially historic cemeteries—that are threatened by development and vandalism. Ann Early and the Survey have assisted various citizen groups with information about Arkansas laws protecting graves, survey and archeological recording of cemetery sites, and advice on management and protection of endangered archeological resources.

### Research

With such a wide range of duties, large-scale research projects are not easily tackled by Arkansas's State Archeologist. Nevertheless, Ann Early continued her involvement in areas of expertise developed over 27 years as Station Archeologist at Henderson State University. These include the archeology of the Caddo Indians, prehistoric and historic settlement in the Ouachita Mountains, and work at the site of Fort St. Francis and 18th century settlements in eastern Arkansas, among other topics. She completed an article for the Southeast volume of the Smithsonian Institution's prestigious *Handbook of North American Indians* series, and submitted a paper on the Caddo to the important regional journal *Southeastern Archeology*.

### Archeological Stewardship in Arkansas

After many years of study and preparation, work was completed on a plan to implement a Site Stewards Program within the Arkansas Archeological Society. Members of this dedicated group of amateur archeologists will receive special training before they "adopt" specific archeological sites, which they will keep under observation for signs of vandalism and threats by development. Stewardship will be in cooperation with landowners. As the Survey's liason with the Society, Ann Early has been instrumental in developing the Stewards Program, which should be fully operational early in the next year.

### Service and Professional Activities

Ann M. Early received her Ph.D. in 1973 from the University of Massachusetts-Amherst. In 1999 she became the second person to serve as State Archeologist for Arkansas. Early moved to the position after 27 years as station archeologist at HSU. Ann Early is the author of numerous books and articles on Arkansas archeology. Her major research interests include human ecology in the uplands of the Trans-Mississippi South, Caddoan cultural traditions and relationships, Caddoan pottery design and typology, and the effects of Euro-American cultural perceptions on popular images of the past.

### Academic Service and Activities

By agreement with the University of Arkansas System, Early holds a non-teaching faculty position as Associate Professor in the UAF Department of Anthropology and participates in departmental faculty meetings. During 2001-2002, she was advisor to one Ph.D. candidate in the UAF Environmental Dynamics Program, acted as host and presenter in the UAF Anthropology Department's Stigler Lecture Series, and participated in the Museum Accreditation Program evaluation of the University Museum.

### Database Oversight and Collections Management

- Early prepared site forms for archeological sites and historic cemeteries nominated to the Arkansas and National Registers of Historic Places. She completed site forms for Civil War sites and battlefields listed by the Arkansas Historic Preservation Program so they could be added to the Survey's AMASDA site database. She also coordinated documentation of sites associated with the 19th century Cherokee Trail of Tears for nomination to the National Register.
- Early assisted the Survey's NAGPRA project workers with instruction on the handling and documentation of ceramic vessels during the inventory process.
- Early facilitated transfer of the Peeler Bend canoe from Saline County to the Historic Arkansas Museum.
- Early oversaw management of the Survey's photographic archives and handled requests for permission to publish, use, or reprint Survey photographs and other materials.

#### Public Archeology

- Early reviewed various reports, compliance-related paperwork, and actions of the State Historic Preservation Officer (SHPO) to monitor the impact of development on archeological sites, and advised numerous agencies and developers on matters related to archeological resources.
- Early reviewed about 75 U.S. Corps of Engineers permit applications relating to Arkansas projects and provided written comments on about 15 of these projects to the Corps and to the SHPO. She toured a dredging operation on the White River to learn more about river management practices that might affect archeological sites.
- Early assisted U.S. Forest Service Heritage Resource Technicians with documentation of sites on National Forest lands, and spoke at a training session for HRTs held in Kentucky.
- Early advised law enforcement personnel in Hot Spring County on site protection strategies and Arkansas's Unmarked Burial Act.
- Early participated in GIS Group meetings at the Arkansas Highway and Transportation Department.

#### Service to the Arkansas Archeological Society

- Early was part of the planning and management team of the Society's Annual Training Program. She oversaw preparations, registration, and equipment needs for the Program, scheduled evening lectures, and supervised production of documents such as registration forms, a procedures manual, and other materials for participants. She attended the first 10 days of the two-week event, taught an Orientation class for beginners and a Basic Lab seminar, and helped supervise fieldwork.
- Early attended the Society's Executive Committee meetings, helped launch the Stewards Program, and supervised the activities of the Survey's Society Office Manager at the Coordinating Office.

### Public Education and Outreach

Early responded to about 200 queries from individuals, interest groups, and agencies seeking help with various matters concerning archeological and historic sites.

- Early gave presentations to the Blytheville Middle School Teacher Workshop, a teacher workshop at Pottsville, Arkansas, the UA History Department/Arkansas Historical Association Teacher Institute at the University of Central Arkansas, and an Elderhostel Program at the University of Arkansas Museum. Combined audiences were more than 100 persons.
- Early led a tour of Survey facilities and gave a teaching presentation to about 75 middle school students from Rogers, Arkansas.
- Early helped with efforts to promote the Survey's new Arkansas Rock Art website, and to make more copies of the *First Encounters* educational CD-ROM.
- Early developed new informational brochures for landowners describing the National Register and the Arkansas Archeological Society's Site Stewards Program. She also contributed to production of the Survey's new general information brochure, for printing in spring 2002.

### **Professional Service and Activities**

- Early is a member of 12 professional and professional/avocational organizations: Society for American Archaeology, Southeastern Archaeological Conference, Society for Historical Archaeology, Arkansas Historical Association, Arkansas Archeological Society, Louisiana Archaeological Society, Mississippi Archaeological Society, Caddo Conference, American Society for Environmental History, Forest History Society, American Society for Ethnohistory, and National Association of State Archeologists.
- Early served as President of the Arkansas Historical Association, Executive Committee member of the Southeastern Archaeological Conference, and member of the State Review Board for Historic Preservation in Arkansas. She is an Editorial Advisor for the journal *Mississippi Archaeology* and a Contributing Editor for *Caddoan Archaeology*.

Early reviewed an article submission for the journal Human Ecology.

### PARKIN ARCHEOLOGICAL STATE PARK

Dr. Jeffrey M. Mitchem, Station Archeologist Timothy S. Mulvihill, Station Assistant E. Faye Futch, Secretary

The Parkin research station was established at Parkin Archeological State Park in 1990 with the primary mission to study the 17-acre Parkin site and related sites in the region. Parkin is an American Indian village that was occupied from around A.D. 1000 to at least 1541. Located on the banks of the St. Francis River in Cross County, its large platform mound and hundreds of houses were surrounded on the other three sides by a moat and log palisade. Corn, beans, and other crops were grown in fields outside the moat. Many similar sites in the region have been destroyed by modern development, but Parkin survived nearly intact. The site lies entirely within the boundaries of the park, and is a National Historic Landmark. Parkin has been identified by many experts as the Indian village of Casqui, visited by the Spanish expedition of Hernando de Soto in the summer of 1541 and described in the written accounts left by survivors of that expedition.

### CURRENT RESEARCH

### Archeogeophysics: Remote Sensing at the Parkin Site

A brief test in spring of 2001 leaves no doubt that geophysical techniques will be used extensively in future research at the Parkin site. Jami Lockhart, manager of the Survey's Archeogeophysical Applications Program, used five remote-sensing techniques on different parts of the site. Several types of probable archeological features, including house floors, hearths, storage pits, and graves, were indicated as subsurface anomalies in the computer-generated imagery. But the work at Parkin also proved that traditional archeological methods, while they may be greatly enhanced by remote sensing, will never be replaced.

One feature revealed by archeogeophysics was an extensive linear anomaly in the northern part of the village. Archeologists Mitchem and Mulvihill, with help from Arkansas Archeological Society volunteers Susan Hollyday and Danny Crumbliss, later excavated a test unit over this anomaly and quickly found that the feature was a shallow ditch of recent origin, probably used for drainage. Bits of modern debris—egg cartons, styrofoam, and 45-rpm records—were distributed throughout the fill, proving that the ditch was open as late as the 1970s. This ditch left no surface indication, nor was it recorded on any maps, but the combination of remote sensing and traditional test excavation told its story in a matter of days. Similar good results can be expected for the prehistoric features at the site.

### Ted Morris Artwork Project Continues

With funding from Arkansas State Parks, Florida artist Ted Morris was commissioned to create eight paintings depicting daily life at Parkin in the 1500s. The paintings emphasize a sense of Parkin's American Indian inhabitants as individuals, and will help park interpreters explain some of the typical activities that went on at the site.

As Morris works on each picture, he submits photographs for evaluation and comment by a group of Arkansas experts, including the Parkin staff. Three paintings were finished in the previous fiscal year. During 2001-2002, Morris completed four more paintings and began work on the eighth and final one.

#### A Year of Lab Work and Visitors

A moratorium on major new excavations is in place at Parkin until the backlog of material from the past decade of fieldwork has been washed, sorted, and catalogued. Most of 2001-2002 was devoted to this effort, but much remains to be done. As weather permitted, Mulvihill also continued work on a topographic map of the site and surrounding areas.

Interaction with the general public is a major focus at the Parkin Station. Visitors frequently bring in artifacts for identification. These informal contacts give Parkin archeologists a chance to highlight the value of archeology and to explain how uncontrolled digging harms archeological sites. Occasionally these visitors are



Robert C. Dunnell (right), University of Washington Emeritus Professor, visited Parkin to confer with station archeologist Jeff Mitchem on thermoluminescence dating of Parkin phase pottery. The technique measures the amount of residual "glow" in mineral isotapes within the fired clay. Photograph by Timothy S. Mulvihill.

recruited as members of the Arkansas Archeological Society, and may return to Parkin as volunteers.

Robert C. Dunnell, Professor Emeritis at the University of Washington and author of many influential books on archeology, represents another sort of visitor. Dunnell is part of a National Science Foundation project exploring thermoluminescent dating of pottery and other fired clay objects. This technique measures the amount of residual "glow" in mineral isotopes within the fired clay. The study will evaluate the accuracy of thermoluminescence as a dating technique by comparing its results with those from radiocarbon analysis. Pottery, fired daub, and burned clay from floors and hearths at Parkin and related sites will be included in the project, along with material from many other sites around the country. The Parkin artifacts are valuable to the study because they have already been independently dated by other methods.

### P.A.S.T.

Since its opening, the Parkin station has interacted closely with the Parkin Archeological Support Team (P.A.S.T.), a citizen group organized to support the park and its programs. Mitchem served as president in 2001 and part of 2002; Mulvihill became treasurer in April of 2002. Both wrote several articles for the group's newsletter *P.A.S.T. Times*.

#### Beads and Other News

Keeping up with Parkin site research is a full time job, but Mitchem and Mulvihill both manage to continue pursuing other interests. Mitchem's expertise on glass beads puts him in demand to study collections from sites in many parts of the New World, especially Florida, where he previously worked and where many Spanish colonial sites are preserved. These tiny artifacts form part of the fragile thread of evidence for early contact between Indians and Europeans. Mitchem also collaborated on a historic bead replication project with Arkansas artisans Tom and Sage Holland.

Mitchem's renown as a bead researcher also contributed to the joint UAF/Yarmouk University bioarcheological project in Jordan. He analyzed beads from several sites and developed a bead typology for the region to facilitate comparative studies. Mitchem's work may eventually be expanded to cover the entire eastern Mediterranean.

Mulvihill provided assistance to other Survey research stations around the state on various projects, especially computer-generated topographic mapping. He also continued analysis of material from a 1950 UAF field school at a Parkin phase site, the Rose Mound, that was never written up, as well as material from the 1996 Society Training Program excavations at the Graves 3 site in Cross County.

### **PARKIN STATION PERSONNEL**

Jeffrey M. Mitchem received his Ph.D. from the University of Florida in 1989. After brief appointments at Florida State University and Louisiana State University, he joined the Survey in 1990 to establish the Parkin research station. His research specializations are 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, and the history of archeology in the Southeast.

**Timothy S. Mulvihill** received his M.A. from the University of Arkansas in 1996. He joined the Parkin station in 1991 after two years as station assistant at ASU. His specializations include Woodland and Mississippian period archeology, site survey and mapping.

**E. Faye Futch** joined the Survey in 1990 as Secretary for the Parkin station. She recently earned her Associate of Arts degree from Mid-South Community College and is working toward a teaching degree at Arkansas State University. In addition to her secretarial duties, Ms. Futch also helps process artifacts in the station laboratory.

### Grants, Honors, and Awards

Mitchem received grants to support research on glass beads in Jordan from The Northwest Bead Society (Seattle), The Bead Society (Los Angeles), and The Bead Society Trust (London).

### Academic Service and Activities

By agreement with the University of Arkansas System, Mitchem has a non-teaching faculty appointment as Associate Professor in the UAF Department of Anthropology. He served as visiting professor in the summer 2001 and 2002 seasons of the joint UAF/Yarmouk University Bioarcheological Field School in Jordan. Mitchem is on the master's thesis committee of Kelly J. Mulvihill, Parkin Archeological State Park interpreter,

who is pursuing her degree in anthropology from Southern Illinois University at Carbondale.

### Service to Arkansas Department of Parks and Tourism

Mitchem and Mulvihill are the primary resource persons for development of interpretive content at Parkin Archeological State Park, and in this capacity contributed to the Ted Morris artwork project.

- Mitchem and Mulvihill helped State Parks personnel select the location for a maintenance building at the park and monitored test excavations associated with this project. They also monitored demolition of an old church and telephone pedestals on park grounds.
- Mulvihill assisted a film crew making a new audiovisual program about the Parkin site.
- Mitchem and Mulvihill led occasional tours of the Parkin site and answered questions and identified artifacts for park visitors.

### **Professional Service and Activities**

- Mitchem served as president of the Society of Bead Researchers. He was on the Editorial Review Board of the Florida Anthropological Society and the Editorial Advisory Board for the journal *American Archaeology*.
- Mitchem chaired a session on Colonial Archaeology at the 35th Annual Meeting of the Society for Historical Archaeology and Conference on Underwater Archaeology, at Mobile.
- Mitchem reviewed manuscripts for publication in three journals: *The Florida Anthropologist, Ethnohistory*, and *American Antiquity*.
- Mitchem participated in the Florida Anthropological Council meeting in St. Petersburg. He provided professional assistance to the Florida Museum of Natural History, South Florida Museum, Safety Harbor Museum of Regional History, Mission San Luis, and Florida Humanities Council.
- Mitchem and/or Mulvihill provided professional consultation or advice to The Archaeological Conservancy, the Center for Advanced Spatial Technologies (CAST) at UAF, National Park Service, and the journals *American Archaeology* and *The Arkansas Catholic*.

### Public Service and Outreach

Mitchem and Mulvihill each contributed several articles to *P.A.S.T. Times*, a newsletter of the Parkin Archeological Support Team. Mulvihill also helped produce the newsletter. Both served as officers of P.A.S.T. and participated in several P.A.S.T.-related activities, including the annual Living History Fair.

Mitchem produced revised content for two Survey educational flyers about the Parkin site.

Mulvihill led three students in the C.R.A.T.E. program, which teaches advanced computer animation techniques to high school students, and their advisor George Sabo (UAF station archeologist) on a tour of the Parkin site. The students created digital animation reconstructions of the site.

Mulvihill helped at the Arkansas Archeological Society's State Fair booth, worked with Society members on individual projects, and supervised Society volunteers at Parkin. He also attended the Society Training Program at Grandview, where he assisted with the excavations and taught the Mapping seminar.

Mulvihill supervised volunteers in the field and lab. Five people contributed 99.5 hours.

Mulvihill conducted site tours and hosted an "artifact identification" session for park visitors in association with Archeology Week (combined audiences, 13 people).

Mitchem gave presentations on Florida archeology and led tours at several Florida sites, with audiences totaling 530 people.

Mitchem presented a talk and tour of Parkin for the Archaeological Conservancy, for volunteer archeological field crew members and their leader Bill Iseminger from the Cahokia site in Illinois, for colleagues from Washington University in St. Louis, and for a group of Florida State University students (combined audiences 88 people).

### TOLTEC MOUNDS ARCHEOLOGICAL STATE PARK

Dr. Martha A. Rolingson, Station Archeologist Marilyn Whitlow, Secretary

The Toltec Mounds site in Lonoke County was built and occupied between A.D. 650 and 1050, and was the religious, social, and political center for people of the Plum Bayou culture of central Arkansas. It is one of the largest and most complex American Indian sites in the Mississippi Valley. The site was visited by archeologists more than 100 years ago, when 16 mounds were recognizable inside a 5298-foot-long earthen embankment on Mound Pond, a relict channel of the Arkansas River. Two of the mounds were then 38 and 50 feet high. Today, several mounds and remnants of the embankment are visible. The mostly square and flat-topped mounds were aligned according to astronomical observations. The site had a small population of religious and political leaders and their families. Large plaza areas allowed the people who lived in scattered villages and hamlets in the surrounding countryside to gather for community activities. The Plum Bayou people cultivated a little corn, but relied mainly on a variety of native domesticated crops. They also hunted, fished, and gathered wild plant foods. The Toltec Mounds site has been a National Historic Landmark since 1978 and has been protected and developed as a state park since 1975.

### CURRENT RESEARCH

### Mound S Analysis Continues, with Evidence of Ceremonial Feasts

Analysis of material from Mound S continued to be Rolingson's major research activity during 2001-2002. The multiyear project will result in both technical and popular reports.

Mound S is the smallest known mound at the Toltec Mounds site, but it produced the largest collection of artifacts. Excavations took place during three seasons of the joint Survey/Society Training Program in 1988, 1989, and 1990.

Mound S apparently was a low earthen platform where special activities and ceremonies were held. It was in use for perhaps only 50 years during the late A.D. 700s. Other small mounds on the site may also have been used for only short periods of time in the 400-year history of occupation at Toltec Mounds.

One significant discovery was a large deposit of animal bone in a good state of preservation, along with broken pottery and stone tools. The bones were studied recently by Dr. Lucretia Kelly, a zooarcheologist at Washington University in St. Louis. She found that white-tailed deer was the dominant species, with smaller amounts of turkey, squirrel, and passenger pigeon. This distribution of species was probably hunted to feed large groups of people at feasts, rather than to feed a family on a daily basis. A few bones of unusual species such as black bear, eagle, and white pelican may also indicate a ritual aspect to the feasts; these animals are not normally found in domestic refuse.

Pottery appears to support the idea of special activities such as communal feasting at Mound S. Plain cooking jars and large shallow serving bowls make up 93% of the 32,566 vessel fragments that could be identified. If the pottery assemblage represented household goods, we would expect it to include storage vessels. Most of the pottery is plain, but some vessels were decorated with curvilinear and painted designs. Fine bowls with red-painted surfaces are also present. These items probably were used for offerings or other rituals.

These interpretations will continue to be explored as work with the Mound S assemblage progresses. The stone artifacts have not yet been studied, and it will be interesting to find out whether the frequency of different stone tool types is more consistent with domestic or ceremonial activity. For example, a large amount of debitage, or waste from stone tool manufacture, might argue against the ceremonial hypothesis, while a high proportion of finished tools used for butchering and carving cooked meat would support it.



Martha Rolingson works on pottery sherds from Mound S.

#### Historical Archeology at Toltec Mounds

The main focus of research at Toltec Mounds is (and will remain) the Plum Bayou culture, but historical artifacts have also been recovered from excavations at the site. Analysis of this material is interesting in its own right, and also useful in providing a fuller picture of land use practices that have affected the site. This year, Robin McMullan, a graduate student in anthropology at UAF, completed her master's thesis, "Lake Mound Plantation: Historic Occupations of Toltec Mounds Archeological State Park," using historic period material from Mound S. She determined that a house on or adjacent to Mound S was occupied by tenant farmers.

Responding to McMullan's work, Rolingson offered the historic artifacts from Mound G excavations for use in George Sabo's historical archeology class at UAF. The students identified and described the artifacts for class projects. Rolingson then developed a chronology of historic period use of the site and the larger Lake Mound Plantation by compiling the available documentary sources and archeological collections relating to 19th century settlement in the area. A draft report was produced, and the project will continue.



Visitors to the 1989 Mound S excavations listen as Arkansas Archeological Society member Jean Hartfield describes an artifact.

### **TOLTEC MOUNDS STATION PERSONNEL**

Martha A. Rolingson received her Ph.D. from the University of Michigan in 1967 and joined the Survey the next year. From 1968 to 1972 she was station archeologist at UAM, and then worked with the State Archeologist and Survey Director in Fayetteville for several years. Between 1976 and 1979 she developed a program of research, interpretation, and exhibit display to facilitate preservation of the Toltec Mounds site as a state park. She has been station archeologist at Toltec Mounds Archeological State Park since 1979.

Marilyn Whitlow has been Secretary at the Toltec Mounds station since 1986. She works with Dr. Rolingson on many aspects of station management, from daily operations to data entry and database management and laboratory work. Ms. Whitlow contributed this year to the historic archeology project by sorting artifacts and preparing the historic material for transport to Fayetteville. She also assisted the Mound S project by rewriting parts of the computer database program, measuring artifacts in the lab, and scanning slides. Another important project is the transcription of aging handwritten field notes and other excavation records into the computer.

### Academic Service and Activities

By agreement with the University of Arkansas System, Dr. Rolingson holds a non-teaching appointment as Professor in the UAF Anthropology Department. She provides assistance to students with thesis and other projects related to Toltec Mounds, Plum Bayou culture, and archeology of the Central Mississippi Valley and Mid-South region. She served on Robin McMullen's (UAF) thesis committee and assisted Dr. George Sabo (UAF) by providing material for analysis in historical archeology class projects.

### Service to Arkansas Department of Parks and Tourism

Rolingson is the primary resource person for all interpretive development at Toltec Mounds State Park, and assists State Parks staff with other matters pertaining to archeology. This year she contributed to a teacher information booklet, a program on the dugout canoe exhibit at the park, information for Louisiana Purchase Bicentennial programs, a wildlife brochure, and various slide talks. She also provided a content outline and other assistance for a video about the park, produced by Camera One of Seattle under contract to Arkansas Parks and Tourism. Rolingson helped park personnel with plans for construction of a teaching pavilion, and with a status report to the National Park Service outlining recent development threats to Toltec, which is a National Historic Landmark.

