ANNUAL REPORT

FOR FISCAL YEAR 2000-2001



ARKANSAS ARCHEOLOGICAL SURVEY

A Division of the University of Arkansas System

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The Survey Coordinating Office in Fayetteville.



University of Arkansas System

Arkansas Archeological Survey

Annual Report for Fiscal Year 2000-2001 I N T R O D U C T I O N

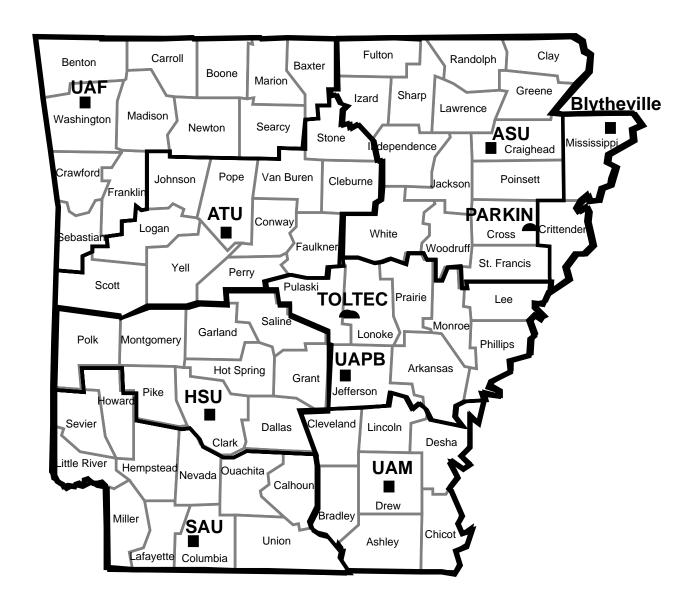
The Arkansas Archeological Survey is a part of the University of Arkansas System. Our mission is to study and protect archeological sites in Arkansas, to preserve and manage information about those sites, and to communicate what we learn to the people of Arkansas. Cooperative agreements with seven state 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; Native American 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. The station archeologists and other staff members are available to the public, providing information about prehistoric and historic archeology, Native Americans, and early settlers of Arkansas to schools, civic groups, and many types of local, statewide, national, and even international organizations.

The Director's Page

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, and other 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. Some highlights of fiscal year 2000-2001 are given here, with more detail in later chapters.

Blytheville Station Continued

The Arkansas General Assembly voted to continue funding for our 10th and newest research station, located on the decommissioned Eaker Air Force Base at Blytheville. The station's mission includes cooperation with geologists and seismologists in an integrated research program to study past earthquake activity. Our presence also complements state and local efforts to develop heritage tourism in northeast Arkansas. A national park and national archeological heritage center have been proposed in the region.

Station archeologist Claudine Payne will help with a project funded by an NEH award to the Blytheville school district. Teachers will explore ways to integrate archeology, along with information systems technology, into the 5th and 6th grade curriculum.

The Wallace Bottom Site and the Arkansas Post

The UAPB station has been heavily involved in researching the complex history of Arkansas Post for many years. The Post was moved several times, and we know that the present-day National Memorial is not the site of its earliest, 1686, location—which has not yet been pinpointed. But maybe we are getting closer. Fieldwork at the Wallace Bottom site yielded early French artifacts along with Native American items, and is a likely candidate for some of the pre-1749 French trading and military activities associated with the Post. Remote sensing at the site revealed subsurface features, some of which may represent early French buildings.

SURVEY DIRECTOR

Thomas J. Green (Ph.D., 1977, Indiana University) joined the Survey as Director in 1992. He was formerly State Archeologist and Deputy State Historic Preservation Officer of Idaho.



Dr. Green (far right) meets with Caddo Indian Tribe representatives Son Supernaw and Bobby Gonzales, and Flossie Mathews and Marilyn Rogers of the Quapaw Tribe, to discuss NAGPRA issues.

NEH Teaching with Technology Project Complete

The Survey's multiyear NEH-funded project to create the *First Encounters* educational software package was completed. The CD-ROM provides original documents and maps, instructional materials, and learning exercises about early French and Spanish interactions with Native Americans in the Southeast. George Sabo (UAF) and Deborah Weddle (CSP) worked on the

project, along with Linda Jones and Luis Restrepo of the UAF Foreign Languages Department. The CD became available in late June 2001 for free distribution to teachers and educational organizations.

HSU Station Assistant Hired

Kate Wright was hired as the new station assistant at HSU. Ms. Wright has a Master's degree in anthropology from the University of Southern Mississippi. Her experience includes contract archeology and an internship with the U.S. Forest Service. Her speciality is lithic (stone tool) studies.

Registrar's Office Receives Grants

The Arkansas Highway and Transportation Department, one of our most frequent site records clients, provided \$88,000 to create an image file database of the complete archive of paper site forms, including records for over 35,000 archeological sites in Arkansas. The image file will be available online to authorized subscribers, and will streamline the land-use planning process for many federal, state, and municipal agencies.

Another grant in the amount of \$55,000 was approved by the National Park Service to complete an inventory of unassociated Native American funerary objects and other sacred or culturally significant objects curated by the Survey, as required by NAGPRA (the Native American Graves Protection and Repatriation Act). These items were reported to the Osage Nation of Oklahoma, Tunica-Biloxi Tribe of Louisiana, Quapaw Tribe of Indians of Oklahoma, Caddo Indian Tribe of Oklahoma, and the Wichita and Affiliated Tribes.

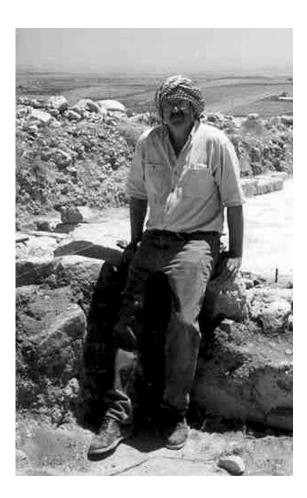
NAGPRA Activities

The Survey has made every effort to comply with NAGPRA requirements in a conscientious and sensitive manner, and so far has met every deadline imposed by the law. We continue to coordinate with Tribal representatives to explain our procedures and respond to Tribal concerns as we make progress in complying with NAGPRA.

The Registrar's office completed a NAGPRA inventory of skeletal material in archeological collections from the HSU station territory. Bobby Gonzales, representative for the Caddo Indian Tribe, accepted the "Notice of Inventory Completion," which was then forwarded for publication in the Federal Registry. Inventories were also begun for site collections from ASU station territory.

Forest History Conference

George Sabo and Ann Early organized a session at the joint meeting of the American Society for Environmen-



Jeff Mitchem in Jordan

tal History/Forest History Society in Durham, North Carolina. The session included papers by Early, Sabo, Jerry Hilliard, and Jami Lockhart about archeological contributions to environmental history.

Middle East Cooperation

Continuing the Survey's and the UAF Anthropology Department's Middle East connection, Parkin station archeologist Jeff Mitchem traveled to Jordan in June 2001. Mitchem participated in the UAF bioarcheology field school taught by Dr. Jerome C. Rose. He supervised some of the excavations, and lent his expertise on glass beads to the study of several years' worth of collections from two important sites.

Salvage Archeology in Northwest Arkansas

Jerry Hilliard of the UAF research station completed excavations at a 1000year-old house on the Illinois River in Benton County. The site was on property being considered for development. Permission to excavate was obtained from landowners, whose cooperation allowed us to study a rarity in the Ozarks, where few prehistoric house sites are known, and even fewer have been excavated. UAF students and Ko-ko-ci Chapter members of the Arkansas Archeological Society helped with the fieldwork. Student Duane Simpson's Master's thesis discusses remote sensing techniques used to plan the archeological explorations.

Artifacts at the site included hoes and grinding stones, indicating farming activity. An earth oven was located just outside the house. Seeds recovered from over 300 soil samples will be identified by specialists to give a detailed picture of how this small-scale farming community adapted to the Ozark ecosystem a millennium ago.

More Salvage in Northeast Arkansas

ATU station's Julie Morrow cooperated with landowners who volunteered information about archeological sites on their property prior to land leveling for agriculture. The Jarrett site in Randolph County proved to be a Middle Mississippian village. House walls, trash pits, and hearths werre excavated over a six month period, and samples were taken for radiocarbon dating and botanical analysis.

The Nicholson site in Jackson County was another suspected house site, this time potentially from the earlier Woodland period. No house remains were found, but a great many stone tools dating from a 10,000-year range of cultural development were recovered.

In both cases the willing cooperation and advance notice given by the landowners allowed archeological assessment well ahead of the planned agricultural operations. This kind of citizen involvement is essential for the preservation of archeological resources in Arkansas.

Arkansas Archeology Month

Starting in October 2002, Archeology Week will become Archeology Month. The longer celebration will offer more flexible opportunities for educational programs, demonstrations, and exhibits. Archeology Month provides a context for the Survey to concentrate its outreach efforts in schools and communities across the state.

A New Educational Database for Arkansas Rock Art

The Survey was awarded an Arkansas Humanities Council grant to create a computer database for Arkansas rock art sites. Information on this important category of archeological heritage is presently scattered throughout many types of documents with no consistent format to allow effective research. Parts of the database, along with learning exercises, will be available online for classroom instructional use. A short book about rock art will be published as part of the project. UAF station archeologist George Sabo leads the team.

Historical Archeology at Old Washington

A series of grants from the Arkansas Natural and Cultural Resources Commission (ANCRC) over the last several



years has allowed Survey Sponsored Research Program archeologists to work toward a comprehensive technical report on archeological research done in the 1980s through 1990s at Old Washington State Park. More than 80,000 historic artifacts recovered from antebellum house places and public buildings in the park have been inventoried and organized, making them accessible for analysis.

June 2001 saw completion of a report on the Sanders House detached kitchen, revealing details of domestic life on an urban farmstead in the second half of the 19th century. The Sanders Kitchen report (by Randall Guendling, Kathleen Cande, Leslie Stewart-Abernathy, and Dawn Novak) is the latest installment in a cumulative effort, continuous over 21 years, to use archeology for investigating and interpreting the historic town of Washington, Arkansas.

Van Winkle Site Excavations in Beaver Lake State Park

For the second year in a row, the U.S. Army Corps of Engineers and Arkansas State Parks funded archeological work at the Van Winkle site in Beaver Lake State Park. A mill, blacksmith shop,

Anthropomorphic pictograph from Stone County. This and other images can be viewed at the new Rock Art website, http://rockart.uark.edu.

and other early industrial features, plus mill-workers' residences, both pre- and post-Civil War, are found on the site, and are important to the history of settlement in northwest Arkansas. The UAF archeological field school for summer 2001 was taught at Van Winkle by Survey archeologists George Sabo and Jerry Hilliard, with help from University of Texas graduate students Jamie Brandon and James Davidson, and UAF graduate students Brynn Berry and Robin Bowers.

Publications

Survey staff authored or coauthored at least 46 publications during 2000-2001. Kathleen Cande, Ann Early, and Martha Rolingson each brought out a major title in the Survey's Research Series. Randall Guendling, Marvin Jeter, Director Emeritus Charles R. McGimsey III, and Martha Rolingson contributed articles to those three volumes.

Robert Mainfort co-edited and contributed to a volume published by Smithsonian Institution Press. Kathleen Cande and George Sabo III each had chapters in edited volumes, as did Hester Davis (State Archeologist Emerita), coauthored with Charles R. McGimsey, and Thomas Green, coauthored with Hester Davis.

Articles in national journals were published by Jeffrey Mitchem (*Historical Archaeology*, coauthored with Florida colleague Dale Hutchinson) and Mary Beth Trubitt (*American Antiquity*). Robert Mainfort, with Rita Fisher-Carroll, published an article in a major regional journal (*Southeastern Archaeology*).

Book reviews by Hester Davis, Marvin Jeter, Jeffrey Mitchem, George Sabo III, Mary Beth Trubitt, and Julie Morrow appeared in various professional journals. The remaining publications consisted of contributions to local journals and newsletters, as well as several limited distribution technical reports.

In addition, Survey staff delivered 28 papers at the annual meetings of 11 national, regional, and local organizations.

NEW DEVELOPMENTS: archeogeophysical research at the Survey

Ground penetrating radar. Magnetometry. Electrical resistivity. Electromagnetic conductivity. Magnetic susceptibility. The newest extension of "hard science" technologies into archeological practice is the application of geophysical near surface prospection to allow noninvasive exploration of buried sites. These technologies are creating a revolution of sorts in archeological field research.

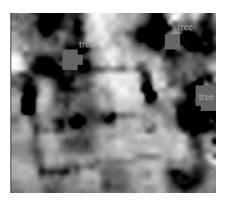
The Survey is poised at the cutting edge of this development. Our new Archeogeophysical Applications Program, managed by Jami Lockhart, offers a full complement of near surface prospection devices. Never before has the potential existed to learn so much about what is below the ground surface without disturbing it. The implications for archeological field research range from considerations of cost-effectiveness to time management to preservation of the ever-diminishing and constantly threatened record of past human activity that is locked in the earth.

These technologies cannot replace full-scale excavation as the primary method of learning about past cultures in detail; however, they can help us focus our research designs to gain the most from person-hours and grant or contract dollars spent in the field. This benefits not only pure research, but the many archeological projects that are conducted on a contractual basis as part of environmental review and cultural resource preservation requirements.

More about the Survey's archeogeophysical research is presented in later chapters of this Annual Report (see especially pages 19-20, 30, 37-38, and 55). Following are brief reviews of some of the projects Lockhart conducted in 2000-2001.

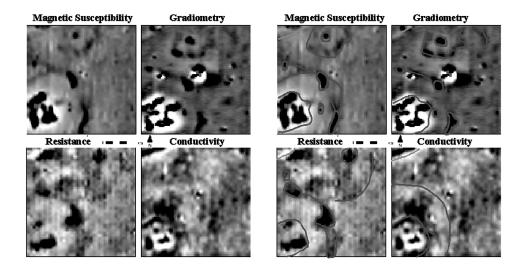
Mt. Comfort

The Mt. Comfort site, near Fayetteville, has been the location of excavations and demonstrations during past Arkansas Archeology Weeks. Before and during the Civil War, the Mt. Comfort community was anchored by a church building that was used as a field hospital by both Union and Confederate armies. The building was burned to the ground in the mid 1860s, late in the war. No above-ground structural indications remain. The Survey's previous excavations had located foundation piers and brick debris, making this site an excellent choice to field test our archeogeophysical equipment. The rectangular outline in the electrical resistivity image at right, for example, shows the former dimensions of the building, and the location of interior support piers.



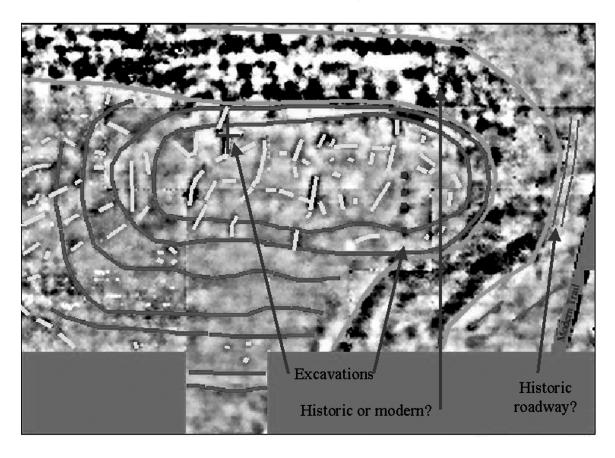
Grandview Ranch

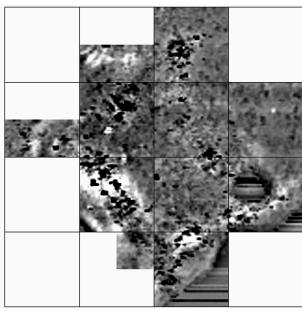
In preparation for the annual Arkansas Archeological Survey and Society Training Program, Lockhart and a crew consisting of SRP's Mike Evans and Jared Pebworth, SAU's David Jeane, HSU's Kate Wright, and UAF graduate student Duane Simpson performed archeogeophysical survey at the Tom Jones site at Grandview Prairie Wildlife Management Area (see the SAU station chapter in this report). All interpreted features from the initial survey proved, upon excavation, to indeed represent actual archeological features, including house walls, hearths, and pits. Work at this site will continue in June 2002.



Toltec Mounds Archeological State Park

Two exploratory archeogeophysical surveys were carried out at Toltec Mounds Archeological State Park. The research plan, developed in consultation with station archeologist Martha Rolingson, was designed to test several of the geophysical techniques, as well as to contribute to understanding the features and extent of Mound G. This mound, nearly leveled today, is one of the largest at the site in terms of area. Only minor archeological investigations had previously been done at Mound G. UAF's Dr. Ken Kvamme and his students also participated in the project. The illustration below shows ground anomalies marked off according to their interpretations. Previous excavations and historic features are indicated by the arrows. Drawn-in contour lines show the possible areal extent of Mound G at successive stages of construction—all new information.



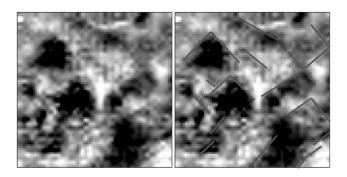


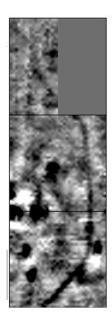
Fort Clark, North Dakota

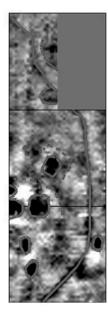
Dr. Ken Kvamme invited Lockhart to help in locating an early 19th century frontier fort associated with a Mandan Indian village on the Missouri River in North Dakota. The illustration at left shows Lockhart's electromagnetic conductivity results at the fort, clearly indicating the rectangular outline of the stockade.

Parkin Archeological State Park

Work at Parkin revealed underground anomalies representing previously unsuspected features. These have been interpreted by Lockhart and Parkin archeologists Jeff Mitchem and Tim Mulvihill as the remains of prehistoric houses, palisades, and other structures, as shown in the electrical resistance images, right and below.