### **Professional Service and Activities**

- Rolingson arranged and hosted three meetings at Toltec Mounds Park. One meeting was at the request of Arkansas Post National Monument staff, to discuss maintenance and care of mounds in park settings. The other two meetings were requested by staff members from Poverty Point State Commemorative Area in Louisiana and the Mississippi Department of Archives and History; both meetings were consultations with J. Michael Howard of the Arkansas Geological Commission.
- Rolingson participated in a meeting with Survey staff and representatives of several American Indian tribes concerning NAGPRA procedures.

#### Public Service and Outreach

- Rolingson took part in long-range planning for development of the Public Education program at the Survey Coordinating Office.
- Service to the Arkansas Archeological Society included one day hosting the information booth at the State Fair, meeting with the Station Advisory Board, and a paper presented at the Society annual meeting in Hot Springs.
- Rolingson gave public lectures, demonstrations, or tours to audiences totaling about 260 people, including grade school classes, college classes, a teacher workshop, and public programs. Programs at Toltec Mounds Archeological State Park included the fall and summer solstice events, an Archeology Week event, UALR Summer Laureate Third Grade, Hendrix College, and Florida State University. Other programs were presented at Lakewood United Methodist Church (Sunday School for lower grades), Archeology Week at the Children's Museum in Little Rock, and a Department of Arkansas Heritage teacher's workshop about Colonial period Indians in preparation for the Louisiana Purchase Bicentennial.

### ARKANSAS STATE UNIVERSITY

Dr. Juliet Morrow, Station Archeologist John Thomas, Station Assistant

The ASU research station covers 15 counties in northeastern Arkansas. American Indian cultural development from 12,000 B.C. to historic times and early Euro-American settlement are represented in the site records. Among the well-known archeological resources are Sloan, a Dalton period mortuary site that is the oldest known cemetery in North America, and the King Mastodon, which was briefly featured in the April 2000 *National Geographic* magazine. A large number of sites in station territory 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.

### CURRENT RESEARCH

#### Excavations at the Jarrett Site

Excavations at the Jarrett site in Randolph County began in June and continued through the fall of 2001. The project was extremely successful, thanks to a large group of committed volunteers and a gracious landowner, Mr. Sherman Stone, who allowed the crews to excavate in the course of land-leveling operations for agricultural purposes. This project is one of several recent successful salvage efforts that illustrate how cooperation between the Survey and landowners can preserve information from a threatened site without disrupting agricultural operations.

The work at Jarrett was also coordinated with the Quapaw Tribe, who have NAGPRA responsibility for remains in this part of the state. The site is a Mississippian village. Features noted include wall-trench houses with interior hearths, trash and storage pits, and graves. The burials were not well preserved, having been robbed and looted sometime in the past. In addition to graves scattered around the village, there were several discrete cemetery areas.

Excavation proceeded in stages as the landowner stripped the surface down to grade. As each stage of leveling was complete, Tim Mulvihill (Parkin station assistant) mapped the site with a Total Station transit. Hundreds of person-hours were donated to help shovelskim the stripped surface and hand excavate the prehistoric features. Volunteers included Arkansas Archeological Society and Central Mississippi Valley Chapter members, and citizens from the communities of Jonesboro, Paragould, Walnut Ridge, and Wynne.

Jarrett is the most temporally discrete site Morrow has seen since coming to Arkansas in 1997. The features and artifacts appear to belong to the Middle Mississippi period (ca. A.D. 1100-1350). One radiocarbon date obtained so far supports this date. More dating samples were collected but not yet analyzed.

A brief report by Morrow will appear in *Field Notes*, the newsletter of the Arkansas Archeological Society. She plans to seek funds for additional radiocarbon dates and specialist analysis of the abundant animal bones and plant remains collected from the storage and trash pit features. This will provide a fuller picture of domestic life in a 900-year-old village in northeastern Arkansas.

### Did Paleoindians Use Boats in the Mississippi Valley 11,000 Years Ago?

Juliet Morrow and her husband, archeologist Toby Morrow, presented a paper at the Midwest Archeological Conference in LaCrosse, Wisconsin, titled "Water Transport and Early Paleoindians? Evidence from the Mississippi River Valley." Their paper responded to suggestions by other researchers that boats were probably known to Early Paleoindians who lived in North America around 11,000 years ago. These and other new ideas have been challenging the traditional perception of Early Paleoindian lifeways.



Volunteer crew members Cloyis Daughetee and Tony Marshall uncover deer bones and antlers in a prehistoric refuse pit during salvage excavations at the Jarrett site in Randolph County.

The Morrows' paper addressed the question not for coastal areas but for the midcontinental states bordering the Mississippi River. They mapped the distribution of over 1000 Early Paleoindian fluted points and identified the geological source areas of the stone used to make them. Many distinctive stone types were used by Paleoindians, who either carried or traded them over long distances But, the Morrows' asked, did these stone types move across large rivers such as the Mississippi?

The answer was an equivocal "yes"—but not by boat. A few stone types found naturally on one side of the Mississippi occurred as fluted points on the opposite side, but all of these were in the northern reaches of the drainage where the river freezes from bank to bank during winter and the Paleoindians could have walked across. Farther south, the Mississippi (and other large rivers such as the Ohio) appears to have been an effective barrier against travel and trade in this time period. This evidence, combined with the lack of boat-building implements in the known Early Paleoindian tool kit, led the Morrows to conclude that the early inhabitants of midcontinental America did not build or use watercraft.

### Other Research

Agricultural activity within station territory means that there are always sites threatened by land-leveling. Station staff monitored six sites so threatened, and conducted excavations at two of them (including Jarrett), all in cooperation with landowners. Survey of a 400-acre area in Lawrence County prior to leveling resulted in 13 new sites recorded.

Analysis of materials from two seasons of Training Program excavation at the Greenbrier site in Independence County continued. Station assistant John Thomas and volunteers Robert Taylor and Michelle Jackson are working on this project. Monte Abbott, anthropology graduate student at Washington University, St. Louis, finished his master's thesis on the plant remains from Greenbrier, while UAF graduate student Dawn Novak continued analysis of the animal bones for her thesis.

New locations were recorded for fluted point finds in southeastern Missouri and western Arkansas. This work is part of Morrow's long-range study of Paleoindian land and resource use patterns in the area. She and Toby Morrow compiled maps showing the distribution of known fluted points and the different raw materials they were made from.

Processing and analysis of all materials excavated at the King Mastodon site was completed. New plans were made with Dr. Moye Rutledge (UAF) for geological coring at the site to discover precisely how the animals come to be in that location. Since there were no artifacts or other direct sign of hunting by humans, it will help to understand whether natural processes alone can account for the site.

Station projects at the Elmo Hurst site (Randolph County), the Nicholson site (Jackson County), and Atlatl Knoll (Clay County) also continued.

### ASU STATION PERSONNEL

Juliet Morrow received her Ph.D. in 1996 from Washington University in St. Louis. She 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 Corps of Engineers. Morrow's background in earth sciences provides expertise in geoarcheology, geomorphology, and site formation processes. Much of her archeological work has focused on the Paleoindian period, which involves multidisciplinary understandings of hunter-gatherer lifeways, stone tool technology, and Pleistocene/Early Holocene ecology. She and archeologist husband Toby Morrow are also interested in experimental stone tool replication and use.

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 now is the station's archeological assistant. Thomas assists with all aspects of general station operation, field and laboratory work, outreach activities, including many talks at public schools, and service to the ASU Museum. He assists Morrow with class preparations and contributes occasional lectures to her anthropology classes at ASU. Thomas also works with the Central Mississippi Valley Chapter of the Arkansas Archeological Society.

### Grants, Honors, and Awards

Small grants from Dr. Patty Jo Watson, Dr. Jim Cherry and the Northwest Arkansas Archeological Society, and Shirley and Tom Townsend were used for radiocarbon dates for Anzick and Jarrett sites, and for other chemical tests and scanning electron microscope work on materials from Anzick site.

### Academic Service and Activities

- By agreement with the University of Arkansas System, Juliet Morrow has a faculty appointment as Assistant Professor in the UAF Anthropology Department. In Spring 2002 she taught three courses for the Department of Criminology, Sociology, Geography and Social Work at ASU: Native American Cultures of the Mid-South, with 6 students; Introduction to Archeology, with 20 students; and Introduction to Physical Anthropology, as a Readings course, with 2 students. Morrow taught Special Problems during the fall, spring, and summer sessions; these students (Ashley Angelo and Brenda Carson) completed original research projects.
- Morrow assisted graduate students Monte Abbott (Washington University) and Dawn Novak (UAF) with thesis projects.
- Morrow and Thomas provided assistance as needed to the ASU Museum. Morrow led a tour of the Archeology exhibit for visiting Russian students. She also gave a tour and talk about the station and its collections to the Museum Collections Management course taught by ASU Museum staff.
- Morrow and Thomas provided several guest lectures at ASU. Morrow spoke to Dr. Sarah Wilkerson-Freeman's graduate seminar in Delta History. Morrow and Thomas presented lectures to Radiology students in preparation for summer fieldwork salvaging mummies in Peru. Thomas presented a guest lecture in Dr. Rick Burns's Introduction to Cultural Anthropology class, and several lectures in Dr. Mary Donnehey's sociology classes. Thomas gave lectures and led a tour for seven students in ASU's Center for English as a Second Language.

### **Professional Service and Activities**

- Morrow reviewed submissions for the journals *Latin American Antiquity* and *American Antiquity*. She also reviewed a monograph to be published by Missouri State University, and a report on a Paleoindian site in Illinois.
- Morrow presented a lecture to the World Archeology class and an Anthropology Colloquium at Washington University in St. Louis.

#### Public Service and Outreach

- Thomas presented lectures on archeology and American Indians to students at Blessed Sacrament School, Westside High School, Greene County Tech, Girl Scouts at Blessed Sacrament, Boy Scout Troop 4, the Methodist Men's Club of Jonesboro, and the Association of Retired Federal Employees, Jonesboro (combined audiences over 300).
- Morrow gave four lectures at the Seven Rivers Boy Scout "Camporee" at Crowley's Ridge State Park (about 110 scouts and leaders).

- Morrow served as a Vice President on the Executive Board of the Missouri Archaeological Society. She wrote two pamphlets on American Indian pottery and stone tools for distribution to the public, and organized a Missouri Archaeology Month symposium on Paleoindian Archeology (held in September 2002).
- Morrow presented a lecture at the Iowa Archeological Society's annual meeting. She and Toby Morrow presented a flintknapping demonstration at the same meeting.
- Morrow and Thomas worked with students, Society members, and others who volunteered over 1800 hours to ASU station field and laboratory projects.
- Morrow organized nine meetings for the Central Mississippi Valley chapter of the Arkansas Archeological Society. She gave the program for one meeting and recruited speakers for the remaining eight.

Morrow was guest speaker at a monthly meeting of the Kadohadacho Chapter of the AAS in Magnolia. Morrow contributed two articles to the AAS newsletter *Field Notes*.

### **BLYTHEVILLE AEROPLEX STATION**

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

The tenth and newest Survey station, located at the Arkansas Aeroplex on the decommissioned Eaker Air Force Base, opened in July 1999. The air base property incorporates a number of significant, well-preserved archeological sites. The station is responsible for Mississippi and Crittenden counties in northeast Arkansas. These two counties 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. Two of these (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. It is hoped that the new station will develop alongside a proposed National Park and Archeological Heritage Center that would interpret the rich cultural and archeological heritage of the Lower Mississippi Valley.

### CURRENT RESEARCH

### New Quarters Add Needed Space

The year began with a move to new quarters on the decommissioned Eaker Air Force base. Station headquarters now sit on the bank of Pemiscot Bayou, surrounded (appropriately) by archeological sites. About 2000 square feet was gained in the move, including a large space to serve as curation area for archeological collections from Mississippi and Crittenden counties.

### The Tinsley 1 Site: Archeology and Earthquakes

In August 2001 the station gladly accepted funding offered by the Midwest Archeological Center of the National Park Service to explore a Late Mississippian site. Tinsley 1 is a small site with about 50 artifact clusters exposed on the ground surface and considerable evidence of ancient earthquake activity. Project goals were to map the site, identify subsurface cultural features using geophysical prospection technologies, and find out whether the remote sensing results would be useful in identifying archeological features buried below the earthquake-produced liquifaction features called sand blows—that are common to the area.

Mapping and remote sensing in December were followed by test excavations. Jami Lockhart directed the geophysical survey, which revealed several subsurface anomalies that were interpreted as prehistoric houses. There were also some dramatic linear signatures tentatively identified as earthquake fissures. The remote sensing allowed precise placement of test units to address the specific research questions. Excavation confirmed the interpretations of the geophysical anomalies and demonstrated unequivocally the presence of an earthquake fissure cross-cutting a Mississippian house.

The work at Tinsley 1 proved that geophysical techniques are extremely useful even at sites that have been disturbed by plowing. It was also proved that remote sensing techniques work very well to distinguish areas of fragmentary burned clay house construction materials—just as well, in fact, as they do at detecting the more intact expanses of burned clay house floors that have been found at sites in southwest Arkansas.

Perhaps the most dramatic success of the remote sensing at Tinsley 1 was in detecting earthquake features. The linear sand-filled earthquake crack on the west side of the site showed up clearly in the imagery, even when it was not evident on the ground surface.

#### Geoslicing: More Earthquake Research

Dr. Payne and assistant Marion Haynes served as archeological consultants in an international collaborative effort of the Center for Earthquake Research and Information, the U.S. Geological Survey, and the Geological Survey of Japan. This project investigated earthquake effects by a technique called "geoslicing." The Geoslicer device, developed by Fukkon Corporation of Japan, is hammered into the ground to depths of up to 30 feet, and pulls up a slab of buried sediment for analysis. The technique is especially valuable for the New Madrid Seismic Zone, where a shallow water table usually restricts subsurface sampling to the upper six feet of soil. Geoslicing on archeological sites provides a ready means to date the sediments on the basis of artifacts, and other samples which can be subjected to radiocarbon analysis. Archeology benefits as well, by obtaining new information about the ancient people and their landscapes.

Geoslicing was performed at two sites in the Blytheville station, where soil liquefaction and sand blows caused by earthquakes are common. The sediment "slices" pulled up revealed soil layers in ancient contexts that closely resemble features left by the devastating 1811-1812 New Madrid earthquakes.

This cooperative research ultimately will help scientists to predict the frequency and periodicity of severe quakes in the region. By studying how the ground behaves during a quake, we can learn to estimate potential damage and perhaps to build more earthquake-resistant structures in the future.

The Geoslicing project at Blytheville was reported in a poster session at the 2002 meeting of the Seismological Society of America. Payne and Haynes were among the co-authors.

#### Sites and Sand Blows

Archeological sites in earthquake-active areas such as the New Madrid Zone may be both damaged and protected by phenomena known as "liquefaction" and "sand blows." At Tinsley 1, for example, a Mississippi period house was bissected by an earthquake fissure. At the same time, sites buried beneath sand blows during earthquakes may escape the plow and thus are better preserved (parts of them, at least) than would otherwise be the case.

It is staggering to imagine the violence of the seismic activity that produced these features. Liquefaction occurs when sediment grains actually float in ground water. The soil loses solidity and behaves as a liquid, moving in waves. Sand blows result when pressurized jets of groundwater break the surface, spraying mud and sand like geysers over areas several meters across. At the same time, subsidence or sinking in of the liquified soil occurs, and what was once a continuous ground surface is broken up like a gigantic jigsaw puzzle, with some pieces pushed down and deeply buried. One result on archeological sites is the curious effect of finding the recent occupation layers underneath more ancient ones—the opposite of normal stratigraphy.



Claudine Payne (center) shows a group of Blytheville Intermediate School students how to sift for artifacts during a visit to the Tinsley 1 site excavation.

### **BLYTHEVILLE STATION PERSONNEL**

**Claudine Payne** received her Ph.D. in 1994 from the University of Florida. She joined the Survey in 1999 to run the Blytheville Aeroplex research station. She has 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 American Indian population 500 years ago.

Marion Haynes is 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. In 1995-97 he worked for Midcontinental Research Associates, surveying sites on the Eaker air base property. He joined the Survey in 1999. His familiarity with the area's people and landscape have been vital assets in development of the new research station.

### Academic Service and Activities

By agreement with the University of Arkansas System, Claudine Payne holds a non-teaching faculty appointment as Assistant Professor in the UAF Anthropology Department. Like all station archeologists, she is available to assist students with research projects in station territory. Payne contributed a guest lecture to the Arkansas History class at Mississippi County Community College.

#### **Professional Service and Activities**

- Payne delivered papers at annual meetings of the Arkansas Archeological Society, the Southeastern Archaeological Conference, and the Arkansas Historical Association.
- Payne and Haynes co-authored, with several others, a poster presentation at the Seismological Society of America. Payne served as Chair of the Survey's Publications Committee and participated in the Survey's Public Outreach Planning Group. She was a member of the Media Relations Committee of the Society for American Archaeology and prepared a report on the SAA website for the Committee Chair.

### Public Service and Outreach

- A large part of Blytheville station activity involves community outreach. This year the station received about 100 visitors. Payne and Haynes served on the Blytheville-Gosnell Chamber of Commerce's Archeology/Heritage Committee to explore development of heritage tourism in the region. Payne worked with the Mayor's office, the committee, and the architects in planning of the Blytheville Heritage Center and Museum.
- At the request of former State Rep. Ann Bush, Payne attended an event for Governor Huckabee and spoke briefly with the Governor about issues concerning archeology in the area.

Payne and Haynes worked with volunteers who contributed 66 hours to station research, mostly at Tinsley 1. Payne and Haynes consulted with The Archaeological Conservancy about potential acquisition of sites in the area.

- Payne is the archeological consultant for the Blytheville Public School District's NEH-funded Schools for a New Millennium program "Linking the Past to the Future: Teaching Archeology with 21st Century Technology in the Mississippi Delta." Payne reviewed materials and advised the pilot team on curriculum revisions. As part of the project, Payne gave a week-long series of presentations to about 600 5th and 6th graders at Blytheville Intermediate School.
- Payne presented lectures and/or station tours to Blytheville Intermediate School students in the Gifted and Talented Program, 7th and 8th grade students at Lamplighter Montessori School in Memphis, participants in The Archaeological Conservancy's "Peoples of the Mississippi Valley" tour, and the Blytheville Kiwanis Club (combined audiences about 175).
- Haynes presented talks to the Montessori School, the Osceola Rotary, and the Archaeological Conservancy tour group (combined audiences of 103).
- Payne taught a Basic Excavation seminar and supervised fieldwork at the joint Survey/Arkansas Archeological Society Training Program at Grandview Prairie. She also volunteered for a day at the Survey/Society information booth at the Arkansas State Fair.

Payne participated in an Archeology Week event at Parkin Archeological State Park.

Payne gave a talk at the Malden Bootheel Youth Museum for Missouri Archeology Month (audience about 40).

### UNIVERSITY OF ARKANSAS AT PINE BLUFF

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

The UAPB research station is responsible for an eight-county region of east-central Arkansas extending from Little Rock to the Mississippi. 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 is especially rich, beginning with the Paleoindian period about 10,000 B.C. and continuing through the entire cultural sequence. Among the important protohistoric and early historic manifestations are French Colonial sites associated with Arkansas Post, the earliest European settlement in the Lower Mississippi Valley, and Menard-Hodges, an American Indian site that has been identified as the 17th century Quapaw village of Osotouy that was linked with Arkansas Post.

### CURRENT RESEARCH

### French Colonial Arkansas: Menard Locality/ Osotouy Research

More evidence has accumulated for interactions between American Indians and French traders at two sites in the Menard Locality, one of which may turn out to be the remnants of the original 1686 Arkansas Post.

House continued analysis of colonial era artifacts from American Indian graves at the Lake Dumond site, located near the Menard-Hodges mound. (Reports on the artifacts and the human remains have been submitted to the Quapaw Tribe.) One of the newest clues consists of red mineral pigment found in two of the graves. Samples were sent to Dr. Glen Akridge in Fayetteville, long-time member of the Arkansas Archeological Society. Atomic absorption spectroscopy of the samples, performed by Akridge, revealed a high mercury content, which supports identification of the pigment as vermilion obtained in trade from the Europeans.

A second site, Wallace Bottom, was discovered in 1998 by a Survey and Arkansas Archeological Society team. The site is in the floodplain adjacent to Menard-Hodges, on land that is now part of White River National Wildlife Refuge. House has devoted much attention to the site, which yielded both American Indian and French Colonial artifacts. These materials may represent a single occupation dating to the time of French military presence on the Little Prairie in the decades leading up to 1749.

By correlating modern topographic features in the Wallace Bottom area with features recorded by United States General Land Office surveyors in 1840, it was possible to determine that the site is located on the bank of the former Gordon's Lake, which may be the Colonial era channel of the Arkansas River. Wallace Bottom is a likely candidate for the late 17th century Arkansas Post/Osotouy village site.

#### New Work at Wallace Bottom

House and Farmer returned to Wallace Bottom in the winter of 2000-2001. A systematic surface collection was made. Dr. Ken Kvamme of the UAF Department of Anthropology and the Survey's Jami Lockhart brought a team of UAF students to conduct archeogeophysical remote sensing surveys on a portion of the site. House completed a report on this work for the U.S. Fish and Wildlife Service.

During 2001-2002, the artifact collection from the site was processed in the UAPB station laboratory and the data encoded in the Survey's AMASDA database. A metal artifact was conserved by Jared Pebworth at the Survey's Coordinating Office. And the Pine Bluff Project Office of the U.S. Army Corps of Engineers contributed to the project by conducting a survey to establish elevation benchmarks. (Permanent benchmarks are essential for coordinated mapping of multiseason fieldwork projects.)

House and Farmer, along with the Survey's geophysical mapping team, returned yet again to the site early in 2002. Staff of White River National Wildlife Refuge assisted in fieldwork that extended the earlier remote-sensing survey project. The entire site has now been covered by geophysical mapping crews. Soil coring helped establish the western margin of the site. With advice from Kvamme and Lockhart, House selected one of the geophysical anomalies for "groundtruthing." Excavation on the anomaly revealed a segment of a linear feature containing abundant American Indian artifacts. Plans for 2003 include more extensive investigation of this feature, which may be either an Indian house wall trench or a French poteax-au-terre structure foundation. This work will proceed under sponsorship of the Quapaw Tribe of Oklahoma.



John House (in the test pit) and Arkansas Archeological Society volunteers at Wallace Bottom.

### The Curtiss Collection: Arkansas Pottery at Harvard University's Peabody Museum

In 2001, curators at the Peabody Museum invited House and other Survey archeologists to study a collection of over 800 pottery vessels and other artifacts collected from Cross County by Edwin Curtiss in 1879-1880. These materials, from what may be considered the first scientific archeological investigation in the state of Arkansas, have resided in the Peabody collection for more than a century but have never been systematically studied.

House proposed an analysis of some 60 effigy vessels in the collection. These are pottery vessels with animal, anthropomorphic, or other recognizable shapes either comprising the vessel body or as decorative elements on the rim. A pilot study of three effigy vessels in the Stuttgart (Arkansas) Agricultural Museum established procedures. House and Farmer traveled to the Peabody in August 2001 to begin recording the Curtiss Collection effigies.

The summer 2001 work resulted in an agreement that House will write a volume on the Arkansas effigies



John Miller, archeologist with the Arkansas Highway & Transportation Department and a well-known expert on prehistoric ceramic technology, uses local clay to create a reproduction of an effigy vessel.

for the Peabody's new Collection Series, to be published in 2003. The focus of the study will be the artistic system or visual "language" underlying the production of these artworks. To explore this process, House collaborated with John Miller, archeologist for the Arkansas Highway and Transportation Department and an expert on American Indian pottery technology, who created experimental replicas of Mississippian effigy vessels.

House plans to use his analysis of the Curtiss effigies as the nucleus of a more wide-ranging study of regional interaction within the larger social and political networks of Mississippian culture systems. The costs of the Curtiss Collection research are to be underwritten by the Peabody Museum.

#### **Thermoluminescent Dating Project**

The UAPB station collaborated with Dr. James Feathers, University of Washington-Seattle, in a pilot study to date Mississippian farmstead sites by thermoluminescence. (The Parkin station is participating in the same project, working with Dr. Robert Dunnell.) Samples from eight sites in Lee County were collected and submitted to Feathers for the study, which will improve the accuracy of thermoluminescent dating by calibrating it with radiocarbon results. The sites are in the UAPB station's Lower St. Francis Project area, so the work contributes to another of House's long-term research projects—a study of prehistoric Mississippian culture settlement, economic, and political change in this Mississippi River floodplain landscape.

### **UAPB STATION PERSONNEL**

John H. House has been involved with Arkansas archeology since 1964 when, as a Mountain Home High School student, he attended the first ever Arkansas Archeological Society Training Program. He received his Ph.D. in 1991 from Southern Illinois University at Carbondale. House joined the Survey in 1978 as a research assistant at the UAPB station. He was station archeologist at UAM from 1983 to 1985, and again during 1988 after taking some time off to travel in South America. In 1989 he returned to UAPB as station archeologist. His research interests include North American prehistory, cultural ecology, cultural evolution, and material culture studies.

**Mary Farmer** returned to the Survey 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 Training Program. She has also studied historic domestic artifacts and has experience restoring prehistoric ceramic vessels.

#### Academic Service and Activities

- By agreement with the University of Arkansas System, John House has a faculty appointment as Associate Professor in the UAF Anthropology Department. He teaches in the Department of Social and Behavioral Sciences at UAPB, where Fall 2001 and Spring 2002 sections of Introduction to Anthropology drew 45 and 39 students, respectively. The course is a requirement for majors in the Social and Behavioral Sciences area.
- House has been a participant in the UA System's Teaching Scholars in Distance Learning Program since 1999. In Spring 2002 he worked with UAPB's distance education coordinator Tanya Colen to put up a course website on UAPB's WebCT server. Anthropology students were able to download and print assignments, study guides, and other course materials, as well as link to other assigned websites.
- House helped arrange a National Park Service archeological internship for a UAPB student from Lee County. The student participated in excavations at Chillicothe, Ohio during summer 2002.
- House joined other UAPB faculty in training to prepare education majors for the PRAXIS examination administered by the state for licensure of teachers.
- House and Farmer completed their involvement in the Pine Bluff Arsenal project, a contract awarded by the Army to UAPB's Department of Social and Behavioral Sciences. House led the archeological fieldwork and analysis. The final report, by House, Farmer, and Peggy Lloyd, was accepted.

#### **Professional Service and Activities**

House was a member of the Survey's Publications Committee.

#### Public Service and Outreach

- House's consultation with The Archeological Conservancy turned to a new project, the Big Creek site in Cleveland County. House revisited the site and secured permission for Conservancy representatives to visit the land. House also hosted a visit to Menard-Hodges by about 30 participants in the Conservancy's Lower Mississippi Valley tour.
- House completed lengthy collaboration with Jefferson County Historical Museum to develop an exhibit on the American Indian heritage of Jefferson County. He repaired American Indian ceramic vessels in the museum's collections. House continued to serve on the museum's Acquisitions Committee.
- House assisted Glenn Tanner and Sue Foster, Heritage Resource Technicians for the Ozark-St. Francis National Forest, with documentation of prehistoric pottery vessels in the Marianna-Lee County Museum.
- House acted as consultant to Michael Baker and Associates, a private research firm conducting archeological mitigation in the projected I-69 connector route through south Arkansas.
- House assisted the Quapaw Tribe of Oklahoma in securing a tribal historic preservation grant from the National Park Service to support further fieldwork at the Wallace Bottom site. A planning meeting to develop the grant proposal involved House, Quapaw Tribal Council and NAGPRA representatives, other Survey staff members, and representatives from White River National Wildlife Refuge and Arkansas Post National Memorial. Fieldwork will be carried out by the Survey, with consultation and regular visits by Quapaw tribal members.
- House consulted with John Riggs of the National Resources Conservation Service on conservation of several archeological sites affected by farmland improvements.
- Farmer and House assisted Chester Shaw of the Pine Bluff Project Office, U.S. Army Corps of Engineers, with fieldwork and documentary research on a site at Lock and Dam No. 4 in Jefferson County.
- Throughout the year, House consulted with U.S. Fish and Wildlife Service personnel regarding management of sites in White River National Wildlife Refuge, especially the Wallace Bottom and Baytown sites.
- Throughout the year, House continued to consult with Arkansas Post National Memorial superintendent Ed Wood on management of archeological sites in the Osotouy Unit.
- House and Farmer inventoried American Indian pottery vessels in UAPB collections in accordance with NAGPRA repatriation requirements. House attended a meeting in Fayetteville with Quapaw and Caddo tribal representatives to discuss these matters.
- Farmer gave presentations at the annual meeting of the Arkansas Archeological Society, Gandy Elementary kindergarten class in Pine Bluff, Marion High School seniors in Marion, Texas, Marion Middle School science classes, Cleveland County Historical Society, and the Pine Bluff Project Office of the U.S. Army Corps of Engineers (combined audiences of about 207).
- House gave presentations at the Lakeside Methodist Church Shepherd Center in Pine Bluff, Jefferson County Historical Museum, Stuttgart Rotary Club, and the UA-Phillips County Community College Lecture series (combined audiences of about 117).
- House and Farmer hosted a Lab Day and annual evaluation visit by the station's Arkansas Archeological Society Board of Advisors.
- House volunteered at the Society/Survey booth at the Arkansas State Fair.
- House assisted Hester Davis with editorial matters for the Society's newsletter, Field Notes.
- House and Farmer, throughout the year, worked with Society member Diana Moxely to help make local arrangements for the annual meeting, held at Pine Bluff in September 2001. Both House and Farmer delivered papers at the meeting, and House presented the Society's McGimsey Preservation Award to Arkansas Post National Memorial and White River National Wildlife Refuge (both nominated by him to receive the award).
- House taught the Basic Excavation seminar and supervised fieldwork at the Society/Survey annual Training Program at Grandview Prairie Wildlife Management Area in Hempstead County.
- Farmer also supervised excavators at the Training Program.
- Farmer served as Vice President of the Southwest Arkansas Tunican Chapter of the Arkansas Archeological Society.
- House and Farmer worked with volunteers who contributed 635 hours to station research in the field and laboratory.

### UNIVERSITY OF ARKANSAS AT MONTICELLO

Dr. Marvin D. Jeter, Station Archeologist James M. Phillips, Station Assistant (through February 2002)

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. These contain numerous small to moderate sized habitation sites and occasional mound centers dating to the later prehistoric and protohistoric periods. Several mound sites are mentioned in the reports of Victorian era archeological teams. The western two-thirds of station territory are uplands of the West Gulf Coastal Plain, dissected by the Saline-Ouachita drainage and its tributaries. This area contains some older Archaic sites as well as the later sequence. Among many significant sites in station territory, the small Lake Enterprise Mound near Wilmot, affiliated with the famous Poverty Point site in northeastern Louisiana, may be the oldest known mound in Arkansas. At the recent end of the archeological record is the Taylor or Hollywood Plantation, a National Register site with an antebellum log home and habitation remains recording the lifeways and culture of African-American slaves.

### CURRENT RESEARCH

### Maxwell-Best: A Possible Choctaw Village

This suspected Choctaw village site in Lincoln County was "discovered" by amateur archeologist James Best of Star City, who found clues to its existence while studying 19th century land surveyors' notes. Fieldwork over several visits to the locality eventually turned up Euro-American trade goods, suggesting the possibility of an Indian community in the relevant time period. These artifacts included forged square nails, bottle glass, a gunflint and side-plate from a flintlock rifle, lead blobs, a bone-handled folding knife, and a thimble converted into a "tinkler" ornament like those that were sewn onto American Indian clothing in the Colonial era. There were also American Indian ceramics of a type consistent with Choctaw pottery of the period, and a concentration of hard-fired daub-like clay that may indicate the remnants of the "mud-cat" chimney of a log cabin.

Dr. Joe Saunders of the Louisiana Division of Archaeology loaned a Total Station transit for contour and vegetation mapping of the site. In fall of 2001, Jeter and Phillips were able to complete the contour map. Dr. Eric Sundell, botanist at UAM, helped complete the vegetation survey.

Finally, Arkansas Archeological Society members Ed and Patsy White worked as volunteers to help Jeter carry out some minor test excavations at the site. Much more work needs to be done at this important site, which is thought to be a rare example of the brief Choctaw refugee occupation in Arkansas during the middle of the 19th century.

### More on Lake Enterprise: Arkansas's Oldest Known Indian Mound

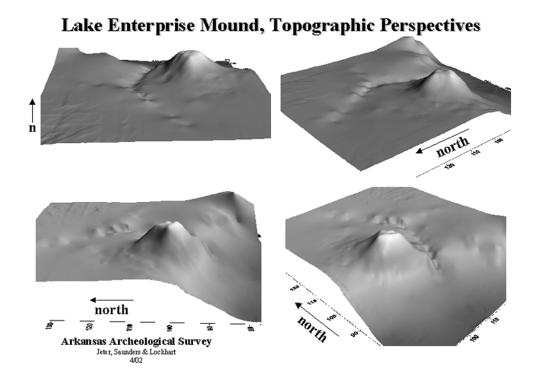
Research over the last decade at this small mound in Ashley County has been one of the UAM station's most important projects. The site is related to Poverty Point in northeast Louisiana, one of North America's most intriguing prehistoric manifestations. Poverty Point's large and unique semicircular earthworks are the earliest such structures in the U.S., and Lake Enterprise may prove to be the oldest mound site in Arkansas, perhaps dating to ca. 1000 B.C.

Analysis of plant remains with scanning electron microscope was performed by Dr. Katherine Mickelson of Ohio State University, who also made Optical Zoom photographs prior to sending some of the specimens for radiocarbon analysis—which may provide a concrete date for the site, but destroys the specimens.

During spring 2002, mapping and geophysical remote-sensing surveys were carried out at the site. Jeter cleared weeds in preparation for April's visit by Jami Lockhart, director of the Survey's archeogeophysical research program. Members of the Southeast Arkansas Tunican Chapter of the Arkansas Archeological Society and of the Louisiana Archaeological Society's Northeast Louisiana Chapter helped with the remote-sensing fieldwork. Electrical resistance, electrical conductivity, magnetic susceptibility, and magnetometry readings were performed over several grids both on and off the mound. Preliminary maps of subsurface anomalies generated by these technologies reveal some likely spots for ground-truth excavations.

During the same period, topographic mapping data were collected by Dr. Joe Saunders of the Louisiana Division of Archaeology's Northeast Louisiana Station (based at the University of Louisiana-Monroe) with a Total Station laser transit. Again, members of the Louisiana Archaeological Society helped. A preliminary topographic map generated from these data already provides more detail than Jeter's 1997 optical transit map.

Saunders's detailed topographic data will be used by Lockhart as a base map to generate final, highresolution versions of the remote-sensing imagery. Test excavations guided by these results are planned for fall 2002, to explore which subsurface anomalies represent archeological features, and their nature.



Computer-generated images use topographic data to construct 3-D views of the Lake Enterprise mound.

### New Database Revives Research on Goldsmith Oliver 2

This protohistoric (early 1600s?) site on the Arkansas River floodplain near the Little Rock airport was the subject of a 1990 limited distribution report that has become something of an "underground classic." Moving toward a more comprehensive and more widely available publication has been hindered by limitations of the older computer database in which the artifact and spatial records were stored.

This year Phillips converted the old database to modern software formats, and Jeter began the laborious process of hand-plotting the distributions of artifact classes across the site. This process produced maps for studying the relationships among classes of artifacts, which are the primary clues used by archeologists to understand activity patterns and the history of occupation. The work is unfinished, but has already led Jeter to revise some of his ideas about the site and its relationships to other sites in the Arkansas and Lower Mississippi valleys.

#### The Borderlands Project

A new project will combine the efforts of UAM station with HSU and UAPB Survey stations and the Dallas County Museum in Fordyce. Jeter proposed the long-term, but low-intensity, project in order to explore a relatively neglected and poorly known area along the drainages of the Saline River and Moro Creek, where these three Survey station territories meet. Culturally, this is in the fluctuating border zone between the Lower Mississippi Valley and the Trans-Mississippi South archeological areas.

Initial plans for exploratory fieldwork had to be curtailed when UAM station assistant Jim Phillips resigned. But Jeter recoded one new site in the region, and conferred with HSU station archeologist Mary Beth Trubitt, who was planning a summer archeological field school at the Hughes Mound in the designated Borderlands area.



Marvin Jeter (right), with Jamie Mooney of Michael Baker Associates, on the I-69 connector road project.

### **UAM STATION PERSONNEL**

Marvin D. Jeter received his Ph.D. in 1977 from Arizona State University. He was UAM station archeologist from 1978 to 1983 and returned to the post in 1989. His extensive archeological experience in the Southeast, Southwest, and Midwest reflects eclectic interests. His research in Arkansas has focused on late prehistoric, protohistoric, and historic-contact periods in the Lower Mississippi Valley, but he has also studied the history of archeological exploration in the region and various aspects of African-American culture in the Southeast.

James M. Phillips received his M.A. in 2000 from the University of Mississippi. He previously attended Murray State University and worked at Wickliffe Mounds in western Kentucky. His research interests include American Indian architecture and symbolic iconography in Mississippian society, experimental archeology, prehistoric technology, and artifact replication. In February 2002, Phillips resigned from the Survey to take a position in Missouri.

### Academic Service and Activities

By agreement with the University of Arkansas System, Marvin Jeter has a faculty appointment as Associate Professor in the UAF Anthropology Department and teaches in the UAM School of Social and Behavioral Sciences. His courses in Spring 2002 were Cultural Anthropology, with eight students, and World Prehistory, with six. Jeter also serves on the UAM Museum Committee.

### **Professional Service and Activities**

- Jeter served as manuscript and/or publication reviewer for the journals *Southeastern Archaeology* and *Mississippi Archaeology*.
- Jeter provided professional advice or consultation to several private research firms: Geo-Marine, on a project in Chicot County for the Vicksburg District of the U.S. Army Corps of Engineers; Michael Baker Jr., Inc., on archeological survey and mitigation along the I-69 Connector route between Pine Bluff and Monticello; and Coastal Environments, Inc., of Baton Rouge, on a site in extreme northeastern Louisiana very near the UAM station territory.
- Jeter read and commented on draft reports by Dr. Joe Saunders (Louisiana Division of Archaeology) and Dr. T. R. Kidder (Tulane University).
- Jeter has chapters in three forthcoming edited volumes. At the invitation of Dr. Ives Goddard of the Smithsonian Institution's National Museum of Natural History, Jeter completed a chapter on "The Small Tribes of the Western Southeast" for the forthcoming *Southeast* volume of the Smithsonian's *Handbook of North American Indians*.

### Public Service and Outreach

- Jeter agreed to be on the advisory board for a grant proposal by the Mosaic Templars of America Building Preservation Association. MTA was headquartered in Little Rock and became the country's largest Black burial benefit organization in the 1920s. He has shared his research findings on MTA tombstones with the Association for a number of years.
- Jeter presented a program on American Indians of Colonial Arkansas to 12 teachers attending a Southeast Arkansas Education Service Cooperative workshop in preparation for the Louisiana Purchase Bicentennial.
- Jeter consulted with the Archaeological Conservancy about possible protection of sites within UAM station territory.
- Jeter continued service as Corresponding Secretary and Program Chair for the Arkansas Archeological Society's Southeast Arkansas Tunican Chapter. Jeter and his wife, Society member Charlotte Copeland, staffed the joint Survey/Society information booth for one day at the Arkansas State Fair.
- Jeter led the annual "Tunican Tours" field trip for Tunican Chapter members; the nine participants visited historical museums and sites in northwest Louisiana.
- Jeter attended the Survey/Society annual Training Program at Grandview Wildlife Management Area, where he taught the seminar on Arkansas Archeology.
- Jeter presented programs on Arkansas archeology, American Indians, and related topics to the Monticello Lions Club, Monticello Elementary School, and Monticello Intermediate School (combined audiences about 388).
- Jeter presented programs at a Louisiana Archaeology Week meeting in Minden, Louisiana, and a Mississippi Archaeology Month meeting at Winterville Mounds State Park in Greenville, Mississippi.

# Southern Arkansas University

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

The SAU research station is responsible for the archeological resources of 11 counties in southwestern Arkansas. Station territory stretches from the southern edge of the Ouachita Mountains to the Arkansas/Louisiana state line, and incorporates the Great Bend region of the Red River. The late prehistoric and protohistoric inhabitants within station territory were members of the Caddoan culture (in the west) and Plaquemine culture (in the east). Among important sites in SAU station territory is Crenshaw, the earliest known Caddoan ceremonial center.

# CURRENT RESEARCH

### Archeology on Grandview Prairie

The Grandview Archeological Project absorbed the lion's share of Schambach's research time this year. Most of the work has been at the Tom Jones site, an unusually well preserved Caddo mound group with a temple mound and at least five outlying mounds. Seven radiocarbon dates from the June 2001 excavations reveal that much of the house construction at the site occurred between A.D. 1400 and 1430. June 2002 was the second season of excavation at Tom Jones, under the purview of the joint Survey/ Arkansas Archeological Society Training Program. The work concentrated on uncovering more of the house remains discovered in three areas of the site in 2001, and was very productive. Artifact collections were enlarged, and food refuse of animal bone and floral remains, including carbonized corn and beans, was recovered. The houses were rectangular with large



Frank Schambach (left) and Marilyn Johnson, member of the Arkansas Archeological Society and participant in the Training and Certification Program, during excavations at the Tom Jones site at Grandview Prairie.

interior posts, which probably supported a gabled roof, and a central hearth. Other new findings include a consistent orientation of houses (about 35 degrees west of north), intentional burning of the houses, perhaps for ritual reasons, and the fact that several low rises scattered over the site may prove to be the locations of additional structures.

Preparations for the Training Program began several months earlier with mapping and archeogeophysical surveys. A combined crew of Survey personnel, Society volunteers, and UAF graduate students from Dr. Ken Kvamme's Near Surface Prospection class recorded 18 new sites on the Grandview property, and relocated two important previously recorded mound sites. Subsurface remote sensing was performed at several of the sites, including some additional areas at Tom Jones.

The Survey's role at Grandview, with essential help from Society volunteers, is to locate and evaluate archeological sites within the Wildlife Management and Prairie Restoration Project Area. This work is in cooperation with Arkansas Game and Fish Commission. So far, crews have visited and recorded information for over 30 prehistoric and historic sites. Among the historic sites, the Moore/Holman Place may prove to be the site of the main house and headquarters for the late 19th and early 20th century Grandview Plantation. It is located next to a segment of the "Old Military Road," or "Southwest Trail," which crosses the Grandview property, and includes a remarkably big well, about 8 feet in diameter, that was dug some 30 feet into the limestone bedrock.

One of the remarkable features about the Tom Jones and related nearby sites is their unusual distance from a source of running water. Continued research will explore the reasons behind these settlement locations. What drew people to this Blackland Prairie environs? Was it the prairie itself, and some combination of resources accessible there? Was it proximity to an important prehistoric trail (that later became part of the Southwest Trail)? Or was it both?

Preliminary reports on the Grandview research have already been presented at professional and other meetings, and in brief written summaries.