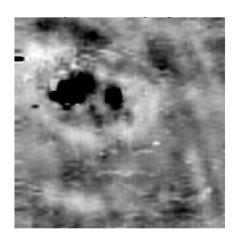


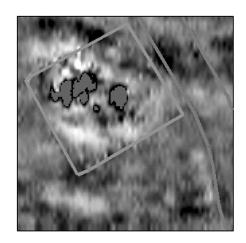




Droke Cemetery

Archeogeophysical survey at Droke Cemetery was performed in response to a request from family descendants, who wished to locate Civil War era family graves so they could be relocated. Graves and a possible fence line are discernible in the electrical resistance image, below left, and highlighted, below right.





Additional archeogeophysical work was performed at Bozeman Cemetery (see the CSP chapter in this report), Wallace Bottom (see the UAPB chapter), and the Illinois River site (see the UAF chapter). A survey at Petit Jean State Park was in cooperation with Park officials' efforts to ameliorate disturbances caused by tourism inside Indian Rock House bluffshelter and other prehistoric rock art sites. Lockhart also traveled to North Carolina at the invitation of East Carolina University's Dr. Charles Ewen, to help archeological field school participants determine the location of a pre-Civil War commandant's house.

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 RESEARCH

Early moved forward with a number of research projects during her second year as State Archeologist. Documentary, oral history, and archival research on the Shipps Ferry site, history of the Butterfield Overland Stage, and the Cherokee Trail of Tears commemoration are just a few examples. Two more ongoing projects are the General Land Office historic vegetation database project and research on Fort St. Francis and the 1739-1740 Chickasaw War.

Historic Landscapes of Arkansas

In October 2000 the Arkansas Natural Heritage Commission entered into a professional services contract with the Survey to transcribe and analyze native vegetation data recorded by 19th century U.S. government surveyors for some 20 townships in Arkansas. The work contributes to the Survey's longterm effort to create an historic landscape database for the state. Early, Kathleen Cande of the Sponsored Research Program, and Survey Computer Services staff Jami Lockhart and Deborah Weddle are involved in the project, along with anthropology graduate students Dawn Novak and Maria Tavaszi.

General Land Office maps and notes contain information on witness trees and other environmental data that can be used to create "pre-settlement" vegetation maps. (It should be noted that "pre-settlement" is something of a misnomer, indicating a time period prior to

extensive settlement by European/ Americans, but during and after some 10,000 years of land-use practices by resident Native American groups.)

The ANHC project allowed encoding of data from several target areas surrounding significant archeological sites. The Survey already had over 18,000 entries in the database before the contract began, and there are nearly 40,000 entries now.

Analysis of the data follows the concept of use-areas, or catchments, that has been used in archeological studies for decades. Catchments define a radius within which use of available natural resources by human groups can be expected, depending on the general cultural and technological adaptation of the group.

The concept is useful for a variety of purposes, such as population estimates at various periods, and the impact of settlement, both prehistoric and historic, on local environments. Aside from pure research, the Forest Service, State Parks, and any agency responsible for management of natural, cultural, and wildlife resources can use the database.

Fort St. Francis: The Search for French Colonial Arkansas

The early French presence in Arkansas is beginning to be known archeologically from studies at various locations associated with Arkansas Post. The Survey's John House is pursuing re-

search at two sites: Menard-Hodges and Wallace Bottom. The story of Arkansas Post has been brought to public attention through the writings of Judge Morris D. Arnold, Arkansas historian and member of the Federal Bench.

But there were other early French sites in Arkansas that deserve attention, and interest in them has accelerated with the approaching bicentennial of the Louisiana Purchase.

Fort St. Francis was established in 1738 as a staging area in the effort to counter threats against French control of the area from the Chickasaw Indians, who were allied with English traders. The fort was important to French military strategies in their war against the Chickasaws. A climactic battle never did occur, however, and the fort was pulled down only two years later, in 1740.

Early is helping Forest Service archeologists and heritage resource technicians with documentary research and other plans to try to find the fort. Its recorded location, near the mouth of the St. Francis River, leaves many possibilities. The site could have long since washed away, or it could be safely buried under St. Francis National Forest lands.

Development of a State Park is planned in this area, and the chances are good that archeology at the site would not only add to our knowledge of French colonial Arkansas, but provide additional tourism benefits as well.



Ann Early participates in a meeting with Forest Service archeologists and Quapaw Tribe NAGPRA representative Carrie Wilson. Left to right: Wilson, Barbara Williams (Forest Service), Early, and Meeks Etchieson (Forest Service).

State Archeologist, Service and Professional Activities

Public Education and Outreach

Early continued work on updates and revisions to the Survey's educational and informative leaflets and flyers. A revised version of the general information brochure was published. The new Toltec Mounds brochure was produced, with grant support from the Arkansas Humanities Council. Revised versions of information flyers on the Native American tribes once resident in Arkansas also were completed. Mary Kwas (education specialist), Barbara Scott (secretary/receptionist), and Jane Kellett (graphic artist) also worked on these projects.

As liason with the Arkansas Archeological Society, Early supervised and participated in joint Survey/Society projects, including the annual summer Training and Certification Program, the Society's annual meeting, Archeology Week, and the State Fair booth. Mary Kwas (education specialist), Gil Verser (Society office manager), and other Coordinating Office staff assisted with these activities. An updated general information brochure about the Society was produced. Early attended the summer Training Program and taught the Human Osteology seminar.

Early co-presented a workshop at the Arkansas Conference on Teaching in Little Rock.

Early gave public lectures at Parkin Archeological State Park, and to the Arkansas River Valley (Russellville), Central Mississippi Valley (Jonesboro), Ouachita (Hot Springs), and Tunican (Monticello) chapters of the Arkansas Archeological Society.

Database Oversight and Collections Management

Early developed a comprehensive list of archeological properties in Arkansas on the National Register of Historic Places and collected materials to create an accompanying photographic archive. This project was in response to a request by the Arkansas Historic Preservation Program.

Early's concern about the Survey's photographic archive prompted new efforts to see that records are complete and up to date. This involves oversight of all 10 research stations. Early also coordinated responses to all requests for use of Survey photographs and other products in non-Survey publications.

Early continued the search for funds to conserve the Peeler Bend canoe.

Academic Service and Activities

By agreement with the University of Arkansas System, the State Archeologist holds a non-teaching faculty title within the UAF Department of Anthropology. Dr. Early is Associate Professor. During summer 2000 Early participated in the UAF Bioarcheological Field School at Tell Ya'Amun, Jordan. She acted as a substitute instructor for the Department's Public Archeology course during Spring 2001, and presented a colloquium in the Environmental Dynamics program.

Early served as consultant to a University of Iowa search committee for Iowa State Archeologist.

Public and Professional Service and Activities

Early's management responsibilities included review of more than 100 permitted development activities affecting archeological sites, providing written commentary for many of them. She also reviewed archeological and management reports, and gave advice and assistance to archeologists performing various compliance work around the state.

Early participated in the planning phase of the UAF station's Arkansas Rock Art database project.

Early contributed information and assistance to numerous agencies and other bodies, including: The Museum of Arkansas History (formerly Arkansas Territorial Restoration); U.S. Army Corps of Engineers; U.S. Forest Service; Ouachita National Forest; Department of Arkansas Heritage; the Archeological Conservancy; White River Environmental Association; the State Historic Preservation Officer; various law enforcement agencies (regarding identification of human remains); the Quapaw Tribe of Oklahoma; the Caddo Indian Tribe; Arkansas Historic Preservation Program; Arkansas State Parks; Walker Cemetery Preservation Association; Mosaic Templars Preservation Association; the South Florida Museum; and numerous private citizens regarding legal issues of cemetery and grave protection, vandalism of archeological sites, and other matters.

Early served as President of the Arkansas Historical Association; Editorial Board Member of the journal *Mississippi Archaeology*; Executive Committee Member and Outreach Grant Selection Committee Chair of the Southeastern Archaeological Conference; Contributing Editor of the journal *Caddoan Archeology*; Member of the Arkansas Review Board for Historic Preservation; and Member of the Louisiana Purchase Commemoration Design Team.

Early reviewed manuscripts for *The Arkansas Archeologist* and *Mississippi Archeology*.

Public Education

Mary L. Kwas, Education Specialist

The Survey has always incorporated public education activities as part of its service mission. In August 1999 one of our Research Assistant positions was dedicated to public education. Mary L. Kwas (M.S., 1980, University of Wisconsin-Milwaukee) was appointed Education Specialist, working under the State Archeologist. She develops and disseminates materials about Arkansas archeology using print media, handson classroom activities, exhibits, and the Internet.

Public Education on the Web, in Print, and Face-to-Face

Mary Kwas continued to prepare and update information for the Survey website's Education pages and Archeology Week pages. The latter have downloadable teacher's handouts for each year's theme, a program schedule, and ideas for programs and activities. She also posted information about archeology to the Arkansas Council for Social Studies and Science listservs, and edited Archaeology & Public Education, an electronic newsletter. of the Society for American Archeology.

"Public Education News," a column written by Kwas, appears regularly in *Field Notes*, the Newsletter of the Arkansas Archeological Society. Kwas also sent information to newsletters of the Arkansas Historical Association, the Arkansas Museums Association, the Department of Parks' *Interpretation News*, the *TASC Newsletter*, and the *Social Studies Leader*.

Educational print resources produced by the Survey include various information leaflets, brochures, and flyers. These are compiled into Teacher Pack-

ets, available by mail upon request, and also distributed to teachers at the Arkansas State Fair and through the state's Education Co-ops.

Kwas presented table displays and workshops and distributed information at two Teachers of Arkansas Studies Council (TASC) Resource Fairs and conducted a "Trash Box Archeology" workshop at the Arkansas Conference on Teaching in Little Rock. The Trash Box Archeology activity is also a regular fea-

An Archeology Week activity at the Fayetteville Public Library: Girl Scouts learned about Native American clothing styles and dances.

ture of University Day at UAF, when both teachers and students participate.

NEH "Teaching with Technology" Project

The *First Encounters* CD was outsourced for production and copies became available for distribution shortly before the beginning of the school year. The success of the project is illustrated by the fact that half of our inventory was gone by mid-September.



Mary L. Kwas holds M.S. and B.A. degrees in Anthropology from the University of Wisconsin-Milwaukee. She has worked for the Mississippi Department of Archives and History, Pinson Mounds State Archaeological Area, and Chucalissa Museum, University of Memphis, before coming to the Survey in 1996. She has over 20 years of experience in public education and archeology.

Service Activities

Society for American Archaeology: Public Education Committee; editor of electronic newsletter, *Archaeology & Public Education*; Arkansas representative for the Network of State and Provincial Education Coordinators.

Arkansas Archeological Society: Author of "Public Education News," a regular column in the Society newsletter; advice and support to the local Ko-ko-ci Chapter of the Society; guest speaker at one of the Chapter's monthly meetings; coordinator of Archeology Week activities.

Local Public Schools: Kwas is collaborating with two kindergarten teachers to produce an Arkansas Indians activity book. She served as a judge at the UA Science Fair for the junior division, Behavioral/Social Sciences. She participated in a Girl Scouts program, Women in Career Fields.

PARKIN ARCHEOLOGICAL STATE PARK

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

The Parkin research station was established in 1990 to study the 17-acre Parkin site and related sites in the region. Parkin is a Native American fortified village that was occupied from A.D. 1000 to at least 1541. A large platform mound and hundreds of houses were built on the banks of the St. Francis River and 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 careless digging and modern agriculture, but Parkin has survived nearly intact. The site is now entirely within the boundaries of Parkin Archeological State Park, and is a National Historic Landmark. Parkin has been identified by experts as the village of Casqui, visited by the Spanish expedition of Hernando de Soto in the summer of 1541 and described in the four written accounts left by survivors of that expedition.

CURRENT RESEARCH

Because of its location at a state park, the Parkin station plays host to many visitors throughout the year. Mitchem and Mulvihill identify artifacts brought in by area residents and conduct tours of the site and station lab. A special "Artifact Identification Day" during Arkansas Archeology Week in October brought an overwhelming response. The informal contacts formed at such events offer a chance to explain the value of archeological sites and the damage caused by uncontrolled digging. Visitors are impressed by what can be learned about past societies from a few simple, often fragmentary, objects when the context is known. Some go on to join the Arkansas Archeological Society or return to the station as volunteers.

The Meador Site Salvage Project

Salvage excavations at the Meador site, about 12 miles south of Parkin, were a highlight of the 2000 fiscal year. Native American graves and village features were plucked from the path of land-leveling machinery by an all-volunteer crew. The work was done at top speed and completed without delaying the landowner's agricultural plans by even a day. To keep the fieldwork moving, mounds of plastic bags full of soil shoveled out of the archeological features were



Former State Representative Jim Luker of Wynne discussing archeogeophysical research at the Parkin site with Station Archeologist Jeff Mitchem in May, 2001. Left to right: Former Rep. Luker, Arkansas Archeological Society member Donald Lee, and Dr. Mitchem.



Parkin Archeological Support Team (P.A.S.T.) President and Parkin station archeologist Dr. Jeffrey Mitchem accepts an Arkansas Heritage Month Grant from Governor Mike Huckabee at the State Capitol, March 15, 2001. Left to right: Ken Grunewald, Albert Evans, Charles Spann, Grady Spann, Kelly Mulvihill, Jeff Mitchem, Governor Huckabee, Cathie Matthews, Betty Lee, and Donald Lee.

set aside for later analysis. It took more than a year, but processing of the Meador soil samples was finally completed in summer 2001. Some of the work was done at the Survey Coordinating Office in Fayetteville, but most was done at Parkin. All the soil was processed by flotation, a technique that uses water to separate small and even microscopic bits of organic material, as well as tiny artifact fragments and pieces of animal bone and shell.

The Meador research progressed on other fronts as well. Matt Compton, a University of Georgia graduate student, began analyzing the animal bones for his doctoral dissertation. He identified bison and very large white-tailed deer among the species that were hunted by Meador site ancient inhabitants. There are also tiny baby catfish bones in the assemblage, which tell us that the people used fishing nets. Compton's research contributes valuable information about changing environmental conditions in

the Parkin area over the past millennium.

A grant from the Arkansas Archeological Society helped pay for a number of radiocarbon dates on samples from Meador. The suite of dates indicates a longer period of occupation than we originally believed. But the dates accord well with the cultural periods suggested by pottery from the site. Most dates fall in the A.D. 300-800 Baytown period, which agrees with the predominantly grog-tempered pottery. (Grog is fired clay ground up and mixed with wet clay to give it body and strength.) One very early date and two late ones reveal that smaller settlements occurred at Meador in the Tchula (500-100 B.C.) and Early to Middle Mississippi (A.D. 800-1350) periods. Again, these radiocarbon dates accord well with the evidence from artifacts, including small amounts of pottery from those two periods.

The Meador site research is proving to be of critical importance, filling gaps in our knowledge of the archeological sequence at Parkin and in the surrounding region. Results will help with park interpretation as well as basic research.

New Interpretive Artwork for Parkin

With funding from State Parks, Florida artist Ted Morris was commissioned to do eight paintings depicting daily life at Parkin in the 1500s. The artworks will assist park interpreters to explain things like house building and pottery making to visitors, but perhaps even more importantly, the project adds a human face to the stones, bones, and clay revealed in excavations. Ted Morris's paintings will incorporate accurate archeological details in personalized and intimate settings of daily life to evoke the Parkin inhabitants as individuals.

Morris visited Parkin to get a feel for the landscape and to study the artifacts firsthand, and met with representatives from State Parks and the Survey to develop ideas for the eight paintings. Among the scenes to be depicted: gathering clay along the St. Francis River, building a house, children at play, harvesting and planting crops, an aged flintknapper, a potter at work, a portrait of Chief Casqui and his mother, and a greeting ceremony showing Casqui and his people coming out of the village to welcome important visitors. Rough sketches of each design were circulated among all the consultants for comments. Corrected details were fine-tuned via photographs of draft versions of the paintings. The project is ongoing, with three of the paintings completed in 2001 and several others in progress.

The Parkin Station Laboratory

After about 10 years of field research, many hundreds of labeled bags of artifacts, plant and animal remains, soil samples, and building rubble await analysis in Station storerooms. We have decided that no new excavations will be planned until this backlog of material is washed, counted, cataloged, and computerized. This means laboratory work, the "tedious" phase of archeological research. Penny N. King joined the staff as part-time field and laboratory assis-

tant at the Parkin Station during Fall 2000. She helped Tim Mulvihill supervise volunteers, this year including a group of home-schooled children and other interested local residents.

Careful laboratory work may reveal additional evidence of Spanish explorer Hernando de Soto's 1541 visit to the area. A handful of Spanish artifacts already are known from the site.

Study of the plant and animal remains will flesh out a picture of the Parkin local environment and tell how the Native American inhabitants used its resources. For example, about 35 kinds of fish and turtles were part of the diet at Parkin, as recorded by the presence of bones and shell fragments in ancient village refuse deposits. Some of these species may actually have been "farmed" by confining them in penned areas in streams and ponds, where they could be netted or dipped out at need.

Other Activities

Though keeping up with Parkin (and Meador) research is more than a full-time job, Mitchem and Mulvihill both continued to pursue other research interests. Mitchem, an expert on Span-

ish trade beads, studied bead assemblages from sites in Florida and other New World areas. This year he also participated in the Survey's ongoing scholarly exchange relationship with Yarmouk University in Jordan. In June he joined UAF Anthropology Professor Jerome C. Rose, helping teach a bioarcheology field school and studying beads from several seasons of excavations at two sites.

Back home (and weather permitting), Mulvihill continued his ongoing effort to complete a large-scale topographic mapping project at Parkin. He also lent his expertise with the Total Station to other professional and amateur archeologists in the state, helping them to create computer-generated maps. In the laboratory, he analyzed artifacts from a 1950 UA field school at the Rose Mound, a site related to Parkin, and from the 1996 Arkansas Archeological Society Training Program excavations at the Graves 3 site in Cross County.