### Cranial Modeling Provides Ethnohistorical Clues

In an invited paper for the Southeastern Archaeological Conference symposium honoring the retirement of University of Georgia Professor Charles Hudson, eminent ethnohistorian of the Southeastern Indians, Schambach explored the ethnic and cultural roots of the 16th century Tula Indians in light of recent bioanthropological findings. The Tula were encountered by Hernando de Soto's 1541 expedition across Arkansas. Like several American Indian cultures, the Tula Indians practiced cranial modeling—binding of the head from birth to produce an aesthetically pleasing skull shape. (The practice has no adverse health effects.) The long and tapering skulls of the Tula intrigued the Spaniards. Their comments, recorded in diaries and memoirs, were noticed by Schambach as descriptions of a rare form of cranial modeling, called "circular modeling." According to a bioanthropological study published in 1997, this form was only practiced by the Spiroan peoples of eastern Oklahoma.

Tracing ethnic connections through the protohistoric era and back into prehistory is fraught with many difficulties, so clues like this can be extremely important. Schambach believes the evidence is enough to suggest Tula and Spiro were one and the same, and that the ancestors of the 1541 Tula Indians thus were the inhabitants of the famous Spiro site, which has produced some of the most exquisite of North American Indian artworks.

# The Poverty Point Interaction Sphere: Trade in a Late Archaic Culture

Another invited paper was presented by Schambach at a Symposium in memory of William Haag, one of the foremost Southeastern archeologists of the last generation and long a beloved professor at Louisiana State University in Baton Rouge.

Poverty Point, a circa 1000 B.C. site in northeastern Louisiana, is known for its huge earthworks arranged as concentric semicircles, along with other mounds and earthworks. The Poverty Point culture was part of an extensive trade network, as demonstrated by the abundance of stone (both tools and unworked raw material) brought into Poverty Point from sources all over the North American midcontinent. But what did the Poverty Point people contribute in exchange? Nothing in the archeological record has so far established a concrete answer, and various perishable goods, such as feathers, have been suggested as possibilities in the past. Schambach believes the answer is shell.

Gulf Coast shells are known to have been important trade items in the Late Archaic. Beads, cups, and other artifacts of marine shell are widely distributed on midcontinental sites, including many locations where the stone types collected at Poverty Point originate. The problem is, no shell has been found at Poverty Point. However, the poorly drained and highly acidic soils there would have destroyed any shell items left in the ground.

Schambach's paper calls attention to some other long-overlooked evidence of a major shell-working industry at Poverty Point. These are small burin-like stone tools that, along with sandstone saws and abraders, are abundant in the artifact assemblage. These implements are similar to tools found at shell-working sites in later Mississippian sites, and in the Southwest. It appears that Poverty Point may indeed have been a center for production of the shell beads, gorgets, engraved cups, and other items that found their way into so many Late Archaic sites.

### New Archeological "Exhibits" for the Web

Schambach accepted the invitation of Dr. Steve Black, editor of the Texas Archeological Research

Laboratory (TARL) website, "Texas Beyond History," to help create new Internet "exhibits" based on some of his research. The new websites will feature Schambach's work on the Crenshaw site—an early Caddo ceremonial center—and the Sanders site—a Texas site that Schambach links to Spiroan long-distance traders.

This project benefits the Survey and the Arkansas Archeological Society in several ways. TARL computers were used to digitize all of Schambach's best slides from Crenshaw. And the new cyber-exhibits will be linked to the Survey's and Society's main websites.



David Jeane (standing, left) works with local kids at a "sand box dig" he created for Imagination Station, an arts and education festival funded by the Louisiana Department of Culture, Recreation and Tourism at the Springhill, Louisiana, Civic Center. Jeane is chairman of the Springhill Historic District Commission.

## SAU STATION PERSONNEL

Frank Schambach recieved his Ph.D. in 1970 from Harvard University. He has been station archeologist at SAU since 1968, where his research has emphasized prehistoric Caddoan and pre-Caddoan cultures of the Trans-Mississippi South, including questions of Caddoan relationships with the complex mound-building cultures of the Mississippi Valley. He is an expert on ceramic typology and has built extensive regional study collections and a photographic archive of American Indian ceramics. Much of his research in the last decade has concentrated on trade networks linking the Trans-Mississippi South with the Southern Plains and Southwest cultural areas.

**David Jeane** earned his M.S. degree in Environmental Science in 1976 from Northeast Louisiana University and joined the Survey in 1997 as station assistant to long-time colleague, Frank Schambach. During a 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 the Arkansas Archeological Society, Louisiana Archaeological Society, Caddo Conference, and other organizations. His other areas of interest include research on South American mummies and 17th and 18th century English ceramics.

### Honors, Grants, and Awards

A \$2500 grant from the Arkansas Archeological Society's Research Fund was awarded for radiocarbon dating analysis of samples from the Tom Jones site.

### Academic Service and Activities

- By agreement with the University of Arkansas System, Frank Schambach has a faculty appointment as Professor in the UAF Department of Anthropology. He teaches two courses per year in the School of Liberal and Performing Arts at SAU. Introduction to Anthropology drew 32 students and North American Indians, 15.
- Schambach presented a lecture to 15 of Dr. Ken Kvamme's UAF Near Surface Prospection students on a visit to the Grandview Wildlife Management Area.
- Schambach served on Jami Lockhart's Ph.D. committee in the Environmental Dynamics Program at UAF. He will act as thesis advisor for Lockhart's dissertation project on the Tom Jones site.
- Schambach corresponded with Professor Samuel Wilson, University of Texas at Austin, on thesis topics for two of Wilson's students.
- Jeane was invited to present a series of eight lectures on Peruvian archeology and mummy research at the Center for Medical Imaging in Bioanthropology at Arkansas State University (124 attendees).
- Jeane developed and constructed two display cases of early southwest Arkansas historic artifacts in the SAU Library, as part of a program on "The Frontier in American Culture." He also set up two display cases of Caddo Indian pottery in the Art Building at SAU.
- Jeane chaperoned a field trip for students in the SAU History Department (7 participants), and served as a judge for the Southwest Arkansas Regional History Fair (200 attendees).

### Professional Service and Activities

- Schambach reviewed submissions for *Arnoldia*, the journal of the Arnold Arboretum at Harvard University, the *Arkansas Archeologist*, and *Pictures of Record*.
- Schambach reviewed an Arkansas Humanities Council minigrant proposal for Dr. Joyce Adams, director of the media library at SAU-El Dorado.
- Schambach provided assistance or information to the Smithsonian Institution's *Handbook of North American Indians* project, Ms. Connie Barlow, a freelance science writer (for articles in *Natural History* magazine and *Arnoldia*), Houston Museum of Science, Texas Archeological Research Laboratory, U.S. Army Corps of Engineers, St. Louis District, and Dr. Timothy Perttula of Frontera Archeology (a private research firm in Austin, Texas).
- Schambach gave a presentation on the Tom Jones site to Survey staff and representatives of the Caddo, Quapaw, and Osage tribes at a NAGPRA consultation conference at the Survey's Coordinating Office. Jeane also attended the meeting.
- With help of volunteers, Schambach and Jeane packed and returned, in two shipments, a large collection from 1939 excavations at the Bayou Sel site, on loan from Harvard University's Peabody Museum for more than 30 years. Both Schambach and Ann Early, former HSU station archeologist, used the collection extensively in

comparative studies.

Jeane was elected Secretary-Treasurer of the Society of Bead Researchers.

Jeane provided information to Dr. Elizabeth Pena of the University of New York at Buffalo, on research at the Sulphur River trading post.

### Public Service and Outreach

- Schambach presented public lectures to the Kadohadacho Chapter of the Arkansas Archeological Society and the East Texas Archeological Society. He presented lectures on four occasions at the Grandview Prairie Educational Center, including one to officials of the Arkansas Game and Fish Commission. Invited lectures were presented at Barton Library, El Dorado (for a humanities series "The Frontier in American Culture"), South Arkansas Community College, El Dorado (for a film and discussion series "Peoples of the New Lands"), and the Texas Archeological Research Center, University of Texas at Austin (combined audiences of 317).
- Schambach served as sponsor for the Kadohadacho Chapter of the Arkansas Archeological Society. He presented a paper at the Society's annual meeting in Hot Springs, and directed excavations at the annual Training Program at Grandview Prairie.
- Jeane was reelected President, Treasurer, and newsletter editor of the Kadohadacho Chapter of the Arkansas Archeological Society. He developed and presented a display of pottery vessels for the Arkansas Archeological Society meeting in Hot Springs (it was also exhibited at the East Texas Archeological Conference in Kilgore, Texas). He was co-director (with Schambach) at the 2002 Society Training Program at Grandview. He also volunteered at the Society information booth at the Arkansas State Fair.
- Jeane directed laboratory volunteers, who reconstructed most of the whole pots excavated during the 2001 Training Program and processed more than 200 soil flotation samples. Volunteers contributed 502 hours to station research projects.
- Jeane provided consultation or assistance to the Economic Development Office in Prescott, Arkansas, on the moving and renovation of the Nevada County Museum, and to the Old Town Cemetery Association of Lewisville and Arkansas Humanities Council, on recording of historic cemeteries.

Jeane served as Treasurer of the Louisiana Archaeological Society and attended Executive Committee meetings.

Jeane served as Director of the City of Springhill (Louisiana) Historic District Commission. With grant funds from Louisiana Department of Culture, Recreation, and Tourism, he created a sand box archeological dig for 4th and 5th graders during the City of Springhill's Art Fest program.

Jeane continued as Board member of the North Louisiana Historical Association.

Jeane presented lectures, slide programs, and/or artifact workshops at the Museum of Natural Resources in Smackover, Taylor Elementary School, Ko-ko-ci Chapter of Arkansas Archeological Society, Texarkana Museum, Baton Rouge Chapter of the Louisiana Archaeological Society, Louisiana Archaeological Society, East Texas Archaeological Society, Community Coffee at the Nashville, Arkansas Chamber of Commerce, Lake Greeson Corps of Engineers in Daisy, and a Humanities Film Series at South Arkansas Community College (combined audiences of 402).

# HENDERSON STATE UNIVERSITY

Dr. Mary Beth Trubitt, Station Archeologist Kate Wright, Station Assistant

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. Both novaculite mining and salt-making are represented in station territory by important archeological sites.

# CURRENT RESEARCH

### Novaculite: A Ouachita Mountain Resource

Continuing a cost-share project between the Survey and the National Forest Service, Trubitt began developing a formal research design for studying novaculite procurement, use, and exchange in the Ouachita Mountains. Questions addressed in this initial phase include methods for identifying the source locations of different stone types, how stone was quarried for tool-making during prehistory, and whether specific tool manufacturing activities can be spatially differentiated. Field visits to novaculite quarrying sites in Montgomery County were made in the company of Forest Service archeologists.

As a test case to evaluate field methods at these large and complex sites, and to assist in the National Register nomination process for one site in Hot Springs National Park, a mapping project was undertaken. After obtaining an ARPA permit, Trubitt and Wright, assisted by volunteers, used a Total Station transit to map surface features at the quarry. The volunteers contributed 96 hours to this project. Final maps and a report are in production. Meanwhile, Trubitt developed an exhibit, "Novaculite: A Ouachita Mountain Resource Used for Thousands of Years," that was displayed at the Garland County Library, the library of the Arkansas School for Math and Sciences, and the Dallas County Museum.

### Archeology at Lake Ouachita

Mapping and test excavations at two large multicomponent sites in Montgomery County took place as part of a long term effort to better understand the historical sequence of occupation and land use in the Ouachita Mountain region. This year the project continued in the lab and library. Wright analyzed the chipped stone tools. Background research and writing of the final report is underway.

### Saline River Borderlands Survey

This new project is a joint undertaking with the UAM and UAPB stations. Marvin Jeter (UAM) proposed the collaboration to explore the little-known middle Saline River and Moro Creek drainages in the area where the station territories meet. This region was a "borderlands" or boundary zone between different cultures in the past. Between A.D. 1000 and 1500, the Saline River separated Caddoan Indian groups of southwest Arkansas from Mississippian cultures of the southeast. There are indications that boundaries between earlier Woodland period groups crossed the area. Even earlier, the Saline River was an important conduit for the exchange of novaculite used for toolmaking by Archaic period societies.

Station assistants Jim Phillips (UAM) and Kate Wright (HSU) began laying the groundwork for field surveys by meeting with landowners to obtain permission, and by visiting sites in the Borderlands study area. Several new sites were recorded by Wright in Grant County as a result. More intensive explorations of one site in Saline County are planned for summer 2002.

### Hodges Collection Research: Middle Ouachita Ceramics

Research continued on artifacts in the Joint Educational Consortium's Hodges Collection, curated at HSU. The work has focused on creating a photographic and analytic database of Caddoan pottery from the Middle Ouachita area. Most of these materials are whole vessels—providing a rare opportunity to record a large body of design attributes from complete objects, rather than the usual fragments.

Trubitt also renovated the exhibit of JEC artifacts on display in the library at Ouachita Baptist University. Volunteers contributed about 75 hours to the curation tasks associated with this project.

### Cahokia Palisade Project

Trubitt continued involvement with research at Cahokia, near East St. Louis, the premier prehistoric

site in eastern North America. The Palisade Project is a program of excavations to uncover evidence of the fortifications around the central precinct of this huge Mississippian mound center at Cahokia, Illinois. Summer 2001 was the fourth field season. Trubitt directed field supervisors and a large crew of volunteers (including several Arkansas Archeological Society members). She is also involved with the analysis and report-writing phases of this project, and was instrumental in obtaining funding for a fifth and final field season in summer 2002. She is currently working on two articles about the Project that will be published as chapters in edited volumes.



Volunteers sort and catalog artifacts at the HSU station lab.

# HSU STATION PERSONNEL

Mary Beth Trubitt received her Ph.D. in 1996 from Northwestern University. She joined the Survey in 2000 as the HSU station archeologist, following a teaching position at Western Michigan University. She has field experience in 10 states and Belize, including work in southern Arkansas while a student during the 1980s. Most of her own research has been 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 in a huge network of long-distance trade during the Mississippi Period.

**Kate Wright** joined the Survey in 2000 as HSU station assistant, after earning a B.A. at the University of South Alabama. She is currently writing a thesis to complete her M.S. degree from the University of South Mississippi. Her previous experience includes contract archeology and an internship with the U.S. Forest Service. Her speciality is lithic analysis.

### Grants, Honors, and Awards

Trubitt, as project director, along with Dr. John Kelly (Washington University, St. Louis) and Dr. Timothy Baumann (University of Missouri, St. Louis) received funding from the Cahokia Mounds Museum Society for 2002 excavations on the Cahokia Palisade Project.

### Academic Service and Activities

- By agreement with the University of Arkansas System, Trubitt has a faculty appointment as Assistant Professor in the UAF Department of Anthropology. She teaches two courses per year in the Sociology and Human Services Department at HSU. In the Spring 2002 term, Introduction to Physical Anthropology and Archeology had nine enrollees and North American Indians had 31. Web pages were created and revised for both courses.
- Trubitt supervised one HSU student intern at the HSU station during Spring 2002. Charles Wright studied previous Survey excavations around the historic Barkman House in Clark County, and prepared and installed an exhibit of artifacts. The house is now owned by HSU.
- Trubitt, assisted by Wright, prepared for a joint HSU/UAF archeological field school at a site in HSU station territory.
- Trubitt and Wright performed on-site documentation and archival research for another historic property owned by HSU, Magnolia Manor.
- Trubitt presented guest lectures in Professor Charles Lemings's Physics/Non-Western Cosmology class, and Professor Trey Berry's Arkansas History class at HSU (combined audience about 55 students).
- Wright worked with other departments at HSU to transfer or curate items from the HSU Museum collections. She updated inventories and reorganized museum collections curated at the Station.

### **Professional Service and Activities**

Trubitt served on the judging committee for the Southeastern Archaeological Conference's Student Paper Competition, and on the Survey's Publications Committee.

Wright served on the Survey's newly formed Public Education Committee.

- Trubitt and Wright met with archeologists conducting Cultural Resource Management projects in station territory to discuss project areas, known sites, and new findings. Trubitt reviewed proposed construction projects with respect to impact on archeological resources, as part of federal permit public notices.
- Wright and Trubitt conducted an emergency site assessment at Lake Catherine State Park in advance of construction activities.
- Trubitt assisted with transfer of the Peeler Bend Canoe to the Historic Arkansas Museum for conservation. (The wooden dugout canoe was found in 1999 and is about 900 years old. It took several years to secure funding for conservation and curation of this large artifact.)

### Public Service and Outreach

Trubitt advised a community group in Norman, Arkansas on interpretive signs for an archeological site in a town park. She also helped Melita, Inc. with plans for historical markers at the Malvern Millennial Walking Trail in Hot Spring County, and documented vandalism at a 19th century cemetery near the proposed trail.

- Trubitt continued consultation with citizens of Arkadelphia, the Joint Educational Consortium, and the Clark County Historical Association about plans to create a Caddo Museum or Caddo exhibits in the Clark County Historical Museum.
- Trubitt and Wright both assist the Ouachita Chapter of the Arkansas Archeological Society in Hot Springs. Trubitt served as vice president in 2001 and president in 2002. Wright is editor of the monthly chapter newsletter. Trubitt and Wright worked at the Survey/Society information booth at the Arkansas State Fair, and served on the planning committee for the Society annual meeting in Hot Springs. Trubitt helped Society members with production of the Archeology Week poster. The station hosted lab days for HSU student volunteers and Ouachita Chapter members during the year. Volunteers contributed 184 hours to field and laboratory work.
- Wright helped with remote sensing, mapping, and other preparations for the Survey/Society 2002 Training Program at Grandview Prairie. Both Wright and Trubitt helped supervise fieldwork. Trubitt taught the Lithics seminar and Wright taught Site Survey at the Training Program.
- Trubitt presented public talks at the Arkadelphia Lions Club meeting, the Clark County Historical Association, the Garland County Library, elementary students at the Dallas County Museum in Fordyce, and the Hot Springs Geology Club (combined audiences about 360).
- Trubitt created an exhibit on Arkansas novaculite for the Garland County Library for Archeology Week. The exhibit also was displayed at the Arkansas School for Math and Sciences and the Dallas County Museum.
- Trubitt updated and installed an exhibit of Joint Educational Consortium's Hodges Collection artifacts in the Ouachita Baptist University library.
- Wright presented talks to an Elderhostel at Queen Wilhelmina State Park, and to the Ouachita Chapter of the Arkansas Archeological Society (combined audiences of about 50).
- Wright maintained outreach files and distributed teacher information packets to local educators. She gave numerous talks on archeology, including five Career Day presentations, at local elementary schools (combined student audiences of about 210).
- Wright developed an exhibit on archeology for the Clark County Library during Archeology Week.
- Wright provided advice to several citizens wishing to donate items to local museums.
- Wright and/or Trubitt provided various assistance to school librarians in station territory, Benton High School, local Boy Scouts of America leaders, the Lake DeGray Corps of Engineers, and the Hot Spring County Sheriff's Office.

# **A**RKANSAS **T**ECH **U**NIVERSITY

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

# CURRENT RESEARCH

### Searching for Sequoyah

The ATU station and volunteers from the Arkansas River Valley Chapter of the Arkansas Archeological Society continued to work on the Cherokee Survey Project. This important tribe occupied parts of Arkansas during a brief reservation period (1817-1828) prior to the U.S. Government's Removal policy, which forced the tribe along the Trail of Tears migration routes to Indian Territory (Oklahoma). Fieldwork focused on the search for Sequoyah's 1820s home and salt works on Illinois Bayou north of Dover in Pope County. Sequoyah, one of the great American Indian leaders of the 19th century, is known for his invention of a syllabic alphabet for the Cherokee language.

Stewart-Abernathy and his assistants worked closely with local historian Leonard Bland of Ozark. Fieldwork, from February to April, made use of GPS, aerial photographs, and local informants. Sequoyah's homesite has so far remained elusive, but over 20 other new sites were recorded, with dates ranging from the Archaic and Woodland periods to the late 19th and early 20th centuries.

Van Tyson, ATU faculty member, area newspaper publisher, and local historian, shared his knowledge of the Arkansas Cherokee leader Glass and related sites in eastern Pope County. He and Stewart-Abernathy presented a program at the Pope County Historical Association. Robert Myers also contributed materially to the Cherokee project by sharing his extensive files, accumulated over at least a decade, on the Cherokee in Arkansas. Myers allowed the ATU station to photocopy these records, a task carried out by ATU assistant Terry Johnson and involving over four linear feet of files.

### Surveys along the Riverbanks

Station staff began using the refitted Survey john boat to study sites impacted by erosion and development. Reconnaissance along the Arkansas River from Dardanelle Lock and Dam to the mouth of the Petit Jean River was accomplished. A wrecked steel barge and erosion and attempted bank stabilization at the Galla Creek Town site were noted. The team studied the appearance of the various mouths of Galla Creek, hoping to link their observations with historical documentation of the locations of old Cherokee sites. They also examined the bank line around the proposed entry to Russellville Slack Water Harbor to check for archeological sites.

### **Old Washington Historic State Park**

Several of Stewart-Abernathy's historical archeology research projects extend outside of ATU station territory. His involvement at Old Washington has been ongoing for years. This year the Survey published a report on the Block House excavations there. Stewart-Abernathy incorporated Old Washington results into a public presentation at the Butler Center, and on the ATU station's web page. He also attended a workshop at Old Washington, "Lies Across America," which dealt with the problem of inaccurate information on historic



Making field notes during the search for Sequoyah's homesite.

markers, exhibits, and literature presented to the public at historic sites and parks across the country.

### Trail of Tears Research

Stewart-Abernathy continued his involvement with efforts to mark and commemorate the routes of the Cherokee Trail of Tears through Arkansas. He and Porter checked two sites associated with the Trail on the Military Road in eastern Arkansas. One site was Strong's, the location of a tavern and rest stop where the Military Road touches the eastern edge of Crowley's Ridge. The other site was Blackfish Ferry, where anyone traveling westward stopped before crossing the old cutoff channel, Blackfish Lake. Historic occupation at both these sites dates back to the 1820s or earlier, with substantial prehistoric occupation in evidence as well.