Finally, as station secretary E. Faye Futch entered the data, both Mitchem and Mulvihill continued to make refinements to their computer database for storing the volumes of information on artifacts from the Parkin site.

STATION PERSONNEL

Jeffrey M. Mitchem (Ph.D., 1989, University of Florida) joined the Survey in 1990 to establish the Parkin Research Station. His research interests include archeology of the Southeast and Mississippi Valley, prehistoric ceramics, glass beads, and history of archeology in the Southeast. He is currently President of the Society of Bead Researchers and of the Parkin Archeological Support Team.

Timothy S. Mulvihill (M.A., 1996, UAF) joined the Parkin Research Station in 1991 after two years as Station Assistant at ASU. His specializations include Woodland and Mississippi period archeology, and mapping. He is skilled with the Total Station transit, and helped develop a computer database for the Parkin site collections.

E. Faye Futch (A.A., 2002, MSCC) joined the Survey staff in 1990 as Secretary. In addition to those duties, she also helps out in the Station laboratory. Ms. Futch will enter the teachers' program at Arkansas State University in Fall 2002.

Grants, Honors, and Awards

Natural History.

Parkin won the Heritage Award from the Arkansas Festival Association for its "Visions of the Past Living History Fair." A grant for \$885 for "Dating the Meador Site (3SF414)" was awarded by the Arkansas Archeological Society's Archeological Research Fund, for radiocarbon dates.

Service to Arkansas Department of Parks and Tourism

Mitchem wrote a Professional Services Agreement for the Ted Morris artwork project; organized and supervised Mr. Morris's visit to Parkin and meeting with the panel of project consultants; and managed the review of draft paintings by the panel. Mitchem helped park personnel with arrangements for donation of the Conquistador exhibit from the Florida Museum of

Mitchem participated in the annual Survey/State Parks meeting to discuss and review the cooperative agreement.

Mulvihill monitored earth-moving activities during construction of a new road and pavilion at the picnic area in the park. He also helped with ice storm recovery and clean-up; gave site tours when park staff were unavailable; reviewed and commented on draft paintings for the Ted Morris artwork project; assisted with clearing and removing trees from the mound; consulted with park staff on locating a new maintenance building; updated the pottery display in the Visitor Center/Museum; and helped with exhibits for Parkin's annual Living History Fair.

Mulvihill and Mitchem helped the park staff with plans for walking trail additions.

Academic Service and Activities

By agreement with the University of Arkansas System, Mitchem has a faculty appointment as Associate Professor in the UAF Anthropology Department. He served as visiting professor on the 2001 joint UA/ Yarmouk University Bioarcheological Field School in Jordan. He served on the thesis committee of one graduate student at Southern Illinois University—Carbondale, and on the qualifying examinations committee of a student in the Environmental Dynamics Program at UAF. Mitchem also provided assistance to a University of Georgia doctoral student whose dissertation project involved Parkin site data.

Mulvihill provided assistance to UAF's Center for Advanced Spatial Technology for an EAST project. EAST is an educational outreach program providing advanced training in computerized spatial technologies for high school students. Five students from Fayetteville High School's West Campus created a computer-animated "virtual tour" of a Native American house at the Parkin site.

Mitchem led tours of the site and station laboratory for a group of visiting Western Illinois University students, and for former state legislator Jim Luker.

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. He reviewed manuscript submissions for the journals *North American Archaeologist*, *Historical Archaeology*, *Southeastern Archaeology*, *Archaeometry*, and *The Florida Anthropologist*.

Mitchem contributed professional assistance to the Director of the Florida Division of Historical Resources and participated in the Florida Archaeological Council meeting.

Public Service and Outreach

Mitchem gave presentations on Parkin site archeology to audiences totaling about 60 people, including a Parkin school reunion group, members of the Delta Scenic Byways Commission, and members of the public attending an Artifact Identification Day during Archeology Week. Both Mitchem and Mulvihill interact with park visitors on a regular basis.

Mitchem edited an essay on Parkin for American Indian Places: A Guide, to be published by Houghton Mifflin.

Mitchem served as President of P.A.S.T. (Parkin Archeological Support Team, a civic group that supports and assists the Park) and wrote articles for each issue of the P.A.S.T. newsletter. He helped prepare a grant proposal for the 2001 P.A.S.T. Living History Fair, which was submitted to Arkansas Humanities Council (the grant was awarded). He provided instruction and information about Native American artifacts to a group of reenactors for the Visions of the Past Living History Fair, and participated in the Fair.

Mitchem lectured on "The Tallant Collection: Reflections of the Original Floridians and Their World" at the South Florida Museum in Bradenton (audience, 200).

Mitchem and Mulvihill provided consultation and advice to The Archaeological Conservancy and the National Park Service on various topics.

Mulvihill gave a presentation on Arkansas prehistory and helped develop a curriculum outline at a workshop for teachers, sponsored by the Arkansas Department of Heritage, at the Delta Cultural Center. He wrote articles for, and helped produce, the P.A.S.T. newsletter. Mulvihill taught the Site Survey class at the annual Arkansas Archeological Society Training Program and helped a Society member conduct a metal detector survey at Georgetown, Arkansas.

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 Native American 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 Research Continues

Analysis of materials from Mound S occupied both Rolingson and Whitlow throughout the year. Mound S, one of the smaller mounds at the Toltec site, was excavated from 1988 to 1990 by volunteers participating in the annual Training and Certification Program that is jointly run by the Survey and the Arkansas Archeological Society. Ms. Whitlow enters artifact data into the Survey's computer database and helps in the lab. She also learned to modify parts of the database program to accommodate Rolingson's needs.

Dr. Rolingson is working primarily on the pottery, a time-consuming and exacting process. Most pottery is recovered in small fragments that must first be sorted according to various criteria, such as paste, decoration, and the part of the vessel represented (e.g., rim, shoulder, or base). Decorated sherds can be matched up to determine the minimum number of vessels. The vessels are then assigned to named types and varieties known for the region and time period. Sometimes new types are defined as well. Comparing the distribution of pottery types over time and space provides important clues to culture-historical development and cross-cultural relationships in prehistory.

Two new radiocarbon dates were obtained from Mound S samples this year. One date is in close agreement with previously obtained dates, about A.D. 750 to 800, further cementing our estimate of the main period of use for Mound S. The other date, on a maize sample, is later, indicating reuse of the small mound some 200 to 300 years after it was constructed. This later date also contributes to speculations that maize was not an important cultigen during most of the Plum Bayou culture occupation at Toltec and formed a minor component of the diet, perhaps reserved for special occasions.

Analysis of faunal material is another area of progress. Zooarcheologist Dr. Lucretia S. Kelly was hired in 1999 to provide specialized analysis of the animal bones from Mound S. Her draft report was completed in June 2001. Funds for Dr. Kelly's work were provided by a grant from the Arkansas Natural and Cultural Resources Council. She identified 49 taxa in the Mound S fauna, with white-tailed deer, squirrel, raccoon, turkey, passenger pigeon, and bowfin predominant. The sample indicates a year-

round exploitation of animals, with the largest numbers from fall and winter hunting. Unusual species are black bear, eagle, and white pelican. The large quantity of bone and large percentage of deer suggest the refuse comes from feeding large groups of people, perhaps at ceremonial feasts, but this hypothesis needs further exploration.

Remote Sensing at Mound G

Colleagues from the Survey Coordinating Office and UAF Anthropology Department initiated a geophysical remote sensing project at Toltec Mounds this year. Jami Lockhart (Survey Computer Services Program) and Dr. Ken Kvamme (UAF) brought work crews to Toltec in November 2000 and April 2001, using several remote sensing techniques to study Mound G, which has been almost leveled by historic and modern activity. Mound G was originally one of the largest in area at the site. Only minor archeological testing has been done there.

Remote sensing technology is an important new addition to archeological fieldwork. These noninvasive techniques provide a "picture" of buried anomalies that give clues to any prehis-

toric structures underneath the mound, and to how the ground was prepared for mound construction. The team was able to define the boundaries of the mound, which can no longer be visually determined.

Rolingson Contributes to Important Regional Publications

The long, often sinuous, route to publication reached its destination for several titles Rolingson has been working on over the past few years. She was editor of a volume in the Survey's Research Series (No. 58), *Historical Perspectives on Midsouth Archeology*, for which she also wrote two articles: one on the contributions of women archeologists, and the other a historical overview of archeological developments to 1960. Two additional articles, concerning Plum Bayou culture of east-central Arkansas and Woodland period archeology of the Central Mississippi Valley, were contrib-

uted to a 2001 University of Alabama Press volume, *The Woodland Southeast*, edited by D. G. Anderson and R. C. Mainfort, Jr.

Rolingson also completed final revisions for an article titled "Archeology of the Central Mississippi Valley after 500 B.C." that will appear in the *Southeast* volume of the prestigious *Handbook of North American Indians* published by the Smithsonian Institution.



Rolingson hosts a tour of the Toltec Mounds site for representatives of the Quapaw Tribe and Arkansas Highway and Transportation Department officials.

Toltec Mounds Site Threatened?

The Historic Preservation Alliance of Arkansas elected to place the Toltec Mounds site on its 2001 list of the 10 most endangered sites in Arkansas. The threats result from proposed construction of power plants within a mile of the site and increasing encroachment by residential developments adjacent to the site. Rolingson worked with the Alliance and attended a press conference at the State Capitol announcing the 2001 list. As always, the Survey's interest in archeological resource preservation is on behalf of the heritage interests of the entire population of Arkansas. Many examples exist across the country of cooperation between development and preservation interests, with mutually beneficial results.

STATION PERSONNEL

Martha A. Rolingson (Ph.D., 1967, University of Michigan) was Station Archeologist at UAM from 1968-1972, and then worked with the State Archeologist and the 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 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.

Service to Arkansas Department of Parks and Tourism

Rolingson is the primary resource person for all interpretive development at Toltec Mounds State Park. She also assists Parks and Tourism staff with other matters pertaining to archeology. This year Toltec Park hired a new superintendent and two new interpreters. Rolingson participated in the interviews and assisted in orienting the new staff members to archeology at the park.

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 topics related to Toltec Mounds, Plum Bayou culture, and archeology in the Central Mississippi Valley and Midsouth region.

Professional Service and Activities

Rolingson reviewed manuscript submissions for the journal *Southeastern Archaeology*. She also commented on UAF station archeologist George Sabo's *First Encounters* CD-ROM project.

Rolingson was invited to present two discussion statements at the Midsouth Archaeological Conference, an open forum for scholars engaged in archeological research in the Midsouth region. She spoke on the Late Woodland and Early Mississippian cultures of the central and lower Mississippi Valley. The discussions are being transcribed for publication. The conference was held in Memphis.

Public Service and Outreach

Rolingson presented public lectures, demonstrations, and tours to audiences totaling about 275 people, including Skywatchers of Arkansas (solstice and equinox programs), college classes, Quapaw Tribal representatives, Arkansas Highway and Transportation Department employees and consulting engineers (with respect to new interstate highway construction in southeastern Arkansas), the Jacksonville Rotary, Shepherd's Center Adventures in Learning, Little Rock District Corps of Engineers (for Native American Awareness Month), and the Central Mississippi Valley Chapter of the Arkansas Archeological Society in Jonesboro. Two lectures were in association with Arkansas Archeology Week.

Rolingson taught Basic Lab Techniques at the Arkansas Archeological Society's annual Training Program. She also volunteered at the Society's information booth at the Arkansas State Fair.

Rolingson provided assistance and advice to the State Archeologist in development of some educational brochures, and provided photographs for various public uses. She helped at the Survey's information booth at the Arkansas Conference on Teaching in Little Rock.

Rolingson provided information and advice to the Historic Preservation Alliance of Arkansas in response to potential threats to the Toltec site from utility and residential development.

Rolingson monitored various utility excavations for a housing development west of Toltec Park, checking for any archeological materials or features that might be revealed during the work.

Rolingson replied to numerous requests from private individuals and various media reporters for information about archeology, Native Americans, and Toltec Mounds.



Remote sensing on Mound G, with Mound B in the background.

ARKANSAS STATE UNIVERSITY

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

The ASU research station covers 15 counties in northeastern Arkansas. Native American cultural development from 12,000 B.C. to historic times and Euroamerican settlements 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 with 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

Research projects at the ASU station range across the chronological spectrum from an Ice Age mastodon excavation to a Late Mississippi period village site. In between are several smaller projects combining archeology with paleoenvironmental research, and some salvage excavations.

Update on the King Mastodon Site

The King Mastodon remains were discovered during routine dredging operations in Craighead County and excavated in October 1999. The project received coverage in *National Geographic* magazine (April, 2000). About 50% of the mastodon skeleton was recovered, and the bones are in good condition. Treatment of the bones in polyvinyl acetate preservative is underway. The skeleton will be curated at the ASU Museum and perhaps eventually form part of an exhibition there.

The project was a great success. Local public officials, volunteers, and professional colleagues from all across Arkansas helped with the fieldwork. Experts from several institutions across the country helped in various ways. Dr. Henry Wright (University of Michigan) helped Morrow secure funding from the National Geographic Committee. Dr.

Stephen Jackson (paleobotanist, University of Wyoming) studied the plant remains, the late Dr. Roger Saucier (renowned geomorphologist of the lower Mississippi Valley) helped with geological analysis, and Dr. Tom Stafford (of Stafford Research Laboratories in Boulder, Colorado) extracted dentine samples from one of the mastodon teeth for radiocarbon dating. Mulhollen and Associates of Jonesboro produced a map of the site. The non-Mastodon faunal elements have been analyzed by Toby Morrow (then of Hemisphere Environmental Consultants). Toby and Juliet Morrow completed the inventory of measurements on the mastodon bones.

By June 2001 a technical report on the project was near completion. Brief articles about the project were posted on the Survey's website and published in *Field Notes*, Newsletter of the Arkansas Archeological Society.

Greenbrier: Site of the 2001 Training Program

The June 2001 Training Program was the second year of Society excavations at the Greenbrier site in Independence County. Anthropology graduate students from UAF and Washington University (St. Louis) are working on specialist analyses of the faunal and flo-

ral remains.

Greenbrier is a Native American habitation site occupied mainly during the Mississippi period (A.D. 900-1550). In addition to the usual array of stone artifacts, ceramics, and food refuse, the site yielded extensive architectural remains. In fact, clay daub (used to plaster the smoke holes and walls of post-and-woven-wattle houses) was so abundant at the site, excavators in some units were finding more daub than dirt.

Finding house floors at a village site is important. The sizes of individual houses, their number, and spatial arrangements combine to afford a picture of the community dynamics. How many people were at the site? What was the average size of households? Were houses all alike or were there significant differences among them? Put these questions together with detailed study of the artifacts, and archeologists can determine what activities went on in and around houses, the probable age and gender composition of family units, and how the occupants figured into regional trade networks.

Extensive excavations of village sites were common in the 1930s through 1950s, but are becoming rare. This means that remaining sites are preserved for the future, but it also means fewer

opportunities to apply the amazing developments in archeological techniques of the last few decades on a large scale. The Greenbrier excavations were modest in size, but they employed the very latest in archeological field and laboratory methods to learn more about the great Native American societies that flourished in this region just prior to the arrival of Europeans.

Back to the Pleistocene

Juliet Morrow's special area of interest is the Paleoindian period of American prehistory. These earliest colonizers of a pristine continent ranged far and wide in small hunting and gathering bands, pursuing the last of the Ice Age megafauna (such as mastodons) and later the abundant herds of bison and other mammals.

Since taking over the ASU station archeologist position, Morrow has been seeking out and consolidating data on Paleoindian occupation. One aspect of this is Morrow's ongoing Fluted Point Survey, a station project to record occurrences of Paleoindian stone tool technologies.

Fluted points and blades are diagnostic of the Clovis Paleoindian culture that occupied both North and South America. Typical fluted points are long, thin, narrow, finely chipped, and finished with "flutes"—shallow channel flakes removed from the base of the projectile and extending sometimes along its whole length almost to the tip. Points may be

fluted on one or both sides. The techniques to produce these well-crafted weapons are very specialized and difficult to master.

Blades are long, narrow flakes struck from specially prepared stone cores. They were used "as is" for knives, or further modified to make hide-scrapers, drills, and other implements.

Clovis experts look to the Aldan River area in eastern Siberia as a possible homeland of Clovis ancestors. The connection is drawn mainly from similarities in stone blade technology. Unfortunately there is little else to go on when tracing the movements and cultural developments of Pleistocene peoples, including the Paleoindians. Stone tools are often all that is left.



Station assistant John Thomas, making epoxy resin casts of Paleoindian fluted points. The artifact replicas are used for classroom and other demonstrations, exhibits, and research.

STATION PERSONNEL

Juliet Morrow (Ph.D., 1996, Washington University) joined the Survey as ASU station archeologist in 1997. Her previous position was with the Office of the State Archeologist of Iowa's Highway Archeology Program. Before that she supervised archeological projects for a private firm and for the Corps of Engineers. Morrow's earlier background in Earth Sciences provides expertise in geoarcheology, geomorphology, and site formation processes. Much of her archeological research 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 are also interested in experimental stone tool replication.

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 operations, field and laboratory work, outreach activities, and service to the ASU Museum. He helps prepare handouts and contributes occasional lectures for anthropology classes at ASU. Thomas also works with the CMV Chapter of the Arkansas Archeological Society and participates in the Society Training Program.



Robert Taylor at work as a volunteer in the ASU station lab.

Grants, Honors, and Awards

The Coordinating Office this year supported hiring of lab workers to process artifacts from the Training Program excavations at the Greenbrier 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. She teaches two courses per year for the Department of Criminology, Sociology, Geography and Social Work at ASU: Native American Cultures of the Midsouth and Introduction to Archeology. In 2000-2001 she also taught Special Problems sections for two students, who completed archeological research projects.

Station staff moved most of the King mastodon bones, along with copies of the field catalogs (both hard copy and electronic diskette) to the ASU Museum.