Stewart-Abernathy provided informal consultation to the Governor's Office regarding inquiries about specific Cherokee and Choctaw sites on the Trail routes.

### Lakeport: Preserving an Antebellum Mansion

Another effort outside ATU station territory is the Lakeport Plantation documentation and preservation project. Stewart-Abernathy continued to participate as a member of the Lakeport Research Team. Extensive work was done to copy photographs from an old Johnson family photo album that is in the care of Mrs. Doris Johnson. A grant from the Arkansas Historic Preservation Program helped station staff distribute digitized copies of all the scanned images to family members.

Taping of oral histories collected from Johnson family members and local informants also proceeded. This part of the project was aided by acquisition of a device that allows tape recording of telephone interviews. Particularly important were interviews with Dr. Miles Johnson, whose father, Dr. Victor Johnson, owned Lakeport from the 1880s until 1927. Another taped interview was with Nathan Goldstein of Greenville, Mississippi, who operated the plantation immediately south of Lakeport.

The Lakeport Research Team won a Hospitality Award from the Arkansas Delta Byways organization for its work on the May 2001 Johnson Family Reunion at Lakeport. During the fiscal year, ownership of Lakeport Plantation was transferred to Arkansas State University by only the second family to own the property since 1859.

In May 2002 the Lakeport Team was awarded a \$960,000 grant for archeological work and exterior restoration of the house. Stewart-Abernathy, Porter, and Johnson helped make preparations for the archeological fieldwork, to be carried out by the Survey's Sponsored Research Program.

## **ATU STATION PERSONNEL**

Leslie Stewart-Abernathy received his Ph.D. in 1981 from Brown University. He is also 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 riverine watercraft. He joined the Survey in 1977 as UAPB station archeologist and moved to the ATU position in 1989. He is an amateur photographer and videographer, restorer of old houses, and a sailor.

**Theresa Johnson** earned her B.A. in anthropology (1987) and M.A. in Folk Studies (1983) from Western Kentucky University. She began working with the Survey as half-time station assistant in 1991. That same year she also took on a part-time position as education coordinator at the ATU Museum of Prehistory and History. She is also an award-winning dog trainer.

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, mostly in the Ouachita National Forest, before joining the Survey in 1999 as a half-time assistant. His interests include the history and prehistory of the northern Ouachita Mountains and Petit Jean River Valley area. He is an accomplished artist and has created many depictions of archeological subjects, some of which appear in publications and museum displays.

### Academic Service and Activities

By agreement with the University of Arkansas System, Stewart-Abernathy has a faculty appointment as Associate Professor in the UAF Anthropology Department. He teaches two courses per year for the Behavioral Science Department at ATU. North American Archeology had 17 students, and Peoples and Cultures of the World had 64. Special Problems in Anthropology was offered as an archeological field school, with three students who attended the Survey/Society Training Program and completed other requirements.

Porter and Johnson assisted with preparation and support activities for Stewart-Abernathy's classes.

Stewart-Abernathy served on the M.A. committees of one student at UAF and one student at the University of Memphis.

Stewart-Abernathy gave a workshop for 15 students in the UAF archeological field school at the Van Winkle site. Stewart-Abernathy gave a guest lecture in Dr. Tom DeBlack's Arkansas History class at ATU. He also presented a lecture to the Phi Alpha Theta Chapter at ATU.

Stewart-Abernathy served as Curator of Anthropology for the ATU Museum of Prehistory and History. He was also a member of the Acquisitions Committee, advisor on policies and grant applications, and co-host for a lecture in the Museum's Series of Discovery.

Johnson works on various Museum projects as education coordinator.

All station staff worked to rescue wall-sized exhibit panels being discarded by the Historic Arkansas Museum for use in the ATU Museum. They also assisted with design and research for an ATU Museum exhibit, "Home Making: Roots in a New Land." Porter created an illustration for this exhibit. Stewart-Abernathy also helped with the opening night production of the play "The Women" at the Museum.

### **Professional Service and Activities**

- Stewart-Abernathy assisted the State Historic Preservation Officer, Arkansas Highway and Transportation Department, Arkansas State Parks, Old Davidsonville State Park, Powhatan State Park, the Plantation Agricultural Museum, the future Magazine Mountain State Park, and Ouachita National Forest with matters relating to historical archeology.
- Stewart-Abernathy and station staff continued assessment of the archeological impacts of the Russellville Intermodal Transportation Facility project in Pope County.

Stewart-Abernathy served a second term as Chair of the State Review Board of the Arkansas Historic Preservation Program. His 23 years of service on this Board ended in June 2002.

Stewart-Abernathy continued service as chair for Arkansas membership of the Society for Historical Archaeology, and Midsouth Regional Contributions Editor for SHA's *African-American Archaeology Newsletter*.

- Stewart-Abernathy was organizer and program chair for the fourth annual meeting of the South Central Historical Archeology Conference, held in Little Rock. Johnson and Porter provided extensive support for the Conference. Registered attendance (50) was the highest so far, with 24 papers presented, plus a workshop.
- Stewart-Abernathy assisted Bob Lafferty of Mid-Continental Research Associates, who was excavating at an historic farmstead site in Pope County.
- Stewart-Abernathy co-chaired a symposium at the Society for Historical Archaeology annual meeting in Mobile. Porter assisted archeologists from Heritage Preservation Associates (a private research firm) and Arkansas Highway and Transportation Department.

### Public Service and Outreach

- Stewart-Abernathy contributed materials for a general audience book on historical archeology being prepared by the SHA outreach committee.
- The ATU station provides sponsorship and support for the Arkansas River Valley Chapter of the Arkansas Archeological Society. Monthly meetings and volunteer work sessions in the lab are held year round. Johnson is Chapter Secretary/Treasurer and also performs many additional services including local publicity, meeting facility arrangements, supervising lab volunteers, and preparation of the quarterly newsletter. Stewart-Abernathy is program chair. He gave one program himself, arranged guest speakers, and led discussion sessions pertaining to research projects in which Chapter members participate (especially the search for Sequoyah's homesite and the summer Training Program at Grandview Prairie). Volunteers contributed 444 hours in the field and laboratory at the ATU station.
- Stewart-Abernathy directed excavations at three historic sites at Grandview Prairie during the Survey/Society Training Program. Porter was site supervisor of excavations at Mound B of the prehistoric Tom Jones site.
- Johnson and Porter delivered Survey teacher packets to about 20 educators in station territory. The packets provide information about Arkansas archeology, Indians, and early settlers for teachers to use in lesson planning.
- Stewart-Abernathy, Johnson, and Porter completed design, graphics, and text for ATU station web pages to be added to the Survey's main website.
- The ATU station held an Open House in conjunction with Arkansas Archeology Week, featuring a flintknapping demonstration by Ben Swadley and a lecture by David Jurney on experimental archeology. Attendance was 45 persons.
- Stewart-Abernathy gave public talks at Pottsville Middle School, Hendrix College, the Butler Center of the Central Arkansas Library, the Phi Alpha Theta Chapter at ATU, and Pope County Historical Association (combined audiences of about 210).

# UNIVERSITY OF ARKANSAS, FAYETTEVILLE

Dr. George Sabo III, Station Archeologist Jerry E. Hilliard, Station 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 bluffshelters along the White and Illinois rivers. Rock art, both painted (pictographs) and pecked (petroglyphs) is also found in some shelters. Recent station research has broadened the archeological picture by focusing on ceremonial mound sites that link the Ozarks to the Mississippian and Caddoan cultures. Other recent projects emphasize historical sites and environmental history. The hardiness and adaptability necessary for survival in the Ozarks is reflected in the archeological remains of American Indians, pioneers, and early American settlers alike.

# **CURRENT RESEARCH**

### Students Explore the Past at Van Winkle Mill

Sabo and Hilliard, along with Jamie Brandon and James Davidson, doctoral students at the University of Texas-Austin, and UA graduate students Brynn Berry and Robin Bowers, taught an archeological field school at the Van Winkle Mill site in Beaver Lake State Park during summer 2001. The site was the location of a steam-powered saw and grist mill complex established in the early 1850s by Peter Van Winkle. There are also remains of several houses occupied by the Van Winkle family and their mill workers, including slaves owned before the Civil War. The family fled the area during the war, when the mill was destroyed, but returned to rebuild the community in the late 1860s.

Excavations concentrated on three areas: a late 19th/early 20th century house (Feature 9), an antebellum dwelling (Feature 33), and the area where the mill itself once stood. At Feature 9, field school students exposed a nearly complete stone foundation with fireplaces at both ends. Close study of the artifacts plus documentary sources reveal the house was probably occupied by mill worker Aaron Anderson Van Winkle and his family between 1870 and 1900. Anderson was a former slave who returned with the family after the war and became mill foreman.

Geophysical survey by Jami Lockhart was used prior to excavation in the area of Feature 33. Here, there were no house foundations, but artifacts suggest an antebellum residence. Study of these features will produce information on the lifeways of African-Americans who lived and worked in the late 19th century Arkansas forest industry. The work is an important contribution to African-American heritage studies. Historical archeology of the Black experience in America has focused primarily on plantation life.

Sabo, Hilliard, and the team of graduate students led more excavations at Van Winkle during Spring Break, 2002. This time, students from Sabo's Historical Archeology class, volunteers from the Ko-ko-ci Chapter of the Arkansas Archeological Society, history students from Rogers High School, and a group of Boy Scouts from Rogers made up the field crew. Jami Lockhart again performed a geophysical remote sensing survey in the mill area, without definitive results. Excavations did, however, reveal structural features related to operation of the mill: a rock-lined drainage cistern, a rock-lined trench used as a fly-wheel mount, and foundations of a blacksmith's shop.

### Praises for the The Arkansas Rock Art Project and Its "Virtual Museum" Website

The Arkansas Rock Art Project, supported by a grant from the Arkansas Humanities Council, is a multidimensional effort to promote preservation, study, and educational uses of a valuable and intriguing archeological resource. Arkansas possesses one of the richest concentrations of rock art in eastern North America, in the form of painted pictographs and carved petroglyphs on the natural rock surfaces of bluffs, shelters, and cave walls. Yet the artworks have received little systematic study, partly because existing records of rock art sites were scattered and uneven in quality. Nor will most people ever have the chance to see and enjoy this unique resource. Sites are difficult of access and must be protected from the detrimental effects of development and vandalism. Even respectful visitors may inadvertently harm these delicate images. The Arkansas Rock Art Project provides a response to all these needs.

Sabo, Hilliard, UA graduate student Michelle Berg Vogel, and a team of Survey researchers designed new record-keeping forms, searched and organized all existing information, and created a comprehensive computer database of rock art sites in Arkansas. New information was added through fieldwork at selected sites, including several in Petit Jean State Park. The new rock art database was incorporated into AMASDA, the Survey's main archeological site database system. The team also put together a draft of a general-audience book to be published in the Survey's Popular Series.

The team then created an Arkansas rock art website (http://rockart.uark.edu) that contains quick fact sheets, articles, technical papers, a picture gallery, lesson plans for teachers, a kid's page, and other resources. Perhaps the website's most notable feature is its searchable on-line database of rock art images which allows users to view photographs and explore basic research questions. Exercises designed for individual or classroom use allow students to learn about this ancient form of artistic expression while simultaneously developing skills for maneuvering through a computerized database.

The website receives an average of 50 visits per day from around the world, and has been featured in articles in local and regional newspapers and received high praises in major journals such as *Science, Christian Science Monitor*, and *Lancet*.

Further work on the project will include detailed research on the relationships between rock art images



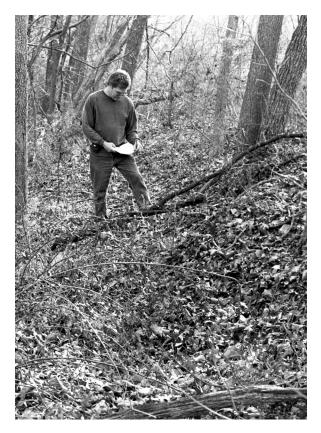
Field school students uncover foundations of a blacksmith's shop at the Van Winkle site in Beaver Lake State Park

and the elaborately decorated ritual artifacts associated with the widespread Southeastern Ceremonial Complex, a religious expression that dominated southeastern Indian societies in late prehistory.

### Cross Hollows Civil War Research

Hilliard began a survey of Cross Hollows this year, resulting in documentation of numerous rifle skirmish pits, one artillery gun emplacement, and one Civil War encampment site. Cross Hollows is located near Lowell in Benton County and was heavily used early in the war, first by Confederate and then by Union troops before and after the Battle of Pea Ridge. It was perhaps the largest Confederate camp, complete with barracks, built in northwest Arkansas.

Encroaching development threatens this significant Civil War locality. The disappearance of Civil War and other cultural landscapes is an issue currently receiving much national attention. Preservation of broad landscapes is expensive in terms of land values, but it provides an important link with the life experiences of our ancestors.



Hilliard records a gun-emplacement feature at Cross Hollows.

# **Other Project Updates**

- Sabo's NEH-funded educational CD-ROM, *First Encounters*, proved so much in demand that he sought and was awarded funding from the Arkansas Humanities Council for a second printing of 1000 copies to ensure that all interested Arkansas teachers have access to the software. The next step in the project will be to adapt the program for web delivery.
- Sabo demonstrated the CD to Arkansas public school teachers at several workshops and meetings around the state. He also collaborated with Dr. Ann Shortridge, educational technology and instructional design specialist in the Dale Bumpers College of Agricultural, Food, and Life Sciences at UAF, on a study to evaluate the effectiveness of the *First Encounters* software as an educational tool. Results were positive and were presented at Ed-Media 2002: World Conference on Educational Multimedia, Hypermedia, and Higher Education (held in Denver in June 2002).
- Arkansas: A Narrative History was published by the UA Press in Spring 2002. Sabo was one of four authors, along with Jeannie M. Whayne, Thomas A. DeBlack, and Morris S. Arnold. The new textbook will serve college students, teachers, and general readers.
- A revised edition of *Paths of Our Children: Historic Indians of Arkansas* was published in the Survey's Popular Series. A new chapter, new color illustrations, and an expanded annotated bibliography increase the usefulness and attractiveness of this slim popular volume.

## **UAF STATION PERSONNEL**

**George Sabo III** received his Ph.D. in 1981 from Michigan State University. He joined the Survey in 1979 as UAF station archeologist, after nine years of archeological research in the Upper Great Lakes and the Canadian Arctic. His work in northwest Arkansas has ranged from mound excavations in the Western Ozarks to studies of historic pioneer farmsteads and ethnohistory of Arkansas Indians. He is now heavily involved in development of multimedia educational resources for teaching about archeology and ethnohistory at both college and K-12 levels.

Jerry E. Hilliard has an M.A. in Anthropology from the University of Arkansas. He joined the UAF station as research associate in 1994 after 15 years' experience with the Survey in public archeology, records management (he was formerly the Registrar), and research on prehistoric and historic sites in the Ozarks. His specializations include American Indian rock art and historic Fayetteville. He also manages the Arkansas Archeological Society's Training and Certification Program.

### Grants, Honors, and Awards

Sabo received an Outstanding Honors Program Mentor award from the UAF Honors Program for his work with student, Ed Tennant.

### Academic Service and Activities

- By agreement with the University of Arkansas System, Sabo has a faculty appointment as Professor in the UAF Anthropology Department. Due to a heavy advising commitment to graduate students in several UAF programs, Sabo's official teaching load was recently reduced to one upper-level course per year. He taught Historical Archeology in Spring 2002, with 17 students.
- Sabo also taught, Archeological Field Session, with 10 students, in Summer 2001.
- Sabo served on 15 M.A. committees in the Anthropology Department, six of which he chaired. He served on five Ph.D. committees in the Environmental Dynamics Program, three of which he chaired. He served on the Ph.D. committee of one student in the History Department.
- Sabo participated in one Ph.D. dissertation defense (History), one Ph.D. comprehensive exam (ENDY), and four thesis/internship exams in Anthropology. Two of his students received their M.A. degrees in Anthropology this year.
- One of Sabo's undergraduate Honors Program students, Ed Tennant, received a prestigious SILO/SURF award to support soil analysis at the Van Winkle Mill site. Sabo and Tennant attended the Arkansas Undergraduate Research Symposium at Henderson State University, where Tennant presented a paper on his project. The two attended Honors ceremonies at UAF. Tennant received a Fulbright Fellowship to study geoarcheology in New Zealand during the 2002-2003 academic year.

### **Professional Service and Activities**

Sabo reviewed a manuscript for the journal *Southeastern Archaeology* and wrote book reviews for *Journal of the West* and *Arkansas Historical Quarterly*.

Hilliard served on the Survey's Publications Committee.

- Sabo authored or co-authored two papers presented at professional meetings. Hilliard presented one paper at a professional meeting.
- Sabo and Hilliard provided consultation and advisory services to Arkansas State Parks and U.S. Army Corps of Engineers concerning study and development of sites in Beaver Lake State Park.

### Public Service and Outreach

- Sabo served the summers of 2001 and 2002 as advisor to high school students in the Arkansas EAST (Environmental and Spatial Technologies) program. The students used SoftImage 3D animation software at Fulbright College's CAST (Center for Advanced Spatial Technologies) to produce virtual reconstructions of the 16th century American Indian village at the Parkin site. Their work can be seen at <http://www.cast.uark.edu/east/ crate>.
- Sabo and Hilliard advise and assist the Ko-ko-ci Chapter of the Arkansas Archeological Society. Sabo gave two programs at Chapter monthly meetings. Hilliard conducted monthly lab nights for Chapter volunteers, who analyzed prehistoric pottery vessels from the Ira Spradley site, which is the only prehistoric cemetery documented for the Ozarks.

Sabo and Hilliard attended the Survey/Society summer Training Program. Sabo taught the Historical Archeology seminar. Hilliard served his seventh year as coordinator of the Society Certification Program.

Sabo presented 12 programs to northwest Arkansas public school classes (about 500 students and teachers). Hilliard gave a talk to a class at St. Joseph's School in Fayetteville (about 10 students).

- Sabo also presented talks at Shiloh Museum, the Ozark Natural Science Center, and Benton County Historical Society (combined audiences of about 100).
- Sabo demonstrated his *First Encounters* educational CD-ROM to Arkansas public school teachers at several venues, including the Arkansas Summer History Institute, held at the University of Central Arkansas campus in Conway; Louisiana Purchase Bicentennial Commemoration workshops in Springdale and Fort Smith; a workshop at the Arkansas State University-Mountain Home campus, and Blytheville public school district teachers participating in the NEH-funded "Schools for a New Millennium" project. In all, more than 150 teachers participated in these events.
- Sabo and State Archeologist Ann Early consulted with Lea Flowers Baker of the Arkansas Department of Heritage on creating educational materials for the Louisiana Purchase Bicentennial. Sabo developed a presentation on Colonial Indians of Arkansas that was used in a series of summer workshops for teachers across the state.
- Sabo served as a member of the Caddo Tribal Heritage Museum Board of Trustees, assisting the Caddo Nation with development of policies, programs, and exhibits for their new museum at the tribal complex near Binger, Oklahoma. He also participated with the Tribe in a project to collect, transcribe, translate, and preserve ceremonial, song, and narrative texts that preserve Caddo historical and cultural traditions.

# Sponsored Research Program

Dr. Robert C. Mainfort, Jr., Administrator Kathleen Cande and Randall Guendling, Project Archeologists Michael Evans and Jared Pebworth, Archeological Assistants Lindi Holmes, Secretary

The Sponsored Research Program (SRP) was developed in the 1970s in response to federal, state, and private agency needs for the management of cultural resources in Arkansas. The SRP conducts externally funded research based on contracts, grants, and cost-share agreements. Projects range from local efforts, such as monitoring a construction site, to preparation of cultural resource overviews covering large regions of the United States. SRP has successfully completed nearly 1000 studies in Arkansas and adjacent states, meeting both administrative and scientific requirements in a timely and professional manner. Service to the university community is provided through teaching and committee memberships. SRP cooperates with the UA Department of Anthropology and other Survey staff to offer a graduate student internship in cultural resource management.

**F** ederal environmental and cultural preservation laws require that impacts of construction and development projects on significant archeological sites must be considered whenever federal monies or permits are involved. The Native American Graves Protection and Repatriation Act (NAGPRA) and Arkansas's Unmarked Grave Protection Act also govern the treatment of certain archeological remains, especially human burials. Archival research and various stages of archeological fieldwork may be required to ensure compliance with these regulations. Archeology today is a discipline that combines excavation with specialized analyses in other fields such as history, architecture, botany, zoology, geology, electronic data management, and even physics and engineering. SRP embraces this multidisciplinary approach to provide a high-quality response to cultural resource management needs. Particular strengths available to SRP researchers include GIS applications, historic sites archeology, historical research, ecosystem analysis, prehistoric ceramic analysis, and geophysical remote sensing applications. A few of the projects ongoing in 2001-2002 are highlighted here.

# CURRENT RESEARCH

### Arkansas Post National Memorial

Kathleen Cande assisted Arkansas Post National Memorial staff by creating and updating a complete set of computerized catalog data for archeological collections from the park. Over the past ten years SRP has been helping the park keep track of over 10,000 artifacts excavated in the course of various archeological projects from the late 1950s to the present. The catalog uses the National Park Service's ANCS (Automated National Catalog System). A memorandum of understanding with the Park Service designates the UA Collections Facility in the Survey Coordinating Office Building at Fayetteville as a federal repository, housing all Arkansas Post collections.

#### **Old Washington State Park**

Funded by a generous grant from the Arkansas Natural and Cultural Resources Council, Kathleen Cande, Randall Guendling, and UAF graduate student Maria Tavaszi prepared a detailed report on excavations at the former Block family detached kitchen in Old Washington State Park.

The town of Washington, in Hempstead County, was founded in 1824 and thrived as county seat and commercial center for a region of plantations and small farms. The Block House, the oldest residence at Old Washington, was occupied during the early 19th century by Abraham Block, a pioneering Jewish merchant, and his family. In 1982 and 1983 the annual Arkansas Archeological Survey/Society Training Program excavations were held at the Block House. Lack of funding prior to the ANCRC grant had prevented a thorough analysis of artifacts and preparation of a technical report.

The purpose of the archeological work was to assist a historically accurate reconstruction of the kitchen. Excavation revealed overall dimensions of the kitchen to be 23 feet by at least 36 feet. A large pit or cellar in the area was dated on the basis of artifacts found inside. It may have been dug in the early 1830s and was filled again with household trash by the early 1840s. The kitchen apparently was built after the pit had ben filled, and therefore is later than the house itself.

Results combine with those from excavation of another kitchen in Old Washington, at the Sanders House, to provide a "vernacular template" of the now vanished antebellum kitchens in the town. Over 1800 artifacts, including many whole transfer-printed dishes, show that Abraham Block had commercial ties with the port city of New Orleans, acquiring wares imported from England both for his store and his own table.

# Historic Cemeteries: Remains Rescued from Inundation

Robert Mainfort supervised archeological excavations to remove approximately 40 individuals interred in two small late 19th century cemeteries that will be inundated by the expansion of Lake Fort Smith.

There are striking differences between the Wright and Eddy cemeteries in quality and quantity of coffin hardware, and personal adornments worn by the deceased. These differences presumably reflect socioeconomic distinctions within the communities that used them. Once analysis of the human remains and artifacts, including head and foot stones, is completed, all material will be transferred to the City of Fort Smith for reinterrment at a location not far from the original cemeteries. A comprehensive report for publication was completed in draft by the fall of 2002.

Research at historic cemeteries is becoming an increasingly urgent need as development and land use patterns change. The information preserved in cemeteries is an important link in tracing and preserving the heritage of Arkansas's early communities.



Robert Mainfort (left) and Mike Evans in the field during the Fort Smith cemeteries salvage project.

### SRP PERSONNEL

- Robert C. Mainfort, Jr. received his Ph.D. in 1977 from Michigan State University. He joined the Survey in 1994 as SRP administrator. He also serves as Series Editor of Survey Publications. His major research interests include mortuary studies, the emergence of ranked societies, multivariate data analysis, historical archeology, and archeology and public education.
- Kathleen H. Cande and Randall L. Guendling (Project Archeologists) coordinate and supervise fieldwork and records searches, analyze data, and write reports. Cande also supervises the SRP lab. Cande received her M.A. at UAF in 1984, and joined the Survey in 1987. Her specializations include archeological textile analysis, archival research, the colonial Southeast, and historical archeology. She is presently enrolled in the Ph.D. program in the History Department at UAF. Guendling has been a Survey employee since 1981. He completed his M.A. degree at UAF in 1993. His research interests are historical archeology and ecology, landscape archeology, Arkansas history, and prehistoric lithic analysis.
- Michael Evans and Jared Pebworth (Archeological Assistants) contribute varied skills to SRP projects, station research projects, and salvage archeology around the state. Their training encompasses all phases of archeological fieldwork, survey and mapping, flotation, remote-sensing, production of CAD and other graphics, conservation of metal artifacts, and vehicle and equipment maintenance.
- Lindi Holmes serves as SRP secretary and office manager, and editor of the Survey's Research Reports. She has primary responsibility for production of all SRP reports and also handles publication reprints.

## SRP SERVICE ACTIVITIES

### Academic Service and Activities

By agreement with the University of Arkansas System, Robert Mainfort has a faculty appointment as Professor in the UAF Anthropology Department, where he normally teaches one course per year. In spring 2002 he taught Archeology of the Midsouth, with an enrollment of six graduate students. Mainfort also taught two Independent Study courses, served on six graduate thesis committees, chairing three of them, and served on the committee of one doctoral student at the University of Texas-Austin.

Mainfort presented a talk and discussion on Arkansas prehistory for 12 UA Museum docents.

Cande conducted tours of the Survey facilities for 21 UAF undergraduate archeology students.

### **Professional Service and Activities**

- Cande served as Gulf States current research editor for the Society for Historical Archaeology Newsletter and as Arkansas current research editor for the Southeastern Archaeological Conference Newsletter.
- Cande served on the Certification Committee of the Register of Professional Archeologists. She is a member of the Register of Professional Archeologists, Society for Historical Archaeology, and Southeastern Archaeological Conference.
- Cande acted as consultant to Arkansas State Parks (for production of exhibits at Parkin Archeological State Park), and to the U.S. Forest Service. She also consulted with Dr. Swannee Bennett, Chief Curator at the Historic Arkansas Museum, on exhibits planned for the 2003 Bicentennial of the Louisiana Purchase.

Cande reviewed a manuscript for publication in the Survey's Technical Papers series.

Guendling acted as consultant to Arkansas State Parks and to the Department of Arkansas Heritage.

- Guendling is a member of the Register of Professional Archeologists, Southeastern Archaeological Conference, Society for Historical Archaeology, Arkansas Archeological Society, and Arkansas Historical Association.
- Mainfort provided consultation and/or advice to the University of Arkansas Museum, Arkansas State Parks, U.S. Army Corps of Engineers, U.S. Forest Service, and the NAGPRA representative of the Quapaw Tribe of Oklahoma.
- Mainfort served on the Editorial Board of the Midcontinental Journal of Archaeology.
- Mainfort reviewed grant proposals for the National Science Foundation and the National Endowment for the Humanities.
- Mainfort served as manuscript reviewer for the journals *American Antiquity*, *Southeastern Archaeology*, and *Midcontinental Journal of Archaeology*.

Mainfort organized and chaired a symposium at the annual meeting of the Society for American Archaeology in New Orleans. He is a member of SAA, and also the American Anthropological Association, Society for Historical Archaeology, Southeastern Archaeological Conference, and Midwest Archaeological Conference.

### Public Service and Outreach

- Mainfort presented a talk to the Ko-ko-ci Chapter of the Arkansas Archeological Society during Archeology Week.
- Mainfort assisted Society member Dr. James Cherry with a long-term study on "head pots," a unique art form of the prehistoric Indians in northeast Arkansas.
- Mainfort participated in the joint Survey/Society Training Program. He supervised volunteers and taught the Ceramics seminar.
- Mainfort served as a judge of senior level social/behavioral science projects at the Northwest Arkansas Science Fair.

# SRP PROJECT FUNDING

SRP projects are funded by grants, contracts, and cooperative cost-share agreements with state and federal agencies such as Arkansas State Parks and the Ozark-St. Francis National Forests. SRP also administers grants awarded to the research stations. Projects during 2001-2002 include new grants and contracts as well as multiyear projects carried forward.

Project Name	Firm or Agency		
Sanders Kitchen*	Arkansas Natural and Cultural Resources Council	75,000.00	
Block House Kitchen	Arkansas Natural and Cultural Resources Council	50,000.00	
Lake Fort Smith Cemeteries	Burns & McDonnell	86,141.87	
River Mountain	Midcontinental Research Associates	8,177.90	
Digitizing Project Records	U.S.D.A. Forest Service	1,000.00	
Cow Project	U.S.D.A. Forest Service	45,606.00	
Turrell Water System	Bond Consulting Engineers	4,202.55	
Ozone Water System	Crafton, Tull, and Associates	3,352.89	
Ash Grove Landfill	CH2M Hill	4,095.58	
Tinsley 1 Mapping & Testing	National Park Service	9,850.00	
Fayetteville Wastewater	McGoodwin, Williams & Yates	44,993.38	
Civil War Metal Detector Survey	Arkansas Highway & Transportation Department	2,025.59	
Broyles Road Extension	McGoodwin, Williams & Yates	2,392.01	

## New GRANTS AND CONTRACTS IN 2001-2002

336,837.77

\* Funds awarded late in FY 2001, but not assigned until FY 2002

## SRP TITLES FOR 2001-2002

Cande, Kathleen H.

- 2002 Finding Aids to the Pea Ridge National Military Park Land Acquisition and Park Establishment Records Collection. Final Report, Project 01-03. Submitted to the U.S. National Park Service, Great Plains System Support Office, Omaha, Nebraska.
- Cande, Kathleen H., Jared S. Pebworth, and Michael M. Evans
- 2001 A Phase I Cultural Resources Survey of the Proposed Northwest Arkansas Regional Airport Connector Road, Alternates 4 and 5, Benton and Washington Counties, Arkansas. Final Report, Project 00-08. Submitted to Barnard Dunkelberg and Company, Tulsa, Oklahoma.
- Cande, Kathleen H., and Maria Tavaszi
- 2001 A Report on Computerization of Arkansas General Land Office Tree Data. Progress Report, Project 01-05. Submitted to Dr. Tom Foti, Arkansas Natural Heritage Commission, Little Rock.

Guendling, Randall L.

2002 A Cultural Resources Survey of the Town of Turrell Water System Improvements, Crittenden County, Arkansas. Final Report, Project 02-06. Submitted to Bond Consulting Engineers, West Memphis, Arkansas.

Guendling, Randall L., Kathleen H. Cande, Leslie C. Stewart-Abernathy, and Dawn Novak

2001 The Archeological Investigation of the Sanders Kitchen, 1981 and 1992, Old Washington Historic State Park. Final Report, Project 01-01. Submitted to the Arkansas Natural and Cultural Resources Council, Little Rock.

Guendling, Randall L., Kathleen Cande, Maria Tavaszi, Leslie Stewart-Abernathy, and Barbara Ruff (with contributions by Donald R. Montgomery)

2002 The Archeological Investigation of the Block Detached Kitchen: The 1982 and 1983 Arkansas Archeological Society Digs, Old Washington Historic State Park. Final Report, Project 02-01. Submitted to the Arkansas Natural and Cultural Resources Council, Little Rock.

House, John H., and Mary V. Farmer

2001 Phase II Testing of Seven Archeological Sites on the Pine Bluff Arsenal, Jefferson County, Arkansas. Final Report, Project 00-06. University of Arkansas at Pine Bluff, Department of Social and Behavioral Sciences, in cooperation with the Arkansas Archeological Survey, Fayetteville. Submitted to the United States Department of the Army, Pine Bluff Arsenal, Pine Bluff, Arkansas.

Kelly, Lucretia S.

2001 Report of Faunal Remains from Mound S, Toltec Mounds Site, Arkansas. Final Report, Project 00-01. Submitted to Arkansas Natural and Cultural Resources Council, Little Rock.

# COMPUTER SERVICES AND ARCHEOGEOPHYSICAL PROGRAM

Jami Lockhart, CSP Coordinator and Director of Archeogeophysical Research Deborah Weddle, Information Technology Support and Internet Applications

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. Since the 1950s the use of computers in archeological research has evolved from a novelty to a necessity. 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. Key components of this integrated approach include geographic information systems (GIS), relational database management systems, and exploratory data analysis. Our pioneering computer database for archeological site information (AMASDA) is one of the most comprehensive such applications in the country. CSP is working to provide Internet database access for agencies involved with cultural resource management in Arkansas. (There is presently online access for qualified subscribers.) Educational websites are maintained in response to public interest as well as agency needs. The newest component of the Survey's computer applications program is a full complement of remote sensing technologies for near surface prospection on prehistoric and historic archeological sites.

# **C**URRENT **P**ROJECTS

### State-of-the-Art Data Management

The CSP has achieved a national and international reputation for its computerized information management systems for archeological records and research. Facilities at the Survey Coordinating Office provide a state-of-theart work area with specialized electrical, Internet, and telecommunications wiring, individual climate control, and static-free building components. The Survey's core computer platforms provide Internet and intraoffice connections to AMASDA (Automated Management of Archeological Site Data in Arkansas). AMASDA (the Survey's main database) contains more than 36,000 multifield archeological site records and records of almost 4590 archeological surveys and projects. These are linked to a GIS (Geographic Information System) with a variety of environmental and cultural data layers needed by resource managers, land use planners, and researchers.

Online access to the database is provided to archeological professionals at the U.S. Army Corps of Engineers, National Park Service, U.S. Forest Service, Natural Resources Conservation Service, Arkansas Department of Heritage, Arkansas Highway and Transportation Department, and researchers at other agencies and universities within Arkansas and neighboring states.

### New Rock Art Database

Lockhart constructed a database in Oracle software to store information about all Arkansas rock art sites as part of UAF station archeologist George Sabo's Arkansas Humanities Council funded project "Drawing from the Past." He, Weddle, and Sabo will develop a database-driven, web-accessible prototype that will serve as the model to upgrade the Survey's entire site file database (AMASDA) for web delivery.

Lockhart also designed an expanded database and methodology for entry of witness tree data from General Land Office surveyors' notes. This creates a GIS data layer for reconstructing the composition of Arkansas forests prior to heavy settlement by Euro-Americans, an important element in understanding forest history and forest management in the state. A \$20,000 grant from Department of Arkansas Heritage funded this project, which was completed this year.

### The Survey on the Web

The Survey's website receives on average more than 900 visits per month and is one of the most widely used archeology websites on the Internet. New content was added this year. The ATU station contributed general information and articles about its research program. Eventually there will be pages for each research station, with information on projects updated regularly.

Another new addition this year was Education News, contributed by the Survey's education specialist Mary Kwas. This section highlights the Survey's numerous public outreach activities.

The Survey website includes links to several other archeology websites managed by the Survey's Internet Applications specialist Deborah Weddle. These include the Arkansas Archeological Society, the South Central Historical Archeology Conference, the Southeastern Archaeological Conference, Archeological Parks in the U.S., and the Survey's *Rock Art in Arkansas* and *First Encounters* educational websites. Additional links are provided to the UA Department of Anthropology and the UA Museum websites.

### Rock Art in Arkansas: A Universal Educational Resource

Deborah Weddle designed and implemented the new *Rock Art in Arkansas* website, which was developed under a grant from the Arkansas Humanities Council. UAF station archeologist George Sabo led a team of Survey and graduate student researchers in the Rock Art project to explore this rich and important body of ancient artistic expression in the state. Development of information resources and public education materials on several levels, for professional researchers as well as K-12 and college classroom use, was a main part of the grant.

The rock art website is hosted on one of the Survey's servers. The site contains fact sheets, articles and technical papers, and a picture gallery, and is tied into a searchable database containing information on all currently recorded Arkansas rock art sites.

The website has recieved extensive press coverage on both the national and international levels, with universally excellent reviews. It has been featured in *Science, The Lancet, Christian Science Monitor*, and numerous local and regional newspapers, and has been averaging more than 900 visitors per month.

One of the main goals was to make the website useful for teachers and school children. New content in a "Just for Kids" section provides scientific information in a story format. Self-guided learning exercises provide practical experience in navigating through a database at the same time that they teach about the art and world view of Arkansas Indians.



Through resources such as *Rock Art in Arkansas*, available via the Internet, the Survey seeks to make educational enrichment tools available to every school district in Arkansas

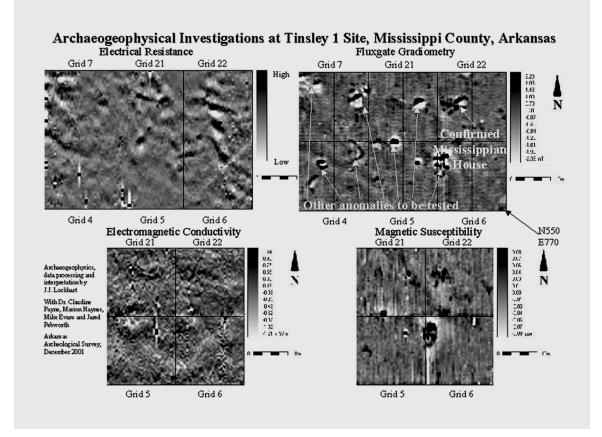
### Archeogeophysical Applications Program

Among the Survey's newest developments is the addition of a comprehensive program of archeogeophysical (or, remote sensing) applications. Jami Lockhart manages and directs this program, in addition to his other responsibilities as manager of the Survey's database systems, GIS, and data processing operations.

Archeogeophysical remote sensing will become an integral part of cultural resource management, and has

the potential to revolutionize archeological methodology. Once again, the Survey is at the forefront of leading-edge technological innovations in these areas.

Archeogeophysical applications were part of numerous research projects around the state in 2001-2002. Papers reporting these projects were delivered at several professional meetings, and relevant content for the Survey website is being developed.

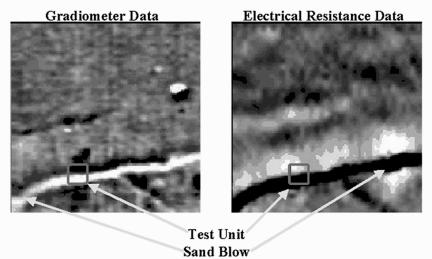


Geophysical imagery of the Tinsley 1 Site, Using Four Technologies.

### An Ancient Earthquake at Tinsley 1

At Tinsley 1 in Mississippi County, Lockhart worked with Blytheville station archeologist Claudine Payne and other Survey staff on a project in cooperation with American and Japanese seismologists to study earthquake features on archeological sites. One of the more dramatic results was discovery by remote sensing, verified by excavation, of a Mississippian house bisected by an earthquake fissure. This project was featured in local newspapers and reported in a poster session at the Seismological Society of America and on various websites. Funding was provided by the National Park Service's Midwest Archeological Center.

# Tinsley 1 Site, Geophysical Grid 14



Geophysical images showing subsurface anomaly interpreted as an earthquake sand blow feature at Tinsley 1.

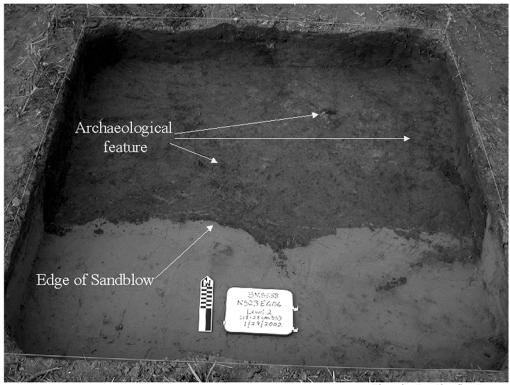


Photo by Dr. Claudine Payne

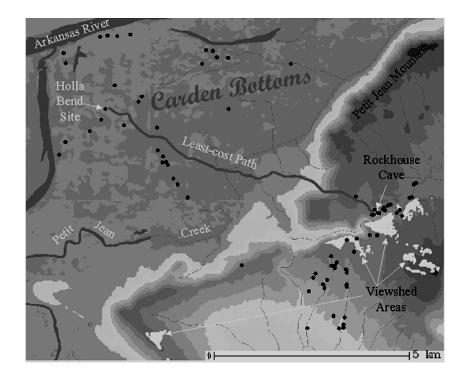
Excavated test pit showing the sand blow bisecting a Mississippian house floor.

### Wallace Bottom and the Early Arkansas Post

Lockhart worked with UA Professor Ken Kvamme and his Near Surface Prospection students to provide additional geophysical imagery for Wallace Bottom, a late 17th century French and American Indian site that may be one of the early locations of Arkansas Post. UAPB station archeologist John House, with help from Leslie Stewart-Abernathy of the ATU station, is exploring this site with support from the Quapaw Tribe of Oklahoma.

#### Indian Rockhouse: Ancient Art on Petit Jean Mountain

As part of the Survey's new rock art research program, led by UAF station archeologist George Sabo, Lockhart and others conducted a geophysical survey to locate possible archeological features inside Indian Rockhouse Cave. The work will help Arkansas Department of Parks & Tourism avoid damage to the site as they develop walkways inside the cave. The walkways are part of an effort to prevent further defacement and degradation of the fragile pictographs and petroglyphs on cave walls, yet allow visits by tourists, researchers, and others to continue. This project is featured on the new *Rock Art in Arkansas* website.



A least-cost analysis uses computer models and landscape data to discover the most likely travel route between sites. Lockhart performed the analysis and created maps in support of a grant proposal by UAF station archeologist George Sabo.

### Van Winkle Mill: Students Explore Early Industry in Northwest Arkansas

Fieldwork in July 2001 and March 2002 continued research begun in 2000 at the Van Winkle Mill site in Beaver Lake State Park. Cost-share agreements with the Corps of Engineers and Arkansas Department of Parks & Tourism support this project. A UAF archeological field school and students in George Sabo's Historical Archeology class used geophysical imagery to guide excavations at a worker's homesite feature associated with the mid-19th century Van Winkle saw and grist mill. The house is thought to have been occupied by Aaron Anderson Van Winkle, a former Van Winkle slave who returned to work as mill foreman after the Civil War. Geophysical imagery also revealed the location of other historic structures at the site.

### Pea Ridge Civil War Battlefield

In association with research by Dr. Ken Kvamme (UAF) and Dr. Doug Scott (National Park Service) at Pea Ridge Battle Field, Lockhart instructed students in the use of electromagnetic conductivity and magnetic susceptibility. The data were used in a comparison of the two techniques for identifying historic battlefield maneuvers.

### Tom Jones: A Prehistoric Caddo Ceremonial Center at Grandview Prairie

Working with SAU station archeologist Frank Schambach, Lockhart continued geophysical survey at the Tom Jones site in southwest Arkansas. The Caddo mound site is preserved nearly intact within the boundaries of Grandview Prairie Wildlife Management Area. The Arkansas Game and Fish Commission has provided considerable support. For the third year in a row, geophysical and GIS work were important in locating subsurface archeological features prior to excavation by participants in the Arkansas Archeological Society's summer Training Program. Dr. Ken Kvamme (UA Department of Anthropology) and his Near Surface Prospection students, Survey staff, and Arkansas Archeological Society volunteers all participated in this large-scale project.

### Lake Enterprise: Arkansas's Earliest Indian Mound

UAM station archeologist Marvin Jeter has been exploring the possibility that this small site represents the earliest known mound in Arkansas. It is associated with the famous Poverty Point site, containing huge unique earthworks, in nearby Louisiana. Lockhart used four different technologies to find the boundaries of the mound and to search for other archeological features that might be associated with it. Other computer mapping techniques were used to create 3D imagery of the mound in its topographic setting.