Morrow served on an ASU committee to develop a new Ph.D. progam in Heritage Studies.

John Thomas gave eight guest lectures to six different classes on the ASU campus, with a total enrollment of 212 students. Thomas also participated in the CESL (Center for English as a Second Language). He presented a lecture to 250 students in the program, accompanied CESL students on a field trip to Blanchard Springs, and hosted 17 of the students on a visit to the station lab.

Morrow and Thomas gave lectures on anthropology and archeology laboratory methods to 100 ASU Radiology Department/ Center for Bioanthropology students as preparation for a working trip to Peru.

Professional Service and Activities

Morrow served as Vice President on the Executive Board of the Missouri Archaeological Society.

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

The station hosted a group of visiting students and their instructor from Western Illinois University; Drew Buchner of Panamerican Consultants, Inc., who examined materials from a site in Craighead County; and Jack Ray, who photographed some Sloan site artifacts for a book project on Ozark chert types and sources.

Public Service and Outreach

Morrow provided various written materials to the Missouri Archaeological Society for public outreach needs. She also presented a slide lecture on archeological ethics to Dr. Carol Morrow's anthropology classes at Southeast Missouri State in Cape Girardeau.

Morrow and her husband Toby Morrow participated in an experimental archeology workshop at the State Historical Society in DesMoines, Iowa.

Morrow lectured at a joint meeting of the Central States Archaeological Society's Greater St. Louis Chapter and the Mound City Chapter of the Missouri Archaeological Society, held at the St. Louis County Library; about 60 people attended. She lectured the Mound City Chapter again on another topic later in the year.

Morrow presented a slide lecture on the King Mastodon site at Parkin Archeological State Park.

Morrow gave four lectures to a total of about 200 students on Career Day at McArthur Junior High School in Jonesboro.

Morrow prepared a slide set and script for Arkansas Archeological Society member Scott Akridge to present at the Society's annual meeting in Batesville; topic was the Training Program excavation at Greenbrier.

Morrow worked with a local real estate agent and the Archeological Conservancy to help arrange purchase by the Conservancy of the McClellan site in Poinsett County. This significant Mississippian mound and village site is the first in the ASU station territory to be purchased by the Conservancy.

Morrow conducted 12 brief field investigations (mostly at the request of private citizens) at locations being impacted by agriculture or development in six counties within the ASU station research area. Several previously unknown sites were recorded and new data collected for known sites as a result of these visits.

Thomas presented lectures on archeology to classes at Oak Ridge Middle School in Ravenden, Strawberry Elementary School, Tyronza Elementary and Middle School, Hoxie Elementary School, and to Boy Scout Troop 66 and their parents in Paragould (audiences totaling 300). He gave three talks on archeology at Pumpkin Hollow (audiences totaling 300). A Jonesboro Middle School student spent a day with Thomas at the ASU station in a job-shadowing exercise.

The station hosted monthly meetings of the Central Mississippi Valley Chapter of the Arkansas Archeological Society, September 2000 through May 2001. Meetings were attended by between 40 and 100 people. The Central Mississippi Valley Archeological Society (CMVAS) became an official chapter of the AAS in December 2000, with station assistance.

The Blytheville Aeroplex

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 over 1000 recorded archeological sites, including four 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 (3CT7) is the probable location of the Native American 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

Adding to the Site Files

With responsibility for a brand new research station, Payne and Haynes devote as much time as they can spare to reconnaissance survey—familiarizing themselves with the region by visiting known sites, and recording new ones whenever possible. Volunteers are an important part of this process. Local members of the Arkansas Archeological Society and other interested citizens contribute their knowledge of the landscape as well as field time.

In 2000-2001, 20 sites were revisited and 19 new sites recorded. Systematic survey of 50 acres along the south side of Pemiscot Bayou was accomplished with volunteer help, and yielded three of the new sites.

Earthquakes and Archeology in Northeast Arkansas

Unique research opportunities and challenges are presented by the earth-quake-impacted geology of the New Madrid Seismic Zone. Geologists and archeologists alike have discovered they can learn more by working together. This collaboration forms one of the Blytheville station's major ongoing commitments. Payne and Haynes work regularly with

Dr. Martitia Tuttle and graduate student Laurel Mayrose (University of Memphis). This year, the station also hosted visits by earthquake specialists from Cyprus and Japan, and Dr. Buddy Schweig of the Center for Earthquake Research and Information.

Predicting the frequency of earthquake events is among the main goals of the geological research. Archeologists hope for better tools to interpret the often complicated stratigraphy of sites in this earthquake-prone region.

"Typical" Chiefdoms under Study in Northeast Arkansas

Archeologists agree that the late prehistoric Native American cultures known as Mississippian had chiefdom-level political structures. But Claudine Payne observes, in a recent paper, that most of our knowledge about Mississippian chiefdoms is based on atypical sites.

Chiefdoms are polities with some degree of centralized organization and leadership based on ascribed or inherited status. In cultural evolutionary terms, chiefdoms are thought to be intermediate between egalitarian and state level societies. But there is a great deal of variation among chiefdoms in terms of scale

and complexity.

Since the Mississippians left no written records, we have to understand their political and other cultural structures by indirect means. Mississippian chiefdoms are interpreted through specific archeological features and artifacts that represent status, and by analogy with ethnographic chiefdoms observed in modern times, such as the traditional societies of Polynesia. As Payne points out, the Polynesian examples were large-scale, complex chiefdoms with dense populations and well-developed political and ideological structures. But were all Mississippian chiefdoms like that?

In Mississippian societies, a hall-mark of chiefdoms is the large ceremonial mound center. Sites with flat-topped mounds occur throughout the Southeast and Midwest. These mounds were constructed by hand, built up from individual basketloads of dirt, and thus represent a high degree of directed cooperation. Some sites have only a single mound and others have several, but the best known sites such as Cahokia and Moundville have as many as a hundred or more. Archeologists have emphasized these large sites too much, says Payne, while the smaller and more typical



Station archeologist Claudine Payne and assistant Marion Haynes flagging surface finds in the field.

mound centers are being overlooked. Of course, the large sites are extremely important, but we need to understand the smaller sites in order to appreciate the full range of variety in Mississippian chiefdoms.

Payne classified Mississippian mound centers by size using two measures: number of mounds, and volume of the largest mound. The latter was calculated with an index rather than actual volume. She obtained some surprising results. Cahokia, the premier and best-known site, has about 120 mounds. But the mean number of mounds in a sample

pf 467 Mississippian sites is 3.2 and the median is only 2. Nearly half of the sites had only a single flat-topped mound.

Mound volume revealed similar disparities. The index for Monks Mound at Cahokia—2291.1—is so high it had to be left off the graphs. Only 10% of sites in the sample had a main mound volume index over 35. For two-thirds of the sample, the index was less than 10.

What these data tell us, argues Payne, is that the "typical" Mississippian chiefdom was on a much smaller scale than the Polynesian examples usually used for comparison. New ethnographic analogies should probably be developed to help interpret Mississippian chiefdoms. Also, generalizations, models, and major synthetic works on Mississippian political structures need to incorporate more information about the smaller sites.

The Blytheville station is developing a program of research that will examine Mississippian sites along the Lower Pemiscot Bayou. All four known mound sites in the area are small, so the project should help fill the gap of knowledge about "typical," small-scale Mississippian chiefdoms.

Archeological Outreach in Blytheville Schools

The Blytheville Public School system recently was awarded a \$120,000 grant from the National Endowment for the Humanities to fund a project titled "Linking the Past to the Future: Teaching Archeology with 21st Century Technology in the Mississippi Delta." Station archeologist Claudine Payne worked with the school system to develop the proposal and will be involved in the project.

The grant was awarded as part of NEH's Schools for a New Millennium program. The project will integrate archeology into the 5th and 6th grade curriculum at Blytheville's new middle school. In addition to the subject matter—which forms an important part of local history—instruction in computer and media skills will be brought into the classroom.

The project also conforms well with the community's support for development of a proposed National Park and Heritage Center to interpret the Central Mississippi Valley's prehistoric Native American and archeological resources.

Payne and Charles Blanchard conducted a workshop for about 25 Blytheville teachers in June. Five of the teachers learned archeological field skills firsthand by participating in the Arkansas Archeological Society's Training Program later that month.

STATION PERSONNEL

Claudine Payne (Ph.D., 1994, University of Florida) joined the Survey in 1999 to run the Blytheville Areoplex research stattion. She has taught anthropology at the University of Florida, the University of Illinois at Urbana-Champaign, and Armstrong Atlantic State University in Savannah, Georgia. Her research specialization in late Precolumbian archeology of the Southeast is ideal for the Blytheville station territory, which was home to a thriving Native American 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 joining the Survey in 1999, Haynes farmed 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 was hired by Midcontinental Research Associates to participate in archeological survey and evaluation of sites on the Eaker Air Base property. His familiarity with the area's people and landscape have been vital assets in development of the new research station.

Grants, Honors, and Awards

Payne received a Certificate of Appreciation from the Arkansas Department of Emergency Management, and a Commendation Certificate from the College Now program, Mississippi County Community College.

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. With no university affiliation at the Blytheville research station, she has no regular teaching or other academic duties, but like all station archeologists may assist students with research projects in station territory, and contribute guest lectures in her areas of expertise.

Professional Service and Activities

The station hosted several geologists from Cyprus and Japan, and Dr. Buddy Schweig of the Center for Earthquake Information. The visiting scholars toured archeological and geological sites in station territory as part of their research into the potential for using archeological sites to provide dates for past earthquake events. Haynes dug a backhoe trench at a (nonarcheological) site to assist the work.

Payne served as a member of the Society for American Archaeology's Media Relations Committee.

Payne attended annual meetings of the Society for American Archaeology (New Orleans), Midsouth Archaeological Conference (Memphis), and Southeastern Archaeological Conference (Macon).

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

Payne reviewed manuscripts for The Arkansas Archeologist and Southeastern Archaeology.

Public Service and Outreach

Unlike other Survey research stations, Blytheville is not associated with a university campus or a state park. The station's unofficial host institution is the City of Blytheville, and station personnel devote a good share of their time to heritage projects important to the community.

Payne worked with the Blytheville Public Schools to obtain a grant from the National Endowment for the Humanities' Schools for a New Millennium program. The \$120,000 grant was awarded to the Blytheville Schools. As part of the project, Payne (with Charles Blanchard) conducted a workshop for about 25 teachers on "The Teaching of Delta Archaeology." Payne attended a panel discussion hosted by U.S. Secretary of Education Richard Riley as a representative of the project team.

Payne contributed articles about archeology to the *Blytheville Courier News* in a column, "Archeology of the Delta." She also granted interviews to several television and newspaper reporters concerning the NEH award to Blytheville Public Schools and the proposed development of a National Park and Archeological Heritage Center at Blytheville.

Payne served as a member of the Blytheville-Gosnell Chamber of Commerce Archeology/Heritage Committee, and Blytheville's Arkansas Communities of Excellence Tourism Committee.

Haynes also served on the Communities of Excellence Tourism Committee.

Payne and Haynes worked with the Archaeological Conservancy on potential acquisition of sites in station territory. They and the Conservancy's Alan Gruber surveyed the boundaries of the Knappenberger site, an important mound group.

Payne consulted with the Mayor of Blytheville and architects in the planning and design of the Blytheville Heritage Center and Museum.

The station created a small exhibit for the meeting of Arkansas Delta Byways, and had a booth at Blytheville's Springtime on the Mall festival.

Station activities for Arkansas Archeology Week included an Open House (attendance about 40), and book displays at the Blytheville Public Library and the Adams-Vines Library of Mississippi Community College.

Payne gave school talks to 1st-graders at Immaculate Conception School in Blytheville and 3rd and 4th-graders at Senath-Hornersville Elementary School in Senath, Missouri. She also spoke to the Arkansas Governor's Earthquake Advisory Council, the Osceola Rotary Club, the Mississippi Historical Society, the Blytheville Women's Club, and the summer children's reading program at the Osceola Public Library. Combined audiences were about 260. Haynes was a co-presenter at the Earthquake Advisory Council.

Haynes presented a program to the Kadohadacho Chapter of the Arkansas Archeological Society.

Payne participated in the Arkansas Archeological Society Training Program excavations and taught the Basic Excavation seminar. She and Haynes attended the Society's annual meeting in Batesville.

About 150 visitors toured the station during 2000-2001, including Congressional candidate Susan Myshka, State Senator and incoming President Pro Tem of the Senate Mike Beebe, and incoming State Senator Steve Bryles. In addition, the station hosted about 15 participants of Career Camp for Girls, part of Mississippi County Community College's *College Now* program.

University of Arkansas at Pine Bluff

Dr. John House, Station Archeologist Mary V. Farmer, Station Assistant

The UAPB research station is responsible for an eight-county region of east-central Arkansas extending from Little Rock to the Mississippi River. This territory encompasses portions of diverse physiographic regions including the Delta, the Gulf Coastal Plain, and the Ouachita Mountains. The archeological heritage of the area is especially rich, beginning with the Paleoindian period about 10,000 B.C. There are many intriguing protohistoric and early historic manifestations, including French Colonial sites associated with Arkansas Post, the earliest European settlement in the Lower Mississippi Valley, and Menard-Hodges, a Native American site that has been identified as the 17th century Quapaw village of Osotouy that was associated with the Arkansas Post.

CURRENT RESEARCH

The Menard Locality and Wallace Bottom: An Early French Presence in Arkansas?

The southern tip of the Little Prairie in Arkansas County has long been believed to correspond to the late seventeenth century Quapaw village of Osotouy and the location of the first Arkansas Post, established by Henri de Tonti in 1686—the first European settlement in Arkansas; indeed, in the entire Lower Mississippi Valley. In 1997 the U.S. Congress authorized and funded an Osotouy unit of Arkansas Post National Memorial encompassing the Archaeological Conservancy's Menard-Hodges archeological preserve (the Menard-Hodges mound and village site has been identified as Osotouy) and the outlying Lake Dumond site. Field research in these areas by the UAPB station and in the context of Arkansas Archeological Society Training Programs in the late 1990s brought much new information to light.

French Artifacts at the Lake Dumond Site

A preliminary report on artifacts from Colonial-era Native American graves at the Lake Dumond site was completed this year. (Analysis was done in consultation with the Quapaw Tribe of Oklahoma and in accordance with provisions of the Native American Graves

Protection and Repatriation Act.) Human remains from the six graves consisted mostly of teeth. The graves themselves indicate a possible European-style cemetery—aligned in two rows oriented in the same direction, feet to the northeast. Among the artifacts from the graves were glass beads and metal ornaments (probably brass) typical of the goods obtained by Native Americans in trade with Europeans. There were also vestiges of basketry and possibly furs.

Wallace Bottom: Its Place in Arkansas History

Perhaps the most significant result of the recent years of fieldwork at the Menard Locality was the 1998 discovery of the Wallace Bottom site in the floodplain adjacent to Menard-Hodges, on a tract of land recently acquired by White River National Wildlife Refuge. Both Native American and French Colonial artifacts were found by a joint Survey and Arkansas Archeological Society team during one of the Training Programs. The assemblage suggests a single archeological component dating to the time of the French military presence on the Little Prairie in the decades leading up to 1749.

How can archeologists build a case for this assessment, barring extensive excavations? House and Farmer have proceeded along several avenues. One is geomorphic study. Correlation of modern topographic features in the Wallace Bottom environs with features recorded by United States General Land Office surveyors in 1840 reveal that the site is located on the bank of the former Gordon's Lake, which may have been the Colonial-era channel of the Arkansas River.

This past year the UAPB team worked to establish a permanent mapping grid on the site. Topographic and geophysical mapping projects as well as some test excavations were carried out. In February, Dr. Kenneth Kvamme of the UAF Anthropology Department led a team of students and Survey personnel in collecting electrical resistivity and magnetometer measurements from approximately 1 ha of the site area. The resulting maps showed subsurface anomalies that may correspond to cultural features buried below the plowzone. Some of the resistivity anomolies have linear or rectangular characteristics suggesting traces of French or Indian struc-

Soil coring and small test pits confirmed the presence of features below the plowzone (i.e., undisturbed by modern agricultural methods). A large number of wrought iron nails from Colonial-era levels in excavations on the lake bank reinforced the idea that substantial European-style wooden structures were once present at Wallace Bottom.

With help from volunteers, washing and cataloging of these finds is an ongoing project at the UAPB station.

"Sweep It under the Rug"

All work and no play make archeology dull, but that will not be happening at the UAPB station.

Station assistant Mary Farmer reported on a bit of domestic folk culture at the annual meeting of the Arkansas Archeological Society in Batesville. The story originated with her own childhood memories. Her parents bought an older house, and before they moved in discovered small holes in the floors. Mary's mother nailed tin can lids over the holes and the family settled down. When the house's previous owner visited one day, she was dismayed to find that the "sweep holes" had been nailed up. You were supposed to just cover them with a rug, she said. And then, when housecleaning, you could literally "sweep it under the rug."

As a child, Ms. Farmer played underneath the house and discovered coneshaped piles of "treasures" beneath the sweep holes. Marbles, buttons, pins, and other small items—all the sorts of incidental artifacts typically found in excavations of historic domestic sites. Ms. Farmer perhaps has discovered a previously unknown mechanism for how they got there, thus contributing to the known repertoire of historic site formation processes. In any case, it is a testimonial to the time-saving ingenuity of some Arkansas homemakers in the pre-Martha Stewart days.



Arkansas Archeological Society member Mary Little and UAPB station assistant Mary Farmer endure the elements to complete a surface collection.

STATION PERSONNEL

John H. House (Ph.D., 1991, Southern Illinois University at Carbondale) has been involved with Arkansas archeology since 1964. As a Mountain Home High School student, he attended the first ever Arkansas Archeological Society Training Program. He joined the Survey in 1978. He was a research assistant at the UAPB station, and 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 moved to the station archeologist position at UAPB. His research interests include eastern North American prehistory, cultural ecology, cultural evolution, and material culture.

Mary Farmer's previous position with the Survey, from which she retired in 1994 after 17 years of service, was as Secretary at the UAPB station. During those years she assisted John House in the field and laboratory as well as performing office duties. She is a long-time member of the Arkansas Archeological Society and veteran of the Training Program. She has studied historic domestic artifacts, such as canning jars, and related technology. She also has experience restoring prehistoric ceramic vessels.



John House (right) explains procedures to Larry Mallard, Superintendent of the White River National Wildlife Refuge, U.S. Fish & Wildlife Service, during test excavations at Wallace Bottom.

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. This year he taught one course in the UAPB Department of Social and Behavioral Sciences—Introduction to Anthropology—with 21 students enrolled. In lieu of House's usual second course offering, the station team continued a program of archeological testing and analysis at seven sites on the Pine Bluff Arsenal in Jefferson County. The project took place under a contract awarded by the U.S. Department of the Army to the UAPB Department of Social and Behavioral Sciences. House directed a team of Survey fieldworkers. Farmer was in charge of laboratory analysis, performing most of it herself and supervising volunteer assistants. House and Farmer (along with historical researcher Peggy S. Lloyd) completed and submitted the draft report, which was accepted. (The final report was delivered in July 2001.)

House was one of 24 participants statewide selected in 1999 to participate in the University of Arkansas System's Teaching Scholars in Distance Learning program. He continued attending monthly seminars to receive training in distance learning curriculum development and technology. He is preparing his Introduction to Anthropology course for distance delivery, and acts as a mentor for other UAPB faculty interested in distance learning.

House attended a Department of Higher Education workshop in Little Rock, training to prepare education majors to take the PRAXIS examination administered by the state for licensure of teachers.

House consulted with Social and Behavioral Sciences Department Sociology area head Gurdeep Khullar on updating the Cultures and Peoples of Africa South of the Sahara course.

Professional Service and Activities

House served on the Survey's Personnel and Publications committees.

Farmer assisted HSU station archeologist, Dr. Mary Beth Trubitt, with excavations at the Hyten House in downtown Benton.

Public Service and Outreach

House provided consultation and assistance to the following organizations and governmental bodies: The Archaeological Conservancy (on management of the Menard-Hodges site and other properties); the National Park Service (on management of the Osotouy Unit of the Arkansas Post National Memorial); the Arkansas Highway and Transportation Department; the Jefferson County Historical Museum (including service on the Museum's Acquisitions Committee); Michael Baker, Jr., and Associates (a private firm conducting archeological survey for a projected I-69 connector route in south Arkansas); the Phillips County Museum in Helena (exhibits development); the Quapaw Tribe of Oklahoma; the U.S. Army Pine Bluff Arsenal; the U.S. Army Corps of Engineers (on management of cultural resources affected by the proposed White River Navigation Project); the U.S. Department of Agriculture, Natural Resources Conservation Service (on NAGPRA compliance matters); and the United States Fish and Wildlife Service (on management of cultural resources in the White

River National Wildlife Refuge, including the Wallace Bottom site).

Farmer contributed consultation and assistance to: The Archaeological Conservancy; the National Park Service; Arkansas Highway and Transportation Department; Michael Baker, Jr., and Associates; the Lakeport Plantation Restoration Team at Lake Village, Arkansas; and the Pine Bluff Arsenal.

Farmer helped James Phillips, UAM station assistant, to create an exhibit for Archeology Week at the Turner Neal Museum of Natural History in Monticello.

House gave public lectures, slide presentations, or demonstrations to the Pine Bluff-Jefferson County Historical Museum (in conjunction with Archeology Week); Saturday Academy, an educational enrichment program for junior high students hosted by Arkansas River Educational Service Cooperative; social studies classes at Coleman Elementary School in Pine Bluff for Sixth Grade Career Day; fourth grade Gifted and Talented students at Coleman Elementary; the Pine Bluff Downtown Rotary Club; and the Lambda Alpha Anthropology Honor Society at Texas Tech University. Combined audiences were 185 persons. House led a tour of the Menard-Hodges site for 15 American History students from the Dumas Branch, Phillips County Community College-University of Arkansas.

House and Farmer hosted a volunteer Lab Day and the annual evaluation visit by the station's Arkansas Archeological Society Board of Advisors. They also hosted a visit by Tunican Chapter members of the Society.

Farmer directed the field lab at the annual Arkansas Archeological Society Training Program. Farmer served as Vice President of the Tunican Chapter of the Society. She provided materials for the Society publications and website. In 2001 she was elected to the UAPB station Board of Advisors.

Farmer presented lectures or slide shows to members of a Hot Springs Presbyterian Church; and to the 5- and 6-year-old class at the Desha School. Combined audiences were 85 persons.



John House and volunteers Mary Little and Don Farmer washing artifacts at the UAPB station lab.

University of Arkansas at Monticello

Dr. Marvin D. Jeter, Station Archeologist James M. Phillips, Station Assistant

The UAM station territory covers seven counties in southeastern Arkansas. The eastern portion consists of Delta landforms deposited by the ancestral Arkansas and Mississippi rivers and their tributaries. These contain numerous small to moderate sized habitation sites and occasional mound centers dating to the later prehistoric and protohistoric periods. Some other 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 prehistoric and protohistoric 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

Continuity with the Prehistoric Past

The effort to link late prehistoric archeological manifestations with historically known ancestors of modern tribes is a major concern for scholars—archeologists and ethnohistorians—and for the modern tribes as well. But the line between prehistory and history is neither sharp nor well defined. Only careful and detailed analysis is likely to accurately trace this diffuse chronological divide. With many gaps in the data, debate over competing hypotheses often continues for years.

To the layperson, this may seem like a simple matter: Find the earliest written reference to a group of people in a certain area, and match them up with the latest prehistoric sites. But reality is not so simple. Many factors obscure the connection between prehistory and ethnohistory. Populations were not static. Native American groups moved around according to the influences of conflict, trade, resources, depopulation caused by introduced diseases, and changing political alliances.

Also, the earliest written records left by European explorers, traders, and missionaries must be carefully interpreted. Names given to Native American groups were spelled in various ways. Many names were derived from the language of interpreters or middlemen, not the language of the group itself. Nor is it a simple matter to match the places mentioned in early accounts with locations on a modern map.

"Resolution" in Archeology and Ethnohistory

In his contribution to a new University Press of Mississippi book, Jeter summarizes the "discordant dimensions" of archeology and ethnohistory: space, time, and culture. The resolution capabilities of the two disciplines in these dimensions are at odds. For archeology, resolution in space can be very fine, while temporal estimates are often rough; in ethnohistory it is the opposite.

Approaches to the culture concept differ as well. Archeology emphasizes the material and etic (i.e., viewed from outside), while ethnohistory provides observations of the behavioral and mental aspects of culture, more closely approaching an emic (insider's) view. Yet both disciplines must filter observations through their own cultural preconceptions.

Combining archeological and ethnohistorical approaches involves changing perspectives on several fronts: moving away from static "typological thinking"; more emphasis on variation and change; and searching for correlations rather than one-to-one matches.

Prehistory to History in the LMV

Jeter's chapter provides a critical summary of several competing scenarios for the transition from prehistory to protohistory in the northern part of the Lower Mississippi Valley, and selects two that he favors.

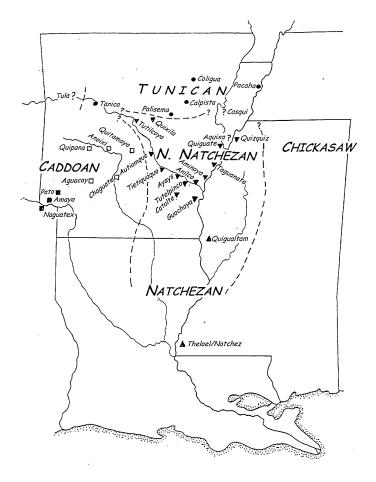
In one alternative—perhaps the most innovative—Jeter combines John Swanton's linguistic analysis of Native American words and placenames in written accounts left by survivors of Hernando de Soto's 1540s expedition with the reconstructed expedition route offered by ethnohistorian Charles Hudson. In the resulting picture, names attributed to the Tunican language group are geographically placed north of the Arkansas River and along the southeastern edge of the Ozarks, in territory assigned archeologically to the Mississippian culture. This placement provides a cultural "bridge" between the Mississippian heartland areas to the east and Spiro Mounds in Oklahoma, which ASU Station archeologist Frank Schambach has interpreted as a settlement of Mississippian (possibly Tunican?) traders.

South of this possible Tunican area, the words and placenames belong to a Natchezan language. Jeter postulates a "Northern Natchezan" occupation in eastern Arkansas along the Mississippi and Arkansas river valleys (later historic Natchezan territory being to the south in Louisiana and Mississippi).

This newly proposed scenario reflecting the ethnic composition of Arkansas around the time of Soto—the early to middle 1500s—suggests that the Quapaw had not yet arrived in Arkansas. The Quapaw, historically known occupants of eastern Arkansas, are speakers of a Siouan language. They would have remained far up the Ohio Valley with related Siouans until the Iroquois League drove them out around 1660, thus arriving in Arkansas only shortly before the first French explorers in 1673.

Interestingly, this scenario is consistent with Tunican oral traditions about a mountainous homeland (possibly the southeastern Ozarks?), and Natchezan traditions of having once controlled a huge area in the Mississippi Valley.

Jeter's work reflects the kind of analysis that can only be accomplished by long and intimate familiarity with the archeology, geography, and history of a specific region, together with thorough understanding of the wider context to which it belongs.



Jeter's "Northern Natchezan" scenario for the early to middle 1500s.

Long-Term Projects Reflect Wide-Ranging Station Research

Jeter has developed long-term research interests ranging from the possible oldest mound in Arkansas to early twentieth century tombstones. Here are updates on a few of the projects currently underway.

Lake Enterprise Mound in Ashley County is related to the famous Poverty Point site in northeast Louisiana, which is one of the earliest mound-building cultures in North America (about 1000 B.C. or older). The enigmatic Poverty Point culture thrived on a long-distance trade network, but details of the culture's economic lifeways remain obscure. We do not know whether or how much the people depended on horticulture. Jeter's recent efforts on the Lake Enterprise project include preparation of samples

for C-14 dating. He also worked with Katherine Mickelson of Ohio State University, who analyzed plant remains from the site. As with other Poverty Point-related sites in Arkansas, no definite evidence of cultigens was found.

The Maxwell-Best site is a possible Choctaw refugee occupation in Lincoln County dating to the 1820s-1840s. Initial clues to the site's existence came from James Best of Star City, who found references to a "Chacktaws village" while studying historic land surveyor's notes and maps. Jeter led a crew of volunteers to the site on several occasions, and found a number of historic artifacts consistent with early to mid 1800s occupation. Unfortunately, the Native American ceramic sherds found so far at the

site cannot be definitively assigned, but they are consistent with the little known about Choctaw ceramics. More work is planned here, including detailed mapping with a Total Station, remote sensing, and vegetation survey working with UAM botanist, Dr. Eric Sundell.

The Mosaic Templars of America, headquartered in Little Rock, became the country's largest Black burial benefits organization in the 1920s. Jeter has been studying tombstones with MTA insignia, which are found across and beyond the South. The stones date between 1913 and 1930, when the Depression forced the organization to stop selling them. Jeter has shared his research with the MTA Building Preservation Society.

STATION PERSONNEL

Marvin D. Jeter (Ph.D., 1977, Arizona State University) 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 his eclectic interests. His research in Arkansas has focused on late prehistoric, protohistoric, and historic-contact periods in the Lower Mississippi Valley. He has also studied the history of archeological explorations in that area, as well as various aspects of African-American culture in the Southeast. He and his wife Charlotte Copeland (long-time member of the Arkansas Archeological Society's Tunican Chapter) enjoy baseball (from Spring Training on), book collecting, chamber music, and motoring.

James M. Phillips (M.A., 2000, University of Mississippi) is the first full-time UAM Station Assistant since 1981. He previously attended Murray State University in western Kentucky, and worked at Wickliffe Mounds in that region. His research interests include Native American architecture and symbolic iconography in Mississippian society. He is an avid experimental archeologist, interested in artifact replications and demonstrations of prehistoric technology. He is also founder and campus advisor of the UAM Fencing Club.

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. He teaches two courses per year in the UAM School of Social and Behavioral Sciences. Cultural Anthropology and Arkansas Regional Archeology each enrolled 10 students in Spring 2001. As part of the Regional Archeology course, Jeter guided optional student field trips to the Poverty Point site in Louisiana, Winterville Mounds in Mississippi, and Toltec Mounds, near Little Rock.

Jeter served on the UAM Museum Committee.

The station moved to temporary quarters on the UAM campus this year as part of a renovation project. Current quarters are reduced in size, causing a need to reorganize and limiting the station's ability to pursue some of its planned activities during the next two years.

Professional Service and Activities

Jeter served as manuscript and/or publication reviewer for the journals *Southeastern Archaeology* and *Mississippi Archaeology*. Jeter was an invited discussant for a symposium on "The Woodland-Mississippian Transition" at the Midsouth Archaeological Conference in Memphis.

Public Service and Outreach

Jeter presented a slide program and discussion to the Louisiana Archaeological Society's Monroe Chapter, the Kadohadacho Chapter of the Arkansas Archeological Society in Magnolia, and the Central Mississippi Valley Chapter of the Arkansas Archeological Society in Jonesboro.

Jeter served as Corresponding Secretary and Program Chairman for the regional southeast Arkansas Tunican Chapter of the Arkansas Archeological Society.

Jeter provided consultation and advice to employees of Michael Baker Jr., Inc., who are conducting archeological surveys along the Interstate Connector route between Pine Bluff and Monticello, and to the Vicksburg District of the U.S. Army Corps of Engineers, on proposed projects within UAM station territory.

Phillips took over some of Jeter's usual duties on behalf of the Tunican Chapter while Jeter recovered from eye surgery. He planned and conducted Chapter meetings, and also planned the schedule of talks and demonstrations for Archeology Week

Phillips volunteered at the Arkansas Archeological Society and Survey information booth at the Arkansas State Fair. Phillips presented a series of talks and demonstrations of Native American technology during Arkansas Archeology Week. Phillips (with help from Jeter) created an exhibit of Native American textiles for the Turner Neal Museum on the UAM campus in conjunction with Archeology Week.

SOUTHERN ARKANSAS UNIVERSITY, MAGNOLIA

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 the important sites in the SAU station territory is Crenshaw, the earliest known Caddoan ceremonial center.

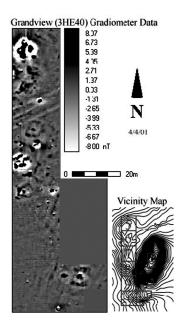
CURRENT RESEARCH

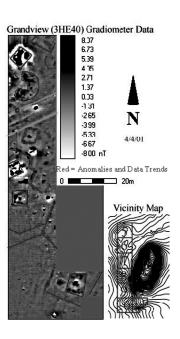
A Caddo Site on Grandview Prairie

A high point of station activity in 2001 was the opportunity to begin research at the Grandview Prairie Wildlife Management Area in Hempstead County. This 4885-acre property, originally the antebellum Grandview Plantation, includes about 550 acres of tallgrass blackland prairie surrounded by over 4000 acres of forested hills. It also includes important archeological sites, such as the remains of the early 1800s Grandview Plantation itself, and the Tom Jones site—a large, heretofore untested and essentially undisturbed prehistoric Caddo mound group.

A Test of Remote Sensing Technology for Archeological Research

Schambach created a three-part plan for required archeological assessment of the property in 1997, at the request of the Arkansas Game and Fish Commission. Thanks to volunteer labor provided by Arkansas Archeological Society Training Program participants, and to the Survey's new battery of remote sensing equipment operated by Jami Lockhart, significant portions of that three-part plan were accomplished in 2001 at a major cost savings, in terms of both time and funds, and avoidance of the destructive field methods usually necessary to





Remote sensing (gradiometry) image of the Tom Jones site, with subsurface features (some representing prehistoric houses) outlined on the right-hand map. Dark oval in the Vicinity Map shows the contours of the large earthen mound.

do such work.

Selected parts of the Tom Jones site were explored with equipment measuring magnetic susceptibility, gradiometry, electrical resistivity, and electromagnetic conductivity to generate computer images of what lies beneath the ground surface. The images were used to plan the June Training Program excavations. This

meant that the excavations did double duty, simultaneously exploring the site and ground-truthing the remote sensing imagery to see if it actually meant what it seemed to mean. The whole effort comprised the first full-scale test of geophysical remote sensing for archeological research in Arkansas, if not the Southeast.

Remains of Houses and Other Features

Results exceeded expectations. The remote sensing technology provided clear and detailed images of collapsed burned houses—marked by heaps of burned clay daub, hearths, and wall lines—and many other kinds of archeological features such as pits, ghostly linear patterns that seem to represent a complex, maze-like stockade around the largest mound, and fainter linear patterns that might be footpaths.

The June excavations confirmed initial enthusiasm. Schambach and Lockhart are still in the process of comparing the remote-sensing imagery with the photographs and drawings recorded during excavation, but preliminary results are highly satisfactory. For example, four excavation units opened over the locations of four reasonably clear images of houses netted the archeological remains of four houses. Another unit placed over a dark image surrounded by a rectangular post mold pattern, and in-

terpreted as a fireplace, revealed a large, hard-burned hearth about 30 cm below the surface. Other units placed over an apparent wall line uncovered a line of post molds.

Remote Sensing: Finding More for Less

All in all, the 2001 fieldwork demonstrated the potential of geophysical remote sensing technology for noninvasive exploration of archeological sites in the Caddo area. The indications are that a complete geophysical survey of the site would be worthwhile. Supplemented by minimal excavation, a great deal about the site can be learned without large investments of labor, and without invasive disturbances of this virtually pristine site. It is important to note that the success of the remote sensing owes something to the fact that the site is so little disturbed by Euroamerican activity. Recent building foundations, drainage excavations, utility trenches, and so on do not occur and so do not add a layer of confusion in interpreting the images.