### **Cross Hollows Civil War Encampment**

Geophysical testing was part of UAF station associate Jerry Hilliard's investigation at Cross Hollows in Benton County. The cultural landscape at Cross Hollows has languished in relative obscurity, but it may be one of the best-preserved Civil War sites of its kind. One part of the site was used (at different points during the war) as a year-round encampment and staging area for both Union and Confederate troops, with as many as 12,000 soldiers living in permanent barracks. Remote sensing revealed several aligned rectangular anomalies in the ground that may prove to be remnants of the barracks.

### Lakeport Plantation

Several Survey staff have been part of a research team working to document and preserve the antebellum plantation mansion at the Lakeport site in Chicot County, now owned by Arkansas State University. ASU received a grant to stabilize the building, and part of those funds will cover archeological work prior to construction. The Survey's Sponsored Research Program will conduct the testing. Lockhart performed geophysical survey on the grounds to help guide the excavations.

#### Additional Contracted Projects

Lockhart managed the archeogeophysical portions of contracted CRM research projects on River Mountain, near Russellville (for Midcontinental Research Associates), and at Lake Fort Smith, to locate and move historic graves (for the Survey's Sponsored Research Program). He also managed a four-day archeogeophysical project and workshop at the 19th century townsite of Sterling, and the possible location of a 17th century French fort near Helena, Arkansas, for National Forest Service heritage resource technicians (HRTs) from Arkansas, Oklahoma, Missouri, and Georgia.

## **CSP** Personnel

Jami J. Lockhart received his M.A. degree in Geography at UAF in 1988, the same year he joined the Survey. He is currently pursuing a Ph.D. in Environmental Dynamics at UAF. His research specializations include integrated data management systems, geographic information systems, archeogeophysical remote sensing, and human-environmental relationships through time.

**Deborah Weddle** received a B.A. degree in Anthropology at UAF in 1993. She began working for the Survey as a student archeological laboratory and field technician before moving permanently to the CSP. Her specializations include development of Internet access applications, geographic information systems, and the use of multimedia technologies for education.

# **CSP Service Activities**

### Student Support (Lockhart)

- Lockhart demonstrated the Survey's archeogeophysics applications for students in the UAF Anthropology Department's archeological field school, and gave a lecture on the results. He was interviewed on KUAF's "Ozarks at Large" radio program about the project. He also participated in fieldwork at Grandview Prairie associated with Dr. Ken Kvamme's Near-Surface Prospection class at UAF, and assisted several students with class and thesis projects.
- Lockhart provided informal instruction in the use of digital tools in cultural resource management and archeological research to Anthropology and Environmental Dynamics students at UAF.
- Lockhart supervised students working on the Survey's project to encode witness tree data from early General Land Office surveyors' notes. More than 18,000 trees in 30 Arkansas townships were encoded. This project, funded by a \$20,000 grant from the Department of Arkansas Heritage, builds a data layer reflecting pre-European settlement forest composition for GIS and other applications.

### Public and Professional Service (Lockhart and Weddle)

- Weddle provided demonstrations of the Survey's computer facilities, resources, and current projects to visiting scholars, professionals, and students.
- Weddle performed computer hardware upgrades and repairs on Arkansas Archeological Society workstations, and provided technical support and graphics assistance to various Society members. She temporarily took over maintenance of the Society's website after the departure of the Survey's half-time Society Office Manager in June.
- Lockhart presented invited lectures on his archeogeophysical research to Fayetteville High School (physics students), Hendrix College, the Arkansas River Valley Chapter of the Arkansas Archeological Society in Russellville, and participants in the 2002 Arkansas Archeological Society Training Program at Grandview Prairie (combined audiences of more than 150).

### Internet Service (Weddle)

- Design, administration and maintenance of the official website of the Southeastern Archaeological Conference. The site, created in 1997, is hosted by the Survey on a voluntary basis. It contains general information about this professional organization and its publications, including online registration for the annual meeting. <a href="http://www.uark.edu/campus-resources/seac>">http://www.uark.edu/campus-resources/seac></a>
- Design, administration, and maintenance of the *Archeological Parks in the U.S.* website. Created in 1998, this site provides links to Internet information on parks which feature or interpret archeological sites in the U.S. <a href="http://www.uark.edu/misc/arass/">http://www.uark.edu/misc/arass/</a>
- Administration and maintenance of the *First Encounters* website, which was created to showcase the Survey's educational CD-ROM *First Encounters: Native Americans and Europeans in the Mississippi Valley*, produced as part of a National Endowment for the Humanities Teaching with Technology grant. The site provides general information and online order forms for the CD-ROM, which is available free of charge to educators and educational institutions. <a href="http://www.uark.edu/depts/contact">http://www.uark.edu/depts/contact</a>

- Administration and maintenance of the official website for the South Central Historical Archeology Conference. This site was created at the behest of ATU station archeologist Leslie Stewart-Abernathy to disseminate information about SCHAC's annual meeting and as a forum for posting contributed research papers about historical archeology in the south central region of the U.S. <a href="http://www.uark.edu/campus-resources/archinfo/schac.html">http://www.uark.edu/campus-resources/archinfo/schac.html</a>
- Hosting, administration, and maintenance of the Survey's new *Rock Art in Arkansas* website, which contains information for researchers as well as online and downloadable materials for K-12 and college-level teachers and students. <a href="http://rockart.uark.edu">http://rockart.uark.edu</a>

### **Campus Service**

Weddle participates in the Information Technology Support Program of the UA Computing Services. This program provides training for departmental staff to enable them to provide effective computer systems and user support. Benefits to the Survey include substantial savings on Computing Services labor fees for specialized software installations, networking, repairs and upgrades, and access to training resources.

Lela Donat, Registrar Marian Kunetka, Assistant Registrar Roula Khawam, NAGPRA Grant Coordinator

The Registrar's Office is responsible for review, processing, and curation of 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 contributes to the Survey/UA Department of Anthropology student internship program.

# **CURRENT ACTIVITIES**

### **General Operations**

The Registrar's Office spends most of its time reviewing and encoding site forms, reports, and images for the various electronic databases, reviewing paperwork and curating new archeological collections, and assisting contractors and students.

The AMASDA database is a potent research tool that can be linked to various GIS programs. The staff work daily to keep this resource current. This year 848 new sites were added, bringing the total for the state of Arkansas to 36,239. In addition, new information for 216 known sites was added. New archeological projects numbered 132.

Approximately 215 researchers visited the office during 2001-2002. With growth in the Anthropology Department and Environmental Dynamics Program at UAF, the number of students using archeological records for various class projects has increased over the past two years.

### Grants and Contracts

The Registrar's Office is involved in several projects to upgrade and improve database delivery for various entities.

**Ozark-St. Francis cost-share**. A cost-share agreement with the Forest Service provides funds to support digitizing archeological project data within the Ozark and St. Francis Forest boundaries.

Scanning Site Forms. A 2001 grant of more than \$88,000 from Arkansas Highway and Transportation Department supports the creation of scanned image files of all paper site forms to be added to the main site database. Work-study and graduate students were hired to perform this work. Thirty-five of the 75 Arkansas counties (about 45%) were finished by the end of FY 2002. AHTD is one of the most frequent users of the Survey's site files. By making the scanned images available online, AHTD archeologists and other clients will be able to consult complete site records without visiting the Coordinating Office—a big savings in time and expense.

NAGPRA Inventories. A grant from National Park Service supported the inventory of unassociated funerary items and items of cultural patrimony that must be repatriated to the appropriate Tribe under NAGPRA (Native American Graves Protection and Repatriation Act). The grant ended in December 2001. Pipes, beads, and ceramic vessels were studied and photographed with the help of station archeologists George Sabo and Jeff Mitchem and Survey photographer Jane Kellett.

Also in the fiscal year, "Notices of Inventory Completion" for skeletal material for the HSU area were published and the remains repatriated to the Caddo Indian Tribe of Oklahoma. By agreement with the Caddos (and other Tribes with whom the Survey has repatriation responsibilities), the collections continue to be curated at the UA facility, but any decision about the collections must come from the Tribe. "Notices of Inventory Completion" for Toltec Mounds State Park were also completed. Work began on the "Notices" for the ASU station area.

New Sites		
Recorded	848	Total number of sites now in Arkansas site files = 36,239
New Data		
Recorded for		
Known Sites	216	
No. of Requests		
for Access to		
Site Records	182	
No. of Collections		
Accessioned	16	
No. of New Projects		Total number of projects now
Entered in AMASDA	132	in AMASDA = 4589

Who Reports New Sites? 2001-2002				
Survey Staff Stations SRP	99 0			
Private CRM Firms	240			
State & Federal Agencies	454			
AR Archeological Society	55			

# **REGISTRAR'S OFFICE PERSONNEL**

Lela Donat (M.A., 1992, UAF) became Survey Registrar in 1994, after three years as Assistant Registrar and a 17-year career in nursing. Her specialization in bioarcheology has provided excellent background for oversight of NAGPRA compliance activities at the Survey. Donat is proficient in the use of several database softwares and has archeological and bioanthropological field and laboratory experience in Arkansas and Chile.

Marian Kunetka (M.A., 1999, UAF) 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.

**Roula Khawam**, anthropology graduate student, works as the NAGPRA Grant Coordinator. She inventoried unassociated funerary objects that are subject to repatriation under the Native American Graves Protection and Repatriation Act.

# PUBLIC EDUCATION

Mary L. Kwas, Education Specialist

The Survey has always incorporated public education activities as part of its service mission. To make this effort more effective, in 1999 a half-time position was dedicated to public education, and Mary L. Kwas was appointed Education Specialist, working under the State Archeologist. Kwas develops and disseminates materials about Arkansas archeology for the general public and for use by professional educators. These outreach materials incorporate print media, hands-on classroom activities, exhibits, and the Internet. Kwas also acts as liason with the Public Education Committee of the Society for American Archaeology and manages Archeology Month.

### Arkansas Archeology Week To Become Archeology Month

The Survey's education specialist coordinates and manages Arkansas Archeology Week, a concentrated series of special events to promote awareness of archeology throughout the state. These events include lectures, exhibits, workshops, and demonstrations scheduled by the Survey research stations, various state agencies, museums, parks, libraries, Arkansas Archeological Society chapters, and other groups. There is a different theme each year (though events are not required to conform to the theme). Kwas helps determine the theme, develops ideas for programs and related materials for teachers, and coordinates the list of events as planning proceeds throughout the year. She also creates material for the Archeology Week web pages and keeps them up to date.

The theme for Archeology Week 2001 was Archeological Parks. Twenty-eight events were scheduled at 20 different venues. These events focused attention on the archeological collections available for public viewing at many Arkansas museums, and the heritage tourism opportunties presented by public parks that interpret archeology in Arkansas and surrounding states. Kwas also produced an 11-page handout for teachers who wished to incorporate the Archeology Week theme in their classrooms. The handouts were distributed through the Educational Coops and the Survey website.

Beginning in October 2002, Archeology Week will be expanded to Archeology Month, allowing for more flexibility in scheduling events. The theme chosen was "Made from Clay: Cooking and Craftsmanship." After 2002, Archeology Month will move to March.

### First Encounters CD

Kwas served as project manager for the Survey's NEH-funded educational software development project

that resulted in the *First Encounters* CD-ROM. Kwas's activities included coordinating reviews of the CD and providing the required progress reports to NEH. This fiscal year, three summative reviews and an addendum final report were prepared and submitted. This report included a compilation of distribution data for the CD, which was made available free of charge to any educators or educational institution requesting it. Kwas also wrote press releases for a second batch of 1000 CDs, funded by the Arkansas Humanities Council. Copies of the CD were sent for review to selected journals, and to all public libraries in Arkansas.

### Helping Arkansas Teachers

Kwas continued efforts on behalf of Arkansas teachers. With active involvement in conferences and resource fairs, the Survey's education specialist provides not only information on Arkansas archeology, but also creative ways to bring this information into the classroom. At the Arkansas Conference on Teaching, held Nov. 1-2, 2001, in Little Rock, Kwas conducted a workshop on "Trash Box Archeology," an active learning instrument that allows students to "excavate" a table-top site and then interpret the artifacts they recover. More people turned up for the workshop than could be accomodated in the space available.

### Representing Arkansas on the National Scene

Kwas's membership and active involvement in the Society for American Archaeology's Public Education Committee continued the Survey's longstanding presence in the public education movement. Kwas served as editor of the committee's electronic newsletter and as Arkansas's representative for the Network of State and Provincial Archaeology Education Coordinators. She helped to develop a Public Education Committee website, and was involved with several projects of the Heritage Tourism work group.

# **Education Specialist**

Mary L. Kwas (M.S., 1980, Anthropology, University of Wisconsin-Milwaukee) has over 20 years experience in public education and archeology. She previously worked as collections archeologist for the Mississippi Department of Archives and History, park manager of Pinson Mounds State Archaeological Area in Tennessee, and curator of education at Chucalissa Museum, University of Memphis. She joined the Survey in 1996 and was appointed education specialist in 1999.

### Service to the Arkansas Archeological Society

Kwas contributed a regular column on Public Education to the Society's newsletter and served as proofreader. She was coordinator for Archeology Month, and assisted the local Ko-ko-ci Chapter with its monthly programs. Kwas will take on new duties, formerly assigned to the Society Office Manager, since fiscal restraints have made it impossible to re-fill this position for 2002-03. She will manage the Society's annual meeting preparations, and be responsible for content development on the Society's website.

### **Professional Service and Activities**

Kwas is a member of the Society for American Archaeology, Southeastern Archaeological Conference, Arkansas Archeological Society, Arkansas Historical Association, and Arkansas Museums Association.

Kwas served on the Society for American Archaeology's Public Education Committee and its Internet Subcommittee. She has been editor of that committee's electronic newsletter *Archaeology and Public Education* since 1999. She also is part of the Heritage Tourism work group

### Service to Arkansas Public Schools

Kwas served as lead judge for the Northwest Arkansas Science Fair, Behavioral/Social Sciences, junior division, at the UAF campus.

Kwas participated in two resource fairs for TASC (Teachers of Arkansas Studies Council) in Little Rock and Helena (combined audiences about 100). She also attended the Conference on Teaching at Little Rock, where as many as 1400 teachers gathered and Kwas's "Trash Box Archeology" session drew a capacity audience of about 25). Another teacher's workshop in Blytheville was part of the district's NEH-funded Schools for a New Millennium project to develop an archeology curriculum for middle school students (audience about 30). Kwas continued collaboration with Arkansas kindergarten teachers to produce a Native American Activity Book.

### Public Education and Outreach

Kwas contributed content to the Education and Archeology Month web pages on the Survey's main website. She also updated content on the Archeological Parks website.

# PUBLICATIONS AND EDITORIAL OFFICE

Mary Lynn Kennedy, Editor Gilbert P. Verser III, Sales and Distribution Robert C. Mainfort, Jr., Series Editor Deborah Sabo, Popular Series Editor Lindi Holmes, Research Reports and Reprints Editor

The Survey's Publication Program incorporates four series. The Research Series, Research Reports, Technical Papers, and Popular Series present archeological information to wide audiences ranging from professional scholars and students to public school teachers, government officials, and the general public. A Publications Committee assists the staff.

### **New Publications**

Research Series No. 59, *Mortuary Behavior at Upper Nodena*, by Rita Fisher-Carroll was published in January. Ms. Fisher-Carroll is a former UAF graduate student. The volume is a revised version of her thesis. Upper Nodena is one of Arkansas's most well known and significant archeological sites. It was excavated during the 1930s by the UA Museum and the Alabama Museum of Natural History. Fisher-Carroll's study explored the material evidence for social ranking at the site, which has been considered to have a complex chiefdom-like political organization. She found little sign of a hierarchical social order.

### Reprints

Three Research Series titles were reprinted during the year: RS16, Fancy Hill; RS35, From Clovis to Comanchero: Archeological Overview of the Southern Great Plains; and RS47, Archeological and Bioarcheological Resources of the Northern Plains. The two Plains volumes are in demand as college textbooks.

### **Digitizing Project**

All 29 Research Reports were transferred to CD-ROM with complete indexing capabilities. Nearly half of the 59 Research Series titles are ready for CD rendering, but indexing will not be undertaken until the remaining titles have been digitized.

### Sales and Distribution

Sales remained steady. RS44, *Standards for Data Collection from Human Skeletal Remains*, is still the Survey's bestselling title. College bookstores and Internet outlets account for 60% of revenue. Books are also sold at annual meetings of the Society for American Archaeology, Southeastern Archaeological Conference, Midsouth Archaeological Conference, and Arkansas Historical Association. Certain titles have been popular at teacher workshops around the state. A record number of free copies was distributed this year, primarily to educators.

Publication Sales and Distribution for 2001-2002								
	Research Series	Research Reports	Popular Series	Technical Papers	Special Publication	Total		
No. of Titles	59	29	2	10	1	101		
Sold	1505	35	221	22	4	1787		
Free	294	2	82	11	0	389		
Total	1799	37	303	33	4	2176		

### Publications, 2001-2002

MORTUARY BEHAVIOR AT UPPER NODENA, by Rita Fisher-Carroll. 2001. 112 pp., 15 illus., paper. ISBN 1-56349-093-5 (Research Series No. 59).

## Forthcoming

A HANDBOOK OF SOIL DESCRIPTIONS FOR ARCHEOLOGISTS, by Gregory Vogel. 2002. 34 pp., 7 illus., paper (Technical Papers No. 11).

GHOST BOATS ON THE MISSISSIPPI: Discovering Our Working Past, edited by Leslie C. Stewart-Abernathy. 2002. 456 pp., 117 illus., paper. ISBN 1-56349-094-3 (Popular Series No. 4).

A MORTUARY ANALYSIS OF THE VERNON PAUL SITE (3CS25): Sociopolitical Organization at a Late Mississippian Site in Cross County, Arkansas, by Thomas Nelson Gannon. 2002. 74 pp., illus., paper. ISBN 1-56349-095-1 (Research Report No. 30).

# PHOTOGRAPHIC AND GRAPHIC ARTS SUPPORT

M. Jane Kellett, Graphic Artist

The photographic and graphic arts support office at the Survey incorporates a darkroom and desktop computer graphic arts facilities. Visual documentation is an essential part of archeology, and of all aspects of historic preservation. The Survey has established an image archive for Arkansas archeology through its photographic and graphic arts support office in Fayetteville. 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 figures, illustrations, and photographic plates for Survey publications, SRP contract reports, and staff publications in other professional journals and books. She does the layout and graphics for a variety of outreach materials produced by the Survey, and has designed many t-shirts for the annual Arkansas Archeological Society summer Training Programs and posters for Arkansas Archeology Week.

# 2001-2002 ACHIEVEMENTS

- 204 rolls of film and 4100 black and white negatives processed
- ◆ 628 image scans made from negatives, hard copy, or slides for various media, including Survey publications, the Arkansas Archeological Society newsletter, SRP reports, outreach materials, CD-ROMs, and websites
- ◆ 70 photographic prints for journal and book publications, National Register nominations and archives, SRP reports, and the UA Museum
- Graphic design for print media including a new Survey brochure; updated educational flyers on American Indian Tribes, Archeological Sites, and Toltec Mounds Archeological State Park; a poster-sized panel for an exhibit of pottery from the Joint Educational Consortium's Hodges Collection (HSU); and bookmarks for free distribution to promote the Rock Art website
- Graphic production for maps and presentation slides for the Wallace Bottom project (UAPB), and Toltec Mounds State Park
- 813 slides for use in outreach and public education presentations
- 1150 photographic plates of pottery vessels and other artifacts and specimens for various projects, including UAPB, Toltec Mounds, SRP, and the Survey publications program
- ♦ 236 photographic plates for NAGPRA inventories

*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

Hester A. Davis, Treasurer and Editor Gilbert P. Verser III, Office Assistant

### 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

The Survey maintains a unique and productive relationship with the Arkansas Archeological Society, an educational organization for people of all ages interested in Arkansas archeology, history and prehistory, and cultural resource preservation in the state. The Society elects a Board of Advisors who conduct yearly evaluations of the Survey's accomplishments, needs, and ongoing efforts to serve the public interest through various outreach and service activities. Society members provide proactive public support for the Survey's mission of education, research, and service. They also constitute a pool of 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 that is perhaps the most effective, as well as the most innovative, feature of a multifaceted cooperative relationship. It was the first such program developed 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 is a non-profit educational organization with approximately 600 members of all ages throughout Arkansas and across the country. There are now six active Chapters working closely with the Survey research stations and other professional archeologists in their areas.

### Volunteers

Society members donate thousands of hours in the field and laboratory each year, working on station research projects, individual research, and emergency salvage. Survey staff and Society members cooperate in local and statewide public archeology activities ranging from school talks to Archeology Month, the State Fair booth, and the annual Training Program. Volunteers contributed over 4270 hours to Arkansas archeology in 2001-2002, and that does not include work done at the annual Training Program.

### Archeological Research Fund

The Society provides monetary support for Arkansas archeology with its Archeological Research Fund (ARF). Since 1985, donations to the fund have accumulated interest in high-yield savings accounts. Each year the interest is bestowed as grants to help support projects in which Society members have participated. This year a single request for funds was recieved and the full amount of \$2500 granted to David Jeane, station assistant at SAU, for radiocarbon dating of samples from the Tom Jones site at Grandview Prairie, scene of the 2001 and 2002 Training Programs.

### **Annual Meeting**

The 2001 annual meeting was held at the Arlington Hotel in Hot Springs, September 28-30. Attendance was one of the highest on record, with 144 registrants. Of 14 papers presented, six were authored or co-authored by Survey personnel. Included was a long session presented by SAU station archeologist Frank Schambach and Survey Computer Services/ Geoarcheology specialist Jami Lockhart on results of the Training Program fieldwork at Grandview Prairie.

UAPB station archeologist John House nominated the Arkansas Post National Memorial and White River National Wildlife Refuge for the Society's McGimsey Preservation Award. The Awards were presented at the banquet to representatives of these organizations.