Thus, the north-south limits of the site were quickly established and a number of significant archeological features explored without wasting precious time on sterile test units. In the process samples of artifacts and charcoal were obtained to confirm the dates of the houses—probably around A.D. 1550, judging from the ceramic styles. Soil samples for flotation (a water separation technique) should tell much about the domestic economy and ecology of the Caddo people who occupied the houses.

Finally, the work produced an unexpected bonus—on one house mound an extensive area of 500-year-old prairie sod was exposed. This sod formed the actual ground surface when the house was built. When the house burned down, its walls collapsed and preserved the sod. The soil samples contain identifiable seeds that will reveal the species composition of the tallgrass prairie at Grandview some 500 years ago. It is even possible that some of these seeds can be sprouted.

Other Station Research

Schambach continued pursuit of long-term research on the origins of the Mississippi period "Spiroan" culture of the Arkansas Valley in western Arkansas and eastern Oklahoma. He identified the Mulberry River culture as ancestral to Spiro and discussed its relationships with other cultures in the region in an article for *The Arkansas Archeologist* and in a book, *Woodland Cultures of the Southeast*, edited by the Survey's Robert Mainfort and David Anderson.

Schambach also wrote a major paper as part of a series of publications concerning the ecology of *Maclura pomifera* (Osage orange or bois d'arc), a tree of very limited distribution around A.D. 1000 whose wood was an important element in Native American trade networks across the Southwest, Southern Plains, and Southeast.



Arkansas Archeological Society volunteer Julian Cranfill works on "the largest pot ever found in a Caddo site in Arkansas" in the SAU station laboratory. The vessel was recovered during Training Program excavations at the Tom Jones site.



Station assistant David Jeane works on an archeological exhibit case at the SAU library.

STATION PERSONNEL

Frank Schambach (Ph.D., 1970, Harvard) has been station archeologist at SAU since 1968. His research has emphasized the 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 in ceramic typology and has built extensive regional study collections and a photographic archive of Native American ceramics. In addition to other ongoing projects, he is currently working on a book chapter coauthored with Stephen Williams (Harvard University) on Spanish and Indian trade in the Mississippi Valley; a Survey Popular Series book on the Prehistoric Caddo; and a compendium of papers on the improved descriptive typology of Southeastern ceramics that he and various colleagues have been developing over 30 years.

David Jeane (M.S., 1976, Environmental Science, Northeast Louisiana University) 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 archeology in Arkansas and Louisiana as a member of the Arkansas Archeological Society, Louisiana Archeological Society, Caddoan Archeological Conference, and other organizations. His extensive field experience includes contract and volunteer projects in Arkansas and Louisiana, and participation in the Survey/Society Training and Certification Program. His interests include the study of Peruvian mummies, and collecting historic (ca. 1760-1860) English china.

Academic Service and Activities

By agreement with the University of Arkansas System, Schambach has a faculty appointment as Professor in the UAF Anthropology Department. He teaches two courses per year in the School of Liberal and Performing Arts at SAU. Introduction to Anthropology had 32 students and Indians of North America had 8 during the Spring 2001 semester. He did an extended amount of course development this year to update Indians of North America.

Schambach assisted Peggy Walters, Director of SAU's Magale Library, with preparation of a grant proposal to the Arkansas Humanities Council. The grant was awarded. The project is an exploration of the significance of the frontier in American culture, and features lecture visits to the campus by Scott Momaday, Elliott West, and James W. Loewen, who also conducts a workshop for local high school teachers.

Schambach informally advised a University of Oklahoma graduate student on his thesis project.

Jeane gave a series of six invited lectures on excavating mummies in Peru to a group of 130 students at the ASU Center for Medical Imaging in Bioanthropology, Batesville.

Jeane chaperoned a field trip to a mosque for the SAU History Department.

Professional Service and Activities

Schambach provided peer reviews for the journals American Antiquity and Southeastern Archaeology, and for Basic Books.

Schambach provided consultation and/or other professional assistance to the Shreveport Chapter of the Louisiana Archeological Society; Arkansas Humanities Council; Mississippi Department of Archives and History; Houston Museum of Science; Peabody Museum of Archaeology and Ethnology, Harvard College; UAM Station Archeologist, Marvin Jeter; freelance science writer, Ms. Connie Barlow; Elliott West, UAF Professor of History; Forest Service archeologists (Ouachita National Forest, and Sylamore District); the Federal Bureau of Investigation (regarding looted artifacts confiscated in Kentucky); Charles Sandige of Mountain View, Arkansas (regarding preparation of an elementary school reader on the Caddo Indians); and Neal Trubowitz, Hrdy Visiting Research Curator at Harvard University.

Jeane served as representative for Louisiana in the Council of Affiliated Societies of the Society for American Archaeology. Jeane was treasurer of the Louisiana Archaeological Society and a member of the Board of Directors of the North Louisiana Historical Association.

Jeane attended meetings of the South Central Historical Archeological Conference (Baton Rouge); the North Louisiana Historical Association; the Southeastern Archaeological Conference (Macon); the Caddo Archaeological Conference (Norman); and the Society for American Archaeology (New Orleans).

Jeane presented papers at the annual meetings of the Arkansas Archeological Society (Batesville) and the Louisiana Archaeological Society (Natchitoches).

Public Service and Outreach

Schambach presented lectures to the Central Mississippi Valley Chapter (Jonesboro) and the Russelville Chapter of the Arkanas Archeological Society. He also presented two public lectures at the Society Training Program at the Grandview Wildlife Management Area.

Schambach served as sponsor of the Kadohadacho Chapter of the Arkansas Archeological Society, assisting its members with various archeological projects and helping to arrange program speakers. He attended the annual meeting of the Society in Batesville, and this year planned and directed the summer Training Program excavations.

Jeane served as President of the Kadohadacho Chapter. He produced the Chapter's monthly newsletter and conducted weekly lab work sessions for member volunteers. He assisted Schambach as director of the 2001 Training Program.

Schambach and Jeane both volunteered for two days at the Survey/Society information booth at the Arkansas State Fair in Little Rock.

Schambach assisted a life member of the Society with plans to restore and preserve a historic log cabin in Conway County. Jeane presented lectures, slide programs, and artifact identification workshops to various public school and other groups, including: Texarkana Museum; Quota Club of Magnolia; Delta Chapter of the Louisiana Archeological Society; Teachers of Arkansas Studies Council in Hope, Arkansas; Central Mississippi Valley, Arkansas River Valley, and Ouachita Chapters of the Arkansas Archeological Society; Howell Elementary School; and Nashville Chamber of Commerce, Community Coffee. Combined audiences were over 360 people.

Jeane served as chairman of the Springhill Historic District Commission in Springhill, Louisiana. The group was awarded a grant from the Louisiana Division of Historic Preservation for a Springhill Main Street project in 2000-2001.

Jeane served as judge of district high school history projects for SAU's History Day.

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

CURRENT RESEARCH

Ouachita Mountain Archeology

A new program of archeological investigations in the Lake Ouachita area of Montgomery County was initiated at the HSU station. This research will add to knowledge of the prehistoric cultural sequence in the Ouachita Mountain region. We already know that mining of novaculite and silicified sandstone for toolmaking and trade was an important attraction of the Ouachitas. Huge Native American quarry sites are among the significant archeological resources in station territory, but little work has been done at these sites because of their difficult access and archeological complexity. Other research domains need attention in the Ouachita region as well.

Much of the work will involve cooperation with federal agencies, in particular the Forest Service and the Corps of Engineers, who are responsible for management of archeological resources on these public lands. In fact, the new program is in part a response to Corps interest in hosting an Arkansas Archeological Society Training Program to learn more about sites on Lake Ouachita.

Trubitt and Wright began with background research and new investigations at two large, multicomponent sites in Montgomery County. The two sites had been damaged by shoreline erosion and unauthorized collecting over the years. With help from several Society vol-

unteers, the sites were mapped during fall 2000 and spring 2001. Test excavations were undertaken in the spring. Wright, a stone tool specialist, supervised the lab work and began a detailed analysis of the lithic artifacts. The sites were occupied from Archaic through Caddo times and have the potential to help answer questions about Native American lifeways in the Ouachita Mountains. A preliminary report has already been completed by Trubitt and submitted to the Vicksburg District of the Corps of Engineers.

The Hodges Collection

A long-term commitment of the HSU research station is study of the Hodges Collection, owned by the Joint Education Consortium and curated at HSU. In particular the work has focused on Native American ceramics. A large number of vessels were added to the photographic and analytic database of Caddo pottery from the Middle Ouachita River area. This project was begun by previous HSU station archeologists. Trubitt's predecessor, Ann Early (now the State Archeologist for Arkansas), used the materials to develop new approaches to the study of ceramic design.

The Hodges Collection has been important in defining ceramic types, which can be sensitive cultural and temporal indicators on archeological sites. Trubitt and Wright attended workshops

on Microsoft Access software to augment their database skills for managing this and other collections.

Trubitt renovated the exhibit of Hodges Collection artifacts on display in the Garrison Activity Center on the HSU campus. A similar renovation of the exhibit at Ouachita Baptist University is planned.

Shell Beads and Other Ornaments

Trubitt continued her research into the production and exchange of marine shell ornaments in prehistoric America and around the world. Tracing the distribution and abundance of exotic materials such as marine shell tells much about transportation and communication routes of the distant past. Trubitt's review article on marine shell use around the world is currently being revised for publication. Since arriving at HSU in January 2000, Trubitt extended her research to include marine shell artifacts from southwest Arkansas, and presented the results at chapter meetings of the Arkansas Archeological Society.

Cahokia Research

Trubitt continued her involvement in the Cahokia Palisade Project, a multiyear effort at the premier Native American prehistoric site in eastern North America. Cahokia, located near East St. Louis, Illinois, was the capital of the Mississippian culture that thrived in the eastern U.S. in the centuries before European contact. The Palisade Project, led jointly by Trubitt and Dr. John Kelly of Washington University in St. Louis, was run under the auspices of the Central Mississippi Valley Archaeological Research Institute, and incorporated archeological field schools and excavations by volunteers. The project sought to locate traces of the west and north walls of the defensive palisade that was constructed around the central portion of the town of Cahokia, and to investigate the role of warfare in the changing political climate after A.D. 1200.

The Hyten House

Trubitt and Wright, with several Society volunteers, conducted brief excavations at the Hyten House in downtown Benton in Saline County. The house was built by the manager of the Niloak Pottery factory in the 1920s, Charles Hyten. The present owner, State Senator Doyle Webb, is working on a National Register of Historic Places nomination for the house.

Previous reports of yard fill containing pieces of the distinctive swirled pottery suggested there might be interesting archeological deposits as well as the standing architecture. The team recovered architectural and domestic artifacts, but no Niloak pottery.



Kate Wright sifts soil from test pits at the Hyten House in Arkadelphia.

STATION PERSONNEL

Mary Beth Trubitt (Ph.D., 1996, Northwestern University) joined the Survey January 1, 2000. Her previous position was at Western Michigan University. She has wide-ranging field experience in 10 states and Belize, including work in southern Arkansas as a student during the 1980s. Most of her own research has been at the Cahokia site, where she has 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 aspect of a huge network of long-distance trade in status goods during the Mississippi Period.

Kate Wright joined the Survey in December 2000 as HSU station assistant. She earned her B.A. in anthropology at the University of South Alabama and 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 specialty is lithic analysis. Wright participates in all general station operations, including field and lab work on various station projects. She maintains the collections and site files, and supervises the work-study students.

Grants, Honors, and Awards

Trubitt and Dr. John Kelly (Central Mississippi Valley Archaeological Research Institute) were awarded an \$18,000 grant from the Cahokia Mounds Museum Society to continue the Cahokia Palisade Project in 2001.

Teaching and Academic Service

By agreement with the University of Arkansas System, Trubitt has a faculty appointment as Assistant Professor in the UAF Anthropology Department. She teaches two courses per year in the Sociology and Human Services Department at HSU. North American Indians had 42 students enrolled, and World Cultures had 44. Trubitt created and revised web pages for both courses.

Trubitt taught the new HSU Archeological Field School at the Cahokia site in Illinois during the summer session. Three HSU students participated.

Trubitt and Dr. Herman Gibson III (Sociology and Human Services Department Chair) proposed two new courses for the HSU graduate curriculum, Master of Liberal Arts program. Anthropology of Caddo Indians and Archeology of Caddo Indians both were accepted by the HSU graduate council and curriculum committee.

Wright acted as an unofficial teaching assistant for both of Trubitt's on-campus courses.

Trubitt and Wright continued to maintain and study the Hodges Collection of the Joint Education Consortium.

Trubitt worked with HSU President Dunn and the education director of the Caddo Nation in Binger, Oklahoma, on scholarship opportunities at HSU for Caddo students.

Trubitt gave a keynote address on her Cahokia research at the 22nd Arkansas Undergraduate Sociology and Anthropology Symposium hosted by HSU at Arkadelphia in April 2001.

Professional Service and Activities

Trubitt served as judge for the Southeastern Archaeological Conference student paper competition for 2000.

Trubitt contributed peer review services to the journal American Antiquity.

Trubitt reviewed a book for the Arkansas Historical Quarterly.

Various consultation and advice concerning archeological sites and projects was contributed to Mr. James Hendrix and the U.S. Army Corps of Engineers; The Caddo Tribal Council and Caddo Museum Director in Binger, Oklahoma; the National Register of Historic Places; and the National Park Service.

Public Service and Outreach

Trubitt and Wright responded to several landowner queries about possible archeological sites in Clark and Saline counties. They also examined private artifact collections in Garland and Montgomery counties. Twelve new sites were recorded by Station personnel.

Trubitt and Wright assisted the owner of Hyten House, State Senator Doyle Webb, with preparations for a National Register of Historic Places nomination. The house, in downtown Benton, is associated with the early 20th century Niloak Pottery.

Lab days for Ouachita Chapter members of the Arkansas Archeological Society were hosted at the Station in summer 2000 and spring 2001.

Wright maintained outreach files and distributed information packets to local residents and educators. She advised several private citizens who had items they wished to donate to various museums.

Trubitt provided consultation and advice to a community group in Norman, Arkansas regarding efforts to install interpretive signs at an archeological site located in a town park; to a community group in Arkadelphia; and to the Caddo Tribal Council in Binger, Oklahoma, regarding plans for creation of a Caddo Cultural Center and Museum.

Trubitt gave public lectures or slide presentations to an Arkansas History class at Ouachita Baptist University (25 students); Bismarck Elementary School 3rd-graders (26 students); and to 3rd, 4th, and 5th-graders in Fordyce at the Dallas County Museum (300 students). She lectured at the Heritage House Museum, Mt. Ida, Arkansas (audience of about 25) and participated in discussions there regarding plans for an exhibit on local Native American history.

Trubitt delivered the keynote address at the annual meeting of the Arkansas Archeological Society in Batesville. She also spoke to the Ouachita and Ko-ko-ci chapters of the Society.

Trubitt assembled a small exhibit for the new Town Hall in Arkadelphia. Wright worked on an exhibit at the Clark County Library for Arkansas Archeology Week.

Wright and Trubitt participated in the annual Arkansas Archeological Society Training Program. Wright was a member of the planning committee. Trubitt taught the Research Design seminar.

Trubitt served as vice president of the Ouachita Chapter of the Society. Wright was on the planning committee for the Society annual meeting. Both Trubitt and Wright participated in field trips organized by Forest Service archeologist Meeks Etchieson that involved Society members.

Trubitt volunteered at the Survey/Society information booth at the Arkansas State Fair.

Wright developed a written plan for requirements for the Boy Scouts of America archeology badge.

ARKANSAS TECH UNIVERSITY

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

Wreck at 3MO84 NOT the Queen City...

Stewart-Abernathy contributed his expertise in Arkansas riverine history to a team investigating site 3MO84 in UAPB station territory. A sunken boat wreck was reported there by a 1977 National Park Service survey using sidescan sonar. The site is near the location where USS *Queen City*, a Federal tinclad gunboat, was captured by Confederates in 1864 and burned and set adrift. The vessel exploded and sank midstream in the White River near Clarendon.

Mike Krivor of Panamerican Consultants, Inc., used sidescan sonar again in 1999, and again located evidence of a wreck, but the two sonar images did not match. Field investigation was needed.

The Fall 2000 team determined that the wreck seen in the 1999 sonar was in fact a wooden barge, probably used to haul logs in the Arkansas timber industry, built perhaps in the late 19th century, or as late as the 1930s. Remains of some additional barges were noticed by the team at another site a short distance upstream.

Carden Bottom: Native American Ceramics

The Carden Bottom area in Yell County along the Arkansas River has long been known for the prehistoric Native American pottery collected there, mostly by site looters in the 1920s



Stewart-Abernathy (left) with others at 3MO84.

through 1940s. One of many questions about the area is: to what extent are the ceramics recovered by scientific excavations representative of those famous looted collections?

Ms. Leslie Walker, a UCA student, completed an Honors thesis this year that will help answer the question. Her project compared known Carden Bot-

tom decorated ceramic sherds from Station collections with reputed Carden Bottom whole vessels in the Gilcrease Museum, Tulsa, and the UAF Museum, Fayetteville. Stewart-Abernathy helped facilitate the project and later assisted Ms. Walker in revising the paper for eventual publication in *The Arkansas Archeologist*.

Cherokee Trail of Tears Research

For several years Stewart-Abernathy has been involved with efforts to mark and commemorate the routes of the Cherokee Trail of Tears through Arkansas. This service activity parallels a long-term station research project aimed at locating and investigating archeological sites from the brief Cherokee reservation occupation of Arkansas in the early part of the 19th century.

A site in Pope County has been under continuous observation as a likely candidate, with test excavations and surface collections performed by station staff, students, and volunteers from the Arkansas River Valley Chapter of the Arkansas Archeological Society. Analysis of the resulting artifact assemblage continues, in the hopes of pinning down the dates of occupation of the site.

Stewart-Abernathy's contributions to the Trail of Tears effort have been increasing. He participated in a workshop last year to study GLO and other historic maps in an effort to establish the main routes followed along the Arkansas River and low water detours between Memphis and Little Rock. This year he joined primary researcher Dr. Duane King and representatives of the National Park Service and the Department of Arkansas Heritage on a field trip to retrace the portion of the route from Memphis to Crowley's Ridge.

Research and Outreach at Lakeport Plantation

The Lakeport Plantation in Chicot County (in UAM station territory) represents the agrarian Delta economy of eastern Arkansas from the 1850s to the present. The plantation complex consists of an intact 1850s house and brick dairy with numerous archeological features.

Stewart-Abernathy is a member of the Lakeport Research Team, a group including architectural historians, archeologists, designers, oral historians, graphic artists, and local leaders dedicated to preservation and interpretive development of the site. The project is funded in part by the Arkansas Historic Preservation Program.

The Team planned and sponsored a Johnson Family Reunion at Lakeport in May 2001, during which colleagues from several Survey research stations helped conduct taped oral history interviews, and made copies of hundreds of historic photographs. With the help of the AHPP grant, the ATU station prepared zip disks containing the scanned photo images and a catalog, which were given to family members.

Art Serves Science ...

Larry Porter's accomplishments as an artist are becoming more evident in various Arkansas archeological publications. A full-scale drawing of a Woodland period chipped stone hoe accompanied SAU Station Archeologist Frank Schambach's article in volume 40 of *The Arkansas Archeologist*. A pen and ink drawing of historic clay pipes illustrates an article by Forest Service archeologist Smoke Pfeiffer for *Field Notes*. And an original watercolor painting was donated to the Arkansas Archeological Society for a silent auction to benefit the Archeological Research Fund.

Porter's work is also visible in museums. A new watercolor painting illustrating Hernando de Soto's encounter with the Tula Indians accompanies an exhibit at ATU's Museum of Prehistory and History.

... And Science Serves Art

The ATU Station was contacted by a composer who is writing an operatic libretto based on the Petit Jean legend. Stewart-Abernathy provided details on the types of French watercraft plying the inland rivers in the 18th century. (Proving that you just never know when you will need an archeologist, or why.)

STATION PERSONNEL

Leslie Stewart-Abernathy (Ph.D., 1981, Brown University), known to all as Skip, is a graduate of Jonesboro High School and Arkansas State University. His wide-ranging archeological interests include method and theory of historical archeology, historical archeology in Arkansas and the eastern United States, material culture in preindustrial and industrial societies, and underwater archeology, especially riverine watercraft. He came to the Survey as UAPB station archeologist in 1977 and moved to the ATU position in 1989. He is an avid amateur photographer, restorer of old houses, and a sailor.

Theresa Johnson earned her B.A. in Anthropology (1978) and M.A. in Folk Studies (1983) from Western Kentucky University. She began working with the Survey as half-time ATU 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 several 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 station assistant. His research interests include the history and prehistory of the northern Ouachita Mountains and Petit Jean River Valley area. He is a gardener and an accomplished artist. In recent years he has turned his artistic skills to depictions of archeological subjects.

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. Introduction to Anthropology had 43 students and Peoples and Cultures of the World had 66. Special Problems in Anthropology was also offered as a 1-credit independent study course in conjunction with the Arkansas Archeological Society Training Program; three students enrolled. Stewart-Abernathy contributed a guest lecture to Dr. Tom DeBlack's Arkansas History class at ATU.

Porter and Johnson acted as unofficial teaching assistants for Stewart-Abernathy's on-campus classes.

Stewart-Abernathy served as reader for an ATU student's MLA thesis. He was thesis committee member for one M.A. student at UAF.

The station provided ongoing assistance to the ATU Museum of Prehistory and History. Stewart-Abernathy is Curator of Anthropology and member of the Museum Acquisitions Committee. Terry Johnson committed much time to various Museum projects, including tours and visitor activities. Porter also led tours. Stewart-Abernathy advised the Museum on grant proposals and development of a Collection Procedures Manual, and helped the Series of Discovery program.

Professional Service and Activities

Stewart-Abernathy served as Chair of the Survey's Personnel Committee, and member of the Publications Committee.

Stewart-Abernathy, Porter, and Johnson provided assistance and/or consultation to the State Historic Preservation Officer; Arkansas Museums Association; Arkansas Game and Fish Commission; Arkansas Highway and Transportation Department; Arkansas State Parks; Old Davidsonville State Park; Powhatan State Park; Petit Jean State Park; Lake Dardanelle State Park; Old Washington State Park; U.S. Army Corps of Engineers; Arkansas Nuclear One; Pacific Northwest National Laboratories and the U.S. Nuclear Regulatory Commission; Spears, Inc., Midcontinental Research Associates, and Historic Preservation Associates (private research firms); Heifer Project International; Museum of Discovery/Arkansas Museum of Science and History; and Ozark-St. Francis and Ouachita National Forests.

Porter participated in a training workshop for documentation and preservation of rock art held at Petit Jean State Park and conducted by rock art specialist Linda Olsen, a professor at Minot University, North Dakota. He then assisted a UAF station project (funded by Arkansas Humanities Council) to document the Rock House Cave site.

Porter helped with test excavations being carried out by forest service archeologists at a Scott County site in the Ouachita National Forest.

Stewart-Abernathy served as Arkansas membership chair for the Society for Historical Archaeology, and as Midsouth Regional Contributions Editor of the *African-American Archaeology Newsletter*. He was a discussant at the 3rd South Central Historical Archaeology Conference in Baton Rouge, and continued service as editor of the meeting Proceedings. He volunteered as organizer and program chair for the Conference's 4th annual meeting (held October 2001) at Little Rock. Johnson and Porter assisted with Conference preparations.

Stewart-Abernathy attended annual meetings of the South Central Historical Archeology Conference, Baton Rouge, and the Historic Preservation Alliance of Arkansas, Fayetteville.

Porter attended the annual meeting of the Arkansas Archeological Society, Batesville.

Public Service and Outreach

Stewart-Abernathy served on the State Review Board, Arkansas Historic Preservation Program, and chaired the March 2001 meeting. In his boardmember capacity he attended a reception for legislators hosted by the Historic Preservation Alliance, and provided support for the Arkansas Historic Preservation Program and the Department of Arkansas Heritage.

The ATU station hosted and advised the Arkansas River Valley Chapter of the Arkansas Archeological Society. This involved 11 monthly meetings with featured speakers and 11 lab nights. Stewart-Abernathy served as Program Chair and gave two programs himself. He also ran the lab nights. Johnson served as Secretary/Treasurer, coordinated volunteer activities, handled local publicity, and prepared the quarterly Chapter newsletter.

Porter assisted in general field activities at the Arkansas Archeological Society Training Program and helped supervise excavations. (Stewart-Abernathy was forced to abandon involvement in the Training Program after fracturing his ankle.)

Johnson and Porter mailed 25 information packets to local teachers. The station provided assistance to the Boy Scouts of America with development of requirements for the Archeology merit badge. Stewart-Abernathy gave advice and information to the director of Mainstreet Russellville.

Stewart-Abernathy gave programs on archeology to the Dardanelle Gifted and Talented Program; three anthropology classes at Hendrix College; Arkansas History Seminar K-8, for teachers; the Searcy County Historical Society, and the Hot Springs Chapter of the Arkansas Archeological Society. Combined audiences were about 255.

Station staff and Chapter volunteers worked together to host an Open House at the station and ATU Museum during Arkansas Archeology Week. Activities included demonstrations by flintknapper Ben Swadley, and local youngster Josh Wilker in Powwow regalia. Johnson coordinated educational materials on the year's theme—clothing—and assisted the Museum in preparation of an Archeology Week display. Attendance was approximately 66.

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 such as petroglyphs is also found in some shelters. Recent station research has broadened the archeological picture by focusing more recently on ceremonial mound sites that link the Ozarks to the Mississisppian 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 Native Americans, pioneers, and early American settlers alike.

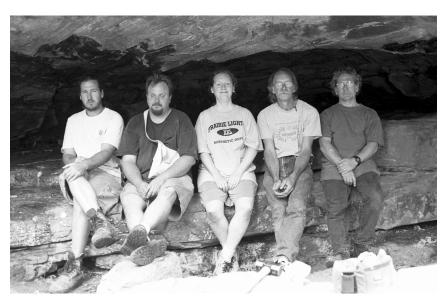
CURRENT RESEARCH

New Project on Arkansas Rock Art Begun

The UAF station's newest enterprise is funded by the Arkansas Humanities Council. A \$17,600 preservation education award supports the project "Drawing on the Past: Educational Resources for the Study of Arkansas Rock Art." Sabo directs the project, which also involves Survey staff members Lela Donat, Michael Evans, Jerry Hilliard, Jami Lockhart, Jared Pebworth, Deborah Sabo, and Deborah Weddle, and UAF graduate student Michelle Berg-Vogel.

The project's two main goals are to create a computer database for Arkansas rock art and to develop both web-based and printed educational resources that will be available to students and educators and the general public.

Arkansas possesses one of the richest concentrations of Native American rock art in eastern North America. The art spans early to late prehistoric, protohistoric, and historic periods and occurs in several regions of the state, especially the Ozark and Ouachita Mountain areas. There is a diverse range of human, animal, plant, and geometric or abstract motifs rendered in carved and pecked (petroglyph), painted (pictograph), and combination styles.



Members of the Arkansas Rock Art project in the field. Left to right, Mike Evans, Jared Pebworth, Michelle Berg-Vogel, Larry Porter, Dr. George Sabo.

Although rock art is one of the topics that the Survey most frequently is asked about, up till now we have developed little in the way of educational materials to respond to this interest. The main reason for this is that little basic research on Arkansas rock art has been done, and there is no comprehensive or consistent body of records about rock art sites. The recorded information is uneven

in quality, and is scattered thoughout the site files and in reports and publications that are not generally accessible.

The rock art team succeeded in developing and field-testing standardized rock art data recording forms. They also conducted a week-long investigation of rock art sites in Petit Jean State Park, where an extensive rock art conservation and restoration project funded by Arkan-

sas State Parks is underway.

A new rock art website was built, including a limited searchable database for educational use, information resources, and exercises that teach about the cultural, aesthetic, and humanistic qualities of Native Americans who lived in Arkansas for millennia before the arrival of Europeans. A short book is planned for the Survey's Popular Series. Eventually, a more comprehensive database will be available online to qualified scholars and researchers.

First Encounters Project

Work was completed on First Encounters: Native Americans and Europeans in the Mississippi Valley, an educational software package that teaches about multicultural interaction using original historical sources and three language tracks. This project was funded by a \$200,000 "Teaching with Technology" grant from the National Endowment for the Humanities. One thousand copies of the CD-ROM became available for distribution in June, and by mid-September 500 had already been given away to schools and educators in Arkansas and around the country. Sabo received a minigrant from the Arkansas Humanities Council to produce another 1000 copies. Information about the project is available at http://www.uark.edu/cam- pus-resources/contact>.

A One-Thousand-Year-Old House Site in Benton County

UAF station research associate Jerry Hilliard completed work at a late prehistoric house site along the Illinois River near Siloam Springs late in 2000. UAF anthropology students and volunteers from the Ko-ko-ci Chapter of the Arkansas Archeological Society provided the labor. Materials obtained in the excavations are still being analyzed, but it looks as if the house was occupied 800-1000 years ago, and represents a community of local Native American farmers around the time that the nearby Goforth-Saindon ceremonial mound was under construction. In all likelihood, the inhabitants of this small farmstead site helped build the mound, and may even have left their footprints in the damp clay there; a panel of human footprints was uncovered on one of Goforth-Saindon's ancient mound surfaces by UAF Anthropology Professor Marvin Kay in 1984.

Van Winkle Mill

The Van Winkle Mill site in Beaver Lake State Park is significant in the history of northwest Arkansas. Peter Marselis Van Winkle operated both grist and saw mills before and after the Civil War. The lumber used in the construction of Old Main and many other northwest Arkansas historic buildings was cut at the Van Winkle Mill. Remains associated with the mill complex, as well as domestic architectural features, have been identified at the park.

The second year of the U.S. Army Corps of Engineers and Arkansas State Parks-funded archeological and historical investigations at Van Winkle Mill included test excavations at two blacksmith features discovered the previous year. Dr. Patrick E. Martin of Michigan Technological University, internationally recognized expert on industrial archeology, acted as consultant for a detailed assessment of archeological potential at the mill complex. Former UAF graduate students Jami Brandon and James Davidson, now in the Ph.D. program at the University of Texas-Austin, remain involved in the project. Sabo and Hilliard directed the UAF Summer 2001 archeological field school at the Van Winkle site.

Arkansas History Textbook Project

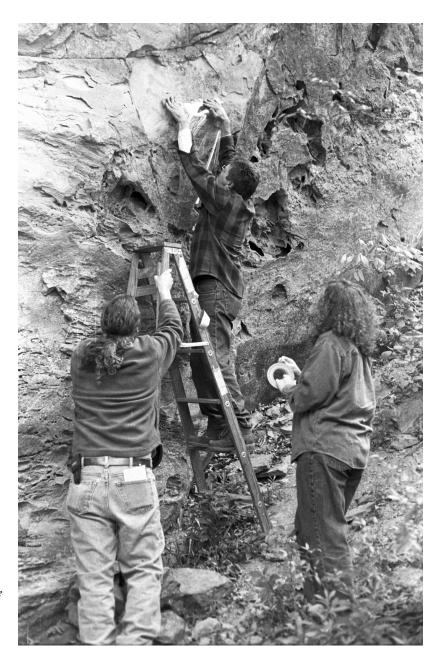
Sabo continued his collaboration with Dr. Jeannie Whayne (UAF History Department), Dr. Thomas DeBlack (ATU History Department), and the Honorable Morris S. Arnold (U.S. Court of Appeals) on a college-level text, suitable also for general readership, about Arkansas history. The final draft of the book was completed and accepted by the University of Arkansas Press for release in 2002.

Native American Ethnohistory

Sabo also worked with the Survey Publications staff to prepare a revised and updated edition of his Popular Series volume, *Paths of Our Children: Historic Indians of Arkansas.* The new edition features expanded text, new color illustrations, and enlarged annotated bibliography.

Ozarks Historical Ecology Project

Sabo and Hilliard, together with the Computer Services Program's Jami Lockhart and State Archeologist Ann Early, presented a symposium on "Archeological Contributions to Environmental History" at the First Joint Meeting of the American Society for Environmental History and Forest History Society in Durham, North Carolina. Sabo, Lockhart, and Hilliard presented coauthored papers at the meeting examining the Ozark forest as resource in prehistoric and historic times, the use of GIS technology to study changes in historic land use, and the relation of land use practices to prevailing social patterns and cultural beliefs in the Lee Creek Valley.



Mike Evans, Jerry Hilliard, and Michelle Berg-Vogel recording a rock art element at a site in Petit Jean State Park.

STATION PERSONNEL

George Sabo III (Ph.D., 1981, Michigan State University) joined the Survey as UAF station archeologist in 1979, 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 pioneer historic farmsteads, and ethnohistory of Arkansas Indians. He is now heavily involved in development of multimedia educational software for teaching about archeology and ethnohistory. Along with UAF colleagues Ann Shortridge (Poultry Science) and Eva Owens (Computing Services), he participates in an informal discussion group on multimedia software development for education.

Jerry 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 of experience with the Survey in public archeology, records management (he was previously the Survey Registrar), and research on prehistoric and historic sites in the Ozarks. Among wide-ranging areas of expertise are specializations in Native American rock art and historic Fayetteville. He created and manages a computer database for the Arkansas Archeological Society's Training and Certification Program.

Grants, Honors, and Awards

A major preservation education grant (\$17,596) was awarded by the Arkansas Humanities Council for a project titled "Drawing on the Past: Educational Resources for the Study of Arkansas Rock Art." Sabo, Hilliard, and other Survey staff comprise the research team.

Academic Service and Activities

By agreement with the University of Arkansas System, Sabo has a faculty appointment as Professor in the UAF Anthropology Department, where he teaches two upper-level courses per year. In Spring 2001 Ethnographic Approaches to the Past enrolled 10 students, and Anthropology of Place and Landscape (cross-listed with the Environmental Dynamics Program) enrolled 12. One student enrolled in Individual Study during Summer 2000. Sabo served on 12 M.A. committees in the Anthropology Department, supervised one M.A. thesis, and participated in five M.A. oral comprehensive exams. He also served on four Ph.D. committees in the Fulbright College Environmental Dynamics program, participated in three Ph.D. comprehensive exams and one Ph.D. dissertation defense, and supervised development of one dissertation proposal. He served on one Ph.D. committee in the History Department and participated in the dissertation defense for that student. Sabo served on two undergraduate thesis committees in the Fulbright College Honors program.

Hilliard assisted three UAF graduate students in their thesis research projects.

Professional Service and Activities

Sabo contributed peer review of a manuscript for the journal Southeastern Archaeology. He wrote a book review for The William and Mary Quarterly. He served as external reviewer for a faculty promotion at Texas A&M University.

Public Service and Outreach

Sabo and Hilliard participated in monthly meetings of the Ko-ko-ci Chapter of the Arkansas Archeological Society.

Hilliard managed the Arkansas Archeological Society's statewide Training and Certification Program, maintaining a database of participants, tracking their progress, and advising them on requirements. He also directed monthly lab sessions for Kokoci Chapter members.

Sabo presented a paper at the annual meeting of the Society in Batesville.

Sabo presented 12 programs to public school classes in northwest Arkansas and other groups, with audiences totaling about

Hilliard presented one talk to grade school students. He also gave a public lecture in the community of Witter in Madison County. (Combined audiences of about 70.)

Sabo served as ex-officio member of the Caddo Tribal Heritage Museum Board of Advisors, assisting the Caddo Nation with the development of policies, programs, and exhibits for their new museum, located on the tribal complex near Binger, Oklahoma.

Sabo served as consultant to several Arkansas state parks: Parkin Archeological State Park, for the production of a series of paintings by artist Theodore Morris that reconstruct 16th century Native American scenes at the park; Beaver Lake State Park, for development of archeological resources; and Petit Jean State Park, for conservation of rock art resources.