Keynote speaker was Michael B. Collins of the Texas Archeological Research Laboratory, who presented an illustrated talk on the Gault site, a Clovis period Paleoindian site he is studying in Texas. A contingent of Society members volunteered to travel to Texas to help with the excavations.

### State Fair Booth

The Survey and Society cooperate each year to staff an information booth at the Arkansas State Fair. Portable exhibits, including the Survey's "Crossroads of the Past" video, are on display. Thousands of copies of various educational brochures and flyers are distributed. Hundreds of teacher packets are also given away at the State Fair. These packets contain information, lesson plans, and other resources for Arkansas teachers to use in history, science, geography, or cultural studies.

### Publications

Society publications include a bimonthly newsletter, *Field Notes*, and an annual bulletin, *The Arkansas Archeologist.* A decades-old hiatus had kept the bulletin behind schedule for years; though a volume was published annually, there was a two-year gap. In 2001, editor Hester Davis closed the gap, with two volumes distributed to members: No. 41 for the year 2000, and No. 42 for the year 2001.



Society members unearth prehistoric features at the Tom Jones site in Grandview Prairie Wildlife Management Area during the annual Training Program.

The first of its kind in the U.S., Arkansas's Training Program has been a model for other organizations across the country and around the world.

Participants receive expert instruction at a real archeological site, excavated according to the highest professional standards.

## "Society Dig": The Training and Certification Program

This unique program is managed cooperatively by the Society and Survey. Every year in June a twoand-a-half week training program is conducted at an archeological site chosen according to various criteria, including ongoing research interests at the Survey stations, educational potential, and logistical needs. Field and laboratory work are supervised by Survey staff, other professionals, and qualified Society members. Survey archeologists also teach a series of five-day seminars on various archeological topics. Those who complete the required number of hours in the field, lab, and classroom may earn Certification in various categories. Training Program participants must be members of the Arkansas Archeological Society and pay a small registration fee as well as their own camping or motel and meal expenses. During the second week there is a day-long Open House when the public and media are invited to tour the site, ask questions, and observe the work in progress.

## THE 2002 TRAINING PROGRAM AT GRANDVIEW PRAIRIE

Last year's research at Grandview Prairie Wildlife Management Area in Hempstead County was continued in 2002, with more test excavations at the Tom Jones mound site as well as several other sites on the property. There were 109 Society members attending the Program. Seventeen Survey staff participated as field and lab supervisors and instructors. Graduate students and other professional archeologists in the state were also on hand.

Caddo Tribal representatives were consulted during planning and visited the site during the Training Program. Forest Service archeologist Meeks Etchiesen managed the field laboratory. A hundred people worked 410 hours in the lab, which received 85 visitors during Open House.

Nine of the 10 seminars were taught by Survey staff: Ann Early (State Archeologist), Tom Green (Survey Director), station archeologists John House (UAPB), Marvin Jeter (UAM), Claudine Payne (Blytheville), George Sabo (UAF), and Mary Beth Trubitt (HSU), and station assistants Tim Mulvihill (Parkin), and Kate Wright (HSU). The remaining seminar was taught by Dawn Novak, UAF graduate student and Survey Intern. Sixty-eight persons enrolled in seminars.

Frank Schambach and David Jeane of the SAU station directed the excavations, and Jami Lockhart, the Survey's archeogeophysics specialist, conducted remotesensing surveys to guide the fieldwork. Skip Stewart-Abernathy (ATU station archeologist) directed work at three historic sites in the Wildlife Management Area. Analysis of the material collected during the Program will continue at the SAU station laboratory throughout the year. The significance of the Tom Jones site to Caddo area archeology cannot be underestimated. The large temple mound is essentially intact—a small looter's hole on top of the mound had done little damage. Excavations have so far uncovered remains of three houses. The square or rectangular houses all have the same 35 degree west of north orientation, indicating they are contemporary with each other.

Remains recovered from house floors include an excellent sample of pottery, with many whole or reconstructable vessels, some of them enormous. There were also abundant carbonized vegetal remains, an important source of information on diet and ecological adaptation of the Caddoan people who occupied the site. Corn kernels and beans—a species that is very difficult to recover archeologically—were found by the meticulous excavators. And thanks to a grant from the Society's Archeological Reseach Fund, radiocarbon dates on samples from the 2001 season were returned this year. At least one of the house floors can be securely dated at around A.D. 1400.

Another new discovery was the possible presence of a settler's cabin on top of the large temple mound. Sherds of European transfer-printed ceramics were spotted washing out of leaf mold on the mound. Skip Stewart-Abernathy reports the sherds may reflect the earliest post-French occupation of southwest Arkansas by Euro-Americans, adding weight to David Jeane's previous suggestion of a settler's habitation there in the 1820s. Documentary sources indicate that the earliest domicile of the Stuart family (the major landowners at Grandview) was a cabin on top of an Indian mound situated on a prairie—which perfectly describes Mound A at the Tom Jones site.

# Appendix 1. Reports and Publications by Survey Staff during 2001-2002

Anderson, David G., and Robert C. Mainfort, Jr. (editors)

2002 The Woodland Southeast. University of Alabama Press, Tuscaloosa & London.

Davis, Hester A.

- 2001 Warts and All. *The SAA Archaeological Record* 1(1):20-21.
- 2001 Facing the Crisis of Looting in the United States. In *Archaeology and Society in the 21st Century: The Dead Sea Scrolls and Other Cases*, edited by Neil A. Silverman and Ernest S. Frerichs, pp. 155-159. Israel Exploration Society and The Dorot Foundation, Jerusalem.
- 2002 Looting Graves/Buying and Selling Artifacts: Facing Reality in the U.S. In *Illicit Antiquities: The Theft of Cultures and the Extinction of Archaeology*, edited by Neil Brodie and Kathryn Walker Tubb, pp. 235-240. One World Archaeology Series 42. Routledge, London & New York.
- 2002 Pot-Hunters, Salvage, and Science in Arkansas, 1900-2000. In *Histories of Southeastern Archaeology*, edited by Shannon Tushingham, Jane Hill, and Charles H. McNutt, pp. 77-87. University of Alabama Press.

Early, Ann

- 2002 The East Phase. Field Notes, Newsletter of the Arkansas Archeological Society 304:4-8.
- 2002 The Mid-Ouachita Phase. Field Notes, Newsletter of the Arkansas Archeological Society 305:10-13.
- 2002 The Social Hill Phase. Field Notes, Newsletter of the Arkansas Archeological Society 306:10-13.
- Green, Thomas J.
- 2001 Cultural Resource Management: The Conservation of Cultural Heritage. In International Encyclopedia of Social and Behavioral Sciences, edited by N. J. Smelser and Paul B. Bates, pp. 3113-3116. Pergamon, Oxford.
- Hilliard, Jerry E.
- 2001 Excavations at Spring Valley Road Shelter (3BE630), Benton County, Arkansas. Arkansas Archeologist 41:29-53.
- 2001 The Narrows Rock Art in Archeological Context. <a href="http://rockart.uark.edu/narrowsarch.html">http://rockart.uark.edu/narrowsarch.html</a>

House, John H.

- 2001 Archeological Investigations at the Wallace Bottom Site, White River National Wildlife Refuge, Arkansas, 2000-2001. Report submitted to United States Fish and Wildlife Service, Regional Archeologist's Office, Savannah, Georgia. Arkansas Archeological Survey.
- 2001 Artifacts and Samples from the Wallace Bottom Archeological Site. Addendum to "Archeological Investigations at the Wallace Bottom Site, White River National Wildlife Refuge, Arkansas, 2000-2001." Report submitted to United States Fish and Wildlife Service, Regional Archeologist's Office, Savannah, Georgia. Arkansas Archeological Survey.

House, John H., Mary V. Farmer, and Peggy S. Lloyd

2001 Phase II Testing of Seven Archeological Sites on the Pine Bluff Arsenal, Jefferson County, Arkansas. Final Report submitted to the U.S. Department of the Army. Department of Social and Behavioral Sciences, University of Arkansas-Pine Bluff.

Hughes, R. E., M. Kay, and T. J. Green

2002 Geochemical and Microwear Analysis of an Obsidian Artifact from the Brown Bluff Site (3WA10), Arkansas. *Plains Anthropologist* 47:73-76.

Jeter, Marvin D.

- 2001 Review of *The Late Woodland Period on the Lower Tombigbee River*, by George W. Shorter et al. *Mississippi Archaeology* 36(2):147-157.
- 2002 From Prehistory through Protohistory to Ethnohistory in and near the Northern Lower Mississippi Valley. In *The Transformation of the Southeastern Indians 1540-1760*, edited by Robbie Ethridge and Charles Hudson, pp. 177-223 (and endnotes pp. 301-313). University Press of Mississippi, Jackson.

Kwas, Mary L.

2001 Communicating with the Public Part I: Slide-Lecture Tips. The SAA Archaeological Record 1(4):23-24.

- 2001 Communicating with the Public Part II: Writing for the Public and How to Say It. *The SAA Archaeological Record* 1(5):16, 23.
- 2001 Communicating with the Public Part III: Writing for the Public and Making It Look Good. *The SAA Archaeological Record* 2(1):30-31.
- 2002 Communicating with the Public Part IV: Tips for Writing a Tour Guide. *The SAA Archaeological Record* 2(3):21.
- Kwas, Mary L., Teresa L. Hoffman, and Elaine Silverman
- 2002 Heritage Tourism and Public Archaeology. The SAA Archaeological Record 2(2):30-32, 44.
- McGimsey, Charles R. III
- 2001 It Was the Best of Times, It Was the Worst of Times. The SAA Archaeological Record 1(1):17-19.

Mitchem, Jeffrey M.

- 2001 Current Research: Beads of Northern Jordan. The Bead Forum 39:6-7.
- 2001 Review of Space and Time Perspective in Northern St. Johns Archeology, Florida, by John M. Goggin. Southeastern Archaeology 20(2):201-202.
- 2002 Review of Coosa: The Rise and Fall of a Southeastern Mississippian Chiefdom, by Marvin T. Smith. The Florida Anthropologist 55(2):107-108.

Morrow, Juliet

- 2001 Notes on Late Ice Age Blade Technology. *Field Notes, Newsletter of the Arkansas Archeological Society* 302:3-5.
- 2001 The Utility of Clovis Blades for Skinning and Butchering Large Game. *Field Notes, Newsletter of the Arkansas Archeological Society* 303:4-5.
- Payne, Claudine
- 2002 Architectural Reflections of Power and Authority in Mississippian Towns. In *The Dynamics of Power*, edited by Maria O'Donovan, pp. 188-213. Center for Archaeological Investigations, Occasional Paper No. 30. Southern Illinois University at Carbondale.
- 2002 Topographic Mapping at the Tinsley 1 Site, Mississippi County, Arkansas. Report submitted to the Midwest Archeological Center of the National Park Service.
- 2002 Test Excavations at the Tinsley 1 Site, Mississippi County, Arkansas. Report submitted to the Midwest Archaeological Center of the National Park Service.
- Payne, Claudine, and Jami J. Lockhart
- 2002 Geophysical Prospecting at the Tinsley 1 Site, Mississippi County, Arkansas. Report submitted to the Midwest Archaeological Center of the National Park Service.

Rolingson, Martha A.

- 2002 Plum Bayou Culture of the Arkansas-White River Basin. In *The Woodland Southeast*, edited by D. G. Anderson and R. C. Mainfort, Jr., pp. 44-65. University of Alabama Press, Tuscaloosa & London.
- Rolingson, Martha A., and Robert C. Mainfort, Jr.
- 2002 Woodland Period Archaeology of the Central Mississippi Valley. In *The Woodland Southeast*, edited by D. G. Anderson and R. C. Mainfort, Jr., pp. 20-43. University of Alabama Press, Tuscaloosa & London.

- 2001 Paths of Our Children: Historic Indians of Arkansas. Revised edition. Arkansas Archeological Survey Popular Series 3. Fayetteville.
- 2001 Review of American Indians in the Lower Mississippi Valley: Social and Economic Histories, by Daniel H. Usner, Jr. William and Mary Quarterly (July 2001), pp. 739-742.
- 2002 Review of *Badger and Coyote Were Neighbors: Melville Jacobs on Northwest Coast Indian Myths and Tales*, edited by William R. Seaburg and Pamela T. Amoss. *Journal of the West* 41(3):97.

Schambach, Frank F.

- 2001 A Preliminary Report on the 2001 Investigations of the Arkansas Archeological Survey and the Arkansas Archeological Society at the Grandview Prairie Wildlife Management Area, Hempstead County, Southwest Arkansas. *Field Notes, Newsletter of the Arkansas Archeological Society* 301:5-11.
- 2002 Preliminary Plans for the 2002 Field Training Program. *Field Notes, Newsletter of the Arkansas Archeological Society* 305:6-7.

Sabo, George, III

2002 Fourche Maline: A Woodland Period Culture of the Trans-Mississippi South. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 90-112. University of Alabama Press, Tuscaloosa & London.

Stewart-Abernathy, Leslie C., Larry Porter, and Terry Johnson

- 2001 Catalog of Images, Lakeport Reunion, 2001. Limited distribution. On file at ATU Station, Arkansas Archeological Survey, Russellville.
- 2001 ATU Station Web Pages. <a href="http://www.uark.edu/campus-resources/archinfo/atu.html">http://www.uark.edu/campus-resources/archinfo/atu.html</a>

Trubitt, Mary Beth

- 2001 The Cahokia Palisade Project's 2001 Season: A Preliminary Report. Report of investigations under the auspices of the Central Mississippi Valley Archaeological Research Institute, submitted to the Cahokia Mounds Museum Society.
- 2002 Excavations Continue on the Cahokia Palisade Project. The Cahokian, Spring 2002, pp. 5-7.

Whayne, Jeannie M., Thomas A. DeBlack, George Sabo III, and Morris S. Arnold

2002 Arkansas: A Narrative History. University of Arkansas Press, Fayetteville.

### The following title was inadvertently omitted from an earlier Annual Report:

Hilliard, Jerry E., with Lorna Beard and Glen Akridge

2000 Historical and Chemical Traces of an Ozark Cemetery for Enslaved African-Americans: A Study of Silhouette Burials in Benton County, Arkansas. *North American Archaeologist* 21(4):323-349.

## Appendix 2. Papers, Symposia, and Workshops Presented by Survey Staff during 2001-2002

Early, Ann

2002 The Caddo: Discordant Data from an Era of Cultural Change. Presented at the annual meeting of the Society for Historical Archaeology and the Conference on Underwater Archaeology, Mobile, Alabama.

Farmer, Mary V.

2001 Wallace Bottom II, 3AR179, Revisited. Presented at the annual meeting of the Arkansas Archeological Society, Hot Springs.

Green, Thomas J.

2001 The Buhl Woman and Kennewick Man: What Have We Learned and What Is All the Fuss? Don E. Crabtree Memorial Lecture, College of Southern Idaho, Twin Falls.

Hilliard, Jerry E.

2001 Salvage Excavations at the Town Center, Fayetteville, Arkansas. Presented at the South Central Historical Archeology Conference, Little Rock.

House, John H.

- 2001 Archeology on the Pine Bluff Arsenal. Presented at the annual meeting of the Arkansas Archeological Society, Hot Springs.
- 2001 Glimpses of Colonial Archaeology in the Menard Locality, Eastern Arkansas. Presented at the South Central Historical Archeology Conference, Little Rock.

Iseminger, William, Mary Beth Trubitt, Jenna Hamlin, and Timothy Baumann

2001 In Pursuit of Cahokia's Central Palisade: The 2001 Investigations. Presented at the annual Midwest Archaeological Conference, LaCrosse, Wisconsin.

Jeane, David, Frank Schambach, and Jami J. Lockhart

2002 The 2001 Investigations by the Arkansas Archeological Survey and the Arkansas Archeological Society at the Tom Jones Site (3HE40). Presented at the annual Caddo Conference, Nacogdoches, Texas.

Kvamme, Ken, and Jami J. Lockhart

2001 New Arkansas Finds through Remote Sensing. Presented at the annual meeting of the Arkansas Archeological Society, Hot Springs.

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

2001 Geophysical Investigations at the Late Mississippian Parkin Site, Arkansas. Presented at the annual Southeastern Archaeological Conference, Chattanooga, Tennessee.

Lockhart, Jami J., and Frank Schambach

- 2002 Archeogeophysics and Archeology at a Caddo Ceremonial Mound Center in Southwest Arkansas: Grandview Prairie (3HE40). Presented at the annual meeting of the Society for American Archaeology, New Orleans, Louisiana.
- Mayrose, L. A., G. Patterson, E. S. Scweig, T. Haraguchi, K. Satake, K. Takada, K. Shimokawa, B. F. Atwater, K.

Okumura, M. P. Tuttle, M. Haynes, C. Payne, S. F. Diehl, and D. Hoffman

2002 Geoslicer Sampling of Liquifaction in the New Madrid Seismic Zone, Central U.S. Poster session presented at the annual meeting of the Seismological Society of America.

Mitchem, Jeffrey M.

- 2001 Looking at Spanish/Indian Contact in South Florida: The Tallant Collection. Presented at the annual meeting of the Southeastern Archaeological Conference, Chattanooga, Tennessee.
- 2002 Beads from Northern Jordan: A First Look. Presented to the Society of Bead Researchers, Bead Expo 2002, Santa Fe, New Mexico.
- 2002 Replicating Beads from Florida and Jordan. Presented to the Society of Bead Researchers, Bead Expo 2002, Santa Fe, New Mexico.
- 2002 The Tallant Collection and the Protohistoric Period of South Florida. Presented at the annual meeting of the Florida Anthropological Society, St. Petersburg.
- 2002 The Tallant Collection: Early Spanish Contact in South Florida. Presented at the annual meeting of the Society for Historical Archaeology and the Conference on Underwater Archaeology, Mobile, Alabama.
- Morrow, Juliet E.
- 2001 Early Paleoindian Mobility and Watercraft: An Assessment from the Midcontinent. Presented at the annual Midwest Archeological Conference, LaCrosse, Wisconsin.
- 2002 Early Paleoindian Mobility and Watercraft: An Assessment from the Midcontinent. Presented at the annual meeting of the Society for American Archaeology, Denver.
- 2002 Not by Stones and Bones Alone: A New Perspective of Late Ice Age Hunting Societies. Presented at the Hawaii International Conference on Social Sciences, Oahu.
- Payne, Claudine
- 2001 Mississippian Life along the Pemiscot Bayou of Northeast Arkansas. Presented at the annual meeting of the Arkansas Archeological Society, Hot Springs.
- 2001 Late Mississippian Community Patterns along the Lower Pemiscot Bayou of Northeast Arkansas. Presented at the annual Southeastern Archaeological Conference, Chattanooga, Tennessee.
- 2002 The Future of the Past: Cultural Tourism in the Arkansas Delta. Presented at the annual meeting of the Arkansas Historical Association, Paragould.

Rolingson, Martha A.

2002 Progress Report on Mound S at the Toltec Mounds Site. Presented at the annual Mid-South Archaeological Conference, Memphis, Tennessee.

Rolingson, Martha A., and Lucretia S. Kelly

2001 New Discoveries on Mound S at the Toltec Mounds Site. Presented at the annual meeting of the Arkansas Archeological Society, Hot Springs.

Sabo, George III, Jami J. Lockhart, and Jerry E. Hilliard

2001 The Forest as a Resource: From Prehistory to History in the Arkansas Ozarks. Presented at the South Central Historical Archeology Conference, Little Rock.

Schambach, Frank F.

2001 Tula and Spiro: Charles Hudson's Contribution to Spiroan Archaeology. Presented at the annual Southeastern Archaeological Conference, Chattanooga, Tennessee. 2002 Gulf Coast Shell and the Poverty Point Interaction Sphere. Presented at the William G. Haag Honorary Symposium, Louisiana State University, Baton Rouge.

Schambach, Frank F., and Jami J. Lockhart

- 2001 A Preliminary Report on the 2001 Investigations by the Arkansas Archeological Survey and the Arkansas Archeological Society at the Grandview Prairie Wildlife Management Area, Hempstead County, Southwest Arkansas. Presented at the annual meeting of the Arkansas Archeological Society, Hot Springs.
- 2001 What if Archeologists Had X-Ray Vision? A Preliminary Report on the 2001 Investigations by the Arkansas Archeological Survey and the Arkansas Archeological Society at the Grandview Prairie Wildlife Management Area, Hempstead County, Southwest Arkansas. Invited presentation at the 9th annual East Texas Archeological Conference, Kilgore College, Kilgore, Texas.

Shortridge, Ann M., and George Sabo III

2002 *First Encounters*: Designing Effective Educational Multimedia. Poster presented at Ed-Media 2002: World Conference on Educational Multimedia, Hypermedia, and Telecommunications, Denver, Colorado.

Stewart-Abernathy, Leslie C.

2002 Baptized, Bar Mitzvahed, and Bible Belted: Scaling and the Search for the Spiritual. Presented at the annual meeting of the Society for Historical Archaeology and the Conference on Underwater Archaeology, Mobile, Alabama.

Trubitt, Mary Beth

2001 Moorehead Phase Monumental Construction at Cahokia: The Palisade. Presented at the annual Southeastern Archaeological Conference, Chattanooga, Tennessee.

Trubitt, Mary Beth, and Kate Wright

2002 Archeological Evaluation of 3HS122, Lake Catherine State Park. Report submitted to Arkansas Department of Parks and Tourism, Little Rock. Arkansas Archeological Survey, Henderson Research Station, Arkadelphia.

## How to Contact the Arkansas Archeological Survey

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

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Arkansas Archeological Survey Toltec Mounds Research Station 490 Toltec Mounds Road Scott, AR 72142-9212 (501) 961-2420

Arkansas Archeological Survey ASU-Jonesboro P.O. Box 820 State University, AR 72467 (870) 972-2071

Arkansas Archeological Survey Blytheville Research Station 2520 Friday Spur Blytheville, AR 72315 (870) 532-9104

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Arkansas Archeological Survey P.O. Box H-7841, HSU Arkadelphia, AR 71999-0001 (870) 230-5463

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