Other agencies and/or groups that received advice or assistance from Hilliard and/or Sabo during the year include: Newton County Resource Council, Mt. Comfort Church, Ozark Natural Science Center, and U.S. Army Corps of Engineers.

Sponsored Research Program, Coordinating Office

Dr. Robert C. Mainfort, Jr., Administrator Randall Guendling and Kathleen Cande, 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 archeological resources in Arkansas. The SRP administers all externally awarded grants for the Survey, and conducts externally funded research based on contracts, grants, and cost-share agreements. Projects range from small locally significant efforts, such as monitoring a construction site for archeological deposits, to the preparation of cultural resource overviews covering multistate 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 educational community is provided through teaching and committee work, and by offering work-study employment for qualified university students as field and laboratory assistants. In addition, SRP cooperates with the UAF Department of Anthropology to offer a graduate internship program in applied archeology.

Federal 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 (U.S.) and the Unmarked Grave Protection Act (Arkansas) 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 of the SRP include GIS applications, historic sites archeology, historical research, ecosystem analysis, prehistoric ceramic analysis, and geophysical remote sensing applications. A few of the projects ongoing or completed in 2000-2001 are highlighted here.

CURRENT RESEARCH

Pea Ridge Archives

Kathleen Cande inventoried a collection of 6500 documents dealing with the original land acquisitions for Pea Ridge National Military Park in Benton County. The collection includes correspondence of Clayton Little and Hardy Croxton, attorneys for Pea Ridge National Park Commission, along with maps, appraisals, and title abstracts. The documents incorporate much valuable information on historic farmsteads and other structures that existed on park lands from the period of Euro-American settlement (mid-1800s) through the establishment of the park. The entire col-

lection was indexed, microfilmed, and packaged in acid-free folders and boxes. The indexes and microfilms are now available for research in the Survey Registrar's Office.

Sanders House

With a generous grant from the Arkansas Natural and Cultural Resources Council, SRP archeologists Kathleen Cande and Randall Guendling prepared a long overdue technical report on 1980s excavations at the Sanders House at Old Washington State Park. The Arkansas Archeological Society and SRP conducted the original research, but funds

were not available for analysis until now. The project focused on the detached kitchen of the mid-19th century house. UAF anthropology graduate student Dawn Novak contributed analysis of animal bones.

The excavations revealed that a temporary kitchen was present on the lot, with an area of brick paving for outdoor household activities. The actual detached kitchen was not built until the late 1850s. (The Greek Revival style house was built in 1844 or 1845.) Simon Sanders's tax records indicated that he sold property—either land or a slave—to finance the kitchen construction.

Societies in Eclipse published by Smithsonian Institution Press

SRP Administrator Robert Mainfort was co-editor (with David S. Brose and C. Wesley Cowan) of *Societies in Eclipse*, a book published in 2001 by Smithsonian Institution Press. This major work incorporates 16 papers on the archeology of Eastern Woodland Indians during the period A.D. 1400-1700, and presents paradigm-altering data accumulated during a generation of archeological research aimed at understanding the effects of Columbus's landfall. More particularly, the book presents new information on the cultural changes that were well underway among American Indians *before* Europeans encountered them. Thus, the emphasis becomes less a story of what was "done to" Native Americans, and more a story of interaction among diverse cultures, each the product of distinctive and dynamic traditions. Patterns of trade and warfare responded to the influx of new peoples and new commodities. Population movements and shifts in survival strategies that began as adjustments to global cooling in the Little Ice Age (A.D. 1550-1700) were exacerbated by European invasion and introduced diseases.

The book's overall value as regional synthesis, and more particular value as a collection of case studies of long-term cultural change in the face of environmental and social stress, make it an important addition to the literature of eastern North American archeology.



SRP crew members at a prehistoric stone quarry site in Benton County. The work was part of a contract project exploring the significance of archeological sites within the footprint of alternate routes for a planned connector road between the Northwest Arkansas Regional Airport and I-540.

SRP Personnel

Robert C. Mainfort (Ph.D., 1977, Michigan State University) 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.

Project Archeologists Kathleen H. Cande (M.A., 1984, UAF) and Randall L. Guendling (M.A., 1993, UAF) coordinate and supervise fieldwork and records searches, analyze data, and write reports. Cande also supervises the SRP lab. Cande joined the Survey in 1987. Her specializations include archeological textile analysis, archival research, the colonial Southeast, and historical archeology. Guendling has been a Survey employee since 1981. His research interests are historical archeology and ecology, landscape archeology, Arkansas history, and prehistoric lithic analysis.

Archeological Assistants Michael Evans and Jared Pebworth contribute varied skills to SRP projects, salvage projects, and station projects. These include all phases of archeological fieldwork, survey and mapping, flotation tank maintenance and operation, production of CAD graphics, conservation of metal artifacts, and vehicle and equipment maintenance—to name a few.

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, Mainfort has a faculty appointment as Professor in the UAF Anthropology Department, where he teaches one course per year. The Archeology of Death was offered in the Fall 2000 semester. Mainfort served on six master's thesis committees, chairing two of them, and on one doctoral dissertation committee in the Environmental Dynamics program. He served as program advisor for three anthropology graduate students. Curriculum development activities this year included a major revamping of the Survey internship program. The old Public Archeology course was proposed to be retitled Cultural Resource Management 1, and the internship course will be Cultural Resource Management 2.

Cande organized tours, prepared handouts, and gave lectures to 16 students in the Anthropology Department's Fall 2000 undergraduate archeology class, 25 students in the Spring 2001 class, and 10 anthropology students from Northwest Arkansas Community College. She also helped a graduate assistant prepare a fieldwork project for the archeology class.

Professional Service and Activities

Mainfort provided consultation and/or assistance to the University of Arkansas Museum, Arkansas State Parks, and Arkansas Department of Heritage, and the Quapaw NAGPRA representative.

Mainfort served on the Editorial Board of *Midcontinental Journal of Archaeology* and was a member of the Society for American Archaeology's Committee on Consulting Archaeology.

Mainfort reviewed proposals for the National Science Foundation, National Endowment for the Humanities, and National Center for Preservation Technology and Training.

Mainfort served as a manuscript reviewer for the journals *Southeastern Archaeology*, *Midcontinental Journal of Archaeology*, and *Mississippi Archaeology*, and for the University Press of Florida and University of Tennessee Press.

Cande served as consultant to Arkansas State Parks and the P.A.S.T. project for new Native American artwork at Parkin Archeological State Park. She also advised the Arkansas Historic Preservation Program.

Cande was a member of the Register of Professional Archeologists Certification Committee.

Cande served as Arkansas Current Research Editor for the *Southeastern Archaeological Conference Newsletter*, and as Gulf States Current Research Editor for the *Society for Historical Archaeology Newsletter*.

Public Service and Outreach

Mainfort, with Ph.D. student Rita Fisher-Carroll, gave a talk at the local Ko-ko-ci Chapter of the Arkansas Archeological Society. Mainfort also taught a seminar in Ceramics at the annual Society Training Program.

Cande worked with education specialist Mary Kwas to prepare an Arkansas Archeology Week activity flyer about studying ancient textiles.

Cande provided assistance to the Phillips County African-American Cemetery Association (now Arkansas Delta African American Historical Society).

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 administered during 2000-2001 include new grants and contracts as well as multiyear projects carried forward.

New Grants and Contracts in 2000-2001

Project Name Firm or Agency	
Sanders House Arkansas Natural and Cultural Resources Council 7.	75,000.00
Toltec Leaflet Printing Arkansas Humanities Council	750.00
	2,964.86
	1,887.64
Witness Tree GLO Encoding Arkansas Natural Heritage Commission 2	20,000.00
Arkansas Rock Art Arkansas Humanities Council 1	17,595.58
Old Missouri & Joyce St. Survey Atkins Benham Engineers	1,442.45
Alabam Transfer Station Ozark Disposal Service	1,766.43
Image Scanning of Site Files Arkansas Highway and Transportation Dept. 8 and Arkansas State Parks	38,218.14
Van Winkle Excavation, 2nd Year U.S. Army Corps of Engineers, Little Rock District 2	20,000.00
Fort Smith Archival Research Burns-McDonnell Engineering Co., Inc.	1,654.36
NAGPRA Ceramic Inventory National Park Service 5	55,260.00
Petit Jean Geophysical Research Arkansas State Parks	4,999.00

291,538.46

COMPUTER SERVICES PROGRAM, COORDINATING OFFICE

Jami Lockhart, CSP Coordinator Deborah Weddle, Information Technology Support Coordinator

The Survey's Computer Services Program (CSP), based at the Coordinating Office, 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 been working 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. There are online and Internet access systems for subscribing agencies involved with cultural resource management in Arkansas. Educational websites are maintained in response to public interest as well as agency needs.

CURRENT PROJECTS

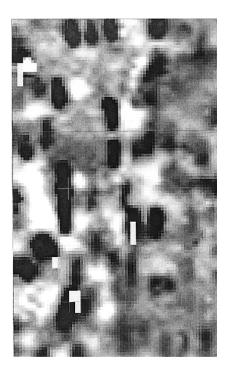
Archeogeophysical Research: A Revolution in Archeological Field Methods

The Survey is fast becoming a regional center for remote sensing applications in archeology. During the past year, projects have been carried out around the state and, by invitation, in North Dakota and North Carolina. We use a full complement of remote sensing technologies: ground-penetrating radar (GPR), magnetometry, resistivity, electromagnetic conductivity, and magnetic susceptibility.

For decades, geophysical and remote sensing prospection techniques have been used by geologists and engineers to "see" natural features beneath the surface of the earth. Comparatively recently, archeologists have adopted these same techniques to look for signs of historic and prehistoric land use without actually disturbing the soil. While excavation remains the primary and vital technique to learn about past cultures in detail, archeology has been moving toward a philosophy that stresses preservation of cultural features in the ground whenever possible. Remote sensing applications are revolutionizing the way in which sites are located, potential features identified, and large-scale projects planned.

When excavation is called for, remote sensing can save tremendous amounts of time and money, while maximizing research and cultural resource management objectives. We can visualize the layout of a site and plan our fieldwork accordingly.

Population growth and demands for development of the land in our modern society result in ever-increasing threats to archeological sites. Once excavated—whether by trowel or bulldozer—a site is gone forever. The benefits offered by archeogeophysical research are fast making it an important leading-edge component of cultural resource management around the world. With the Survey's investment in this technology, Arkansas now possesses the most comprehensive remote sensing capability for archeological research in the Southeast.



Bozeman Cemetery, near Arkadelphia, is located on an antebellum plantation and contains graves of early settlers, slaves, and Civil War soldiers. Lockhart participated in fieldwork conducted by UAF's Dr. Ken Kvamme and his Near Surface Prospection class. The illustration shows resistivity results, with the locations of marked and unmarked graves appearing as dark elongated shapes.

State-of-the-Art Data Management

The CSP has achieved a national and international reputation for its computerized information management systems for archeological research. Facilities at the Survey Coordinating Office provide a state-of-the-art work area with specialized electrical, Internet, and telecommunications wiring, individual climate control, and static-free building components. The Survey's core computer platforms consist of four unix-based multiuser systems, including a Sun Microsystems Ultra Enterprise 450 server which provides Internet and intraoffice connections to AMASDA (Automated Management of Archeological Site Data in Arkansas). AMASDA (the Survey's main database) contains more than 35,000 multifield archeological site records and records of almost 4500 archeological surveys and projects. These are linked to a GIS with a variety of statewide and localized environmental and cultural data layers needed by resource managers, land use planners, and researchers.

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

CSP Contributions to Station Research Projects

Projects closely involving the CSP included the NEH-funded development of the *First Encounters* educational CD, the GLO witness tree data encoding contract, and the new Rock Art project funded by Arkansas Humanities Council. Archeogeophysical applications were carried out at several stations, including Parkin, Toltec, SAU, UAPB, and UAF. These are summarized in other portions of this Annual Report.

First Encounters

In the final year of the First Encounters project, Weddle designed the program's user interface, solved problems arising from cross-platform integration, performed beta-testing, corrected various programming glitches in the French and Spanish sections, worked with the Survey's graphic artist, Jane Kellett, to create a jewel case design, and sent the master disc to the printers. One thousand copies were published in Windowscompatible format. A Macintosh version of the CD will be produced at the Survey on a per-request basis.

Witness Trees

Along with State Archeologist Ann Early and UAF Station Archeologist George Sabo, Lockhart presented an oral and written proposal to the Department of Arkansas Heritage for further work on the GLO tree database. The proposal was funded. Lockhart made extensive modifications to the previous database, enabling information from the 19th century surveyors' notes to be added. He trained and supervised graduate students Maria Tavaszi and Dawn Novak in the data entry phase. Twenty thousand trees in 35 Arkansas townships have been added to the database, which is a resource

for forest and environmental history research.

Rock Art

CSP assistance to the UAF Station rock art project included designing and building a website to incorporate webbased data entry and query forms tied to the Oracle database created by Lockhart.

The Survey on the Web

Deborah Weddle is responsible for design, deployment, and administration of the Survey's websites. Our main site provides general information on state laws for protecting archeological resources, a complete list of Survey publications, news about current excavations and projects, and points of contact throughout Arkansas via our research stations. http://www.uark.edu/campus-resources/archinfo/

The Survey website was expanded considerably this year. New additions include a section devoted to the Office of the State Archeologist, which offers information for the general public on how to report archeological sites. A downloadable version of the Survey's official site record form is included. Also created this year was a section on the Survey's educational program. These pages present resources for teaching archeology at elementary through college levels, including downloadable flyers and handouts for classroom use. Information on Archeology Week and student internships is also available.

The *First Encounters* website was set up to showcase our educational CD-ROM produced with support of a National Endowment for the Humanities Teaching with Technology grant. Interactive modules excerpted from the CD were placed on the website as previews of its content and educational goals. (The *First Encounters* website may be reached via the main Survey website; it was streamlined in late summer 2001, when the CD-ROMs became available for distribution.)

CSP PERSONNEL

Jami Lockhart (M.A., 1988, UAF - Geography) has been with the Survey since 1988. He is currently studying for a Ph.D. in Environmental Dynamics at UAF. His research interests include integrated data management systems, geographic information systems, archeogeophysical remote sensing, and human-environmental interrelationships through time.

Deborah Weddle (B.A., 1993, UAF - Anthropology) began working for the Survey as a student archeological laboratory and field technician before moving permanently to the CSP. Her research interests include development of Internet/World Wide Web access applications, geographic information systems, and the use of multimedia technologies for learning.

CSP SERVICE ACTIVITIES

Student Support (Lockhart)

Instruction and electromagnetic conductivity (EM) and magnetic susceptibility (MS) surveys associated with one UAF student's MA thesis in Anthropology.

EM and MS testing associated with two students' final projects in Dr. Ken Kvamme's Near Surface Prospection class (UAF). Extensive demonstration of database, GIS, and archeogeophysics for 20 students in Bryan Renfro's NWA Community College class.

Extensive demonstration of database, GIS, and archeogeophysics for 20 students in the UAF Introduction to Archeology class.

Public and Professional Service (Lockhart)

Presentation of "Technology in Archeology" to 60 Asbell Elementary students.

Demonstrations and discussions of archeogeophysics for approximately 300 students during Archeology Week.

Instruction, demonstrations, and presentations for 15 students in East Carolina University's archeological field school.

Demonstrations and assistance for visitors from South Korea and Jordan.

Presentation of evening lecture on archeogeophysics at the Arkansas Archeological Society annual Training Program.

Presentations and demonstrations to the Southeast State Historic Preservation Officers and their staff (audience about 20), and to Quapaw Tribal representatives (audience about 5).

Public and Professional Service (Weddle)

Demonstrations of Survey computer facilities and capabilities to visiting scholars, professionals, and students.

Graphics assistance (scanning, editing, printing slides and photographs), technical support for software applications, computer hardware upgrades and repairs for Arkansas Archeological Society and Northwest Arkansas Archeological Society.

Internet Service (Weddle)

Design, administration, and maintenance of the official website of the Southeastern Archeological Conference. The site contains general information about this professional organization and its publications, including online registration for the annual meeting. http://www.uark.edu/campus-resources/seac>

Design, administration, and maintenance of the Archeological Parks in the U.S. website, which provides links to internet information on various archeological parks. http://www.uark.edu/misc/aras

Campus Service (Weddle)

Participation in the Information Technology Support Program through partnership with UA Computing Services. This program provides training for departmental staff specialists to enable them to answer many of their departments' computer support needs. Benefits to the Survey include savings on Computing Services labor fees for specialized software installations and computer repairs and upgrades, as well as providing access to training resources.

THE REGISTRAR, COORDINATING OFFICE

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 the 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 Internship program.

CURRENT ACTIVITIES

The Registrar's Office spends about 85% of its time reviewing site forms and encoding site data for AMASDA (the Survey's main computerized database); reviewing and re-boxing new archeological collections for curation; encoding of archeological reports, slides, and black-and-white photos; and assisting contractors and students. Some of our additional long-term goals and responsibilities are briefly mentioned.

Citations Database

All sources currently housed in the Survey Library have now been entered into the Citations bibliographical database. This includes Arkansas technical reports, Southeast regional references, and audio-visual materials. The next step will be to add references from Arkansas Archeological Society publications.

Scanning of Site Forms

In 2001 we received an \$88,000 grant from Arkansas Highway and Transportation Department to scan visual images of all paper site files into our computer database for online access by authorized subscribers. AHTD is one of our most frequent clients; their archeologists consult our site files at least once a day. With the new computerized image files, the process will be faster and much more efficient. Work-study graduate students perform the work. Scanning provides the added benefit of an extra "layer" of archival storage for this irreplaceable data.

NAGPRA

The Registrar's Office continues to work with Survey research stations and the UA Museum to submit required "Notices of Inventory Completion" in compliance with the Native American Graves Protection and Repatriation Act. (The Act requires that institutions receiving federal monies inventory and report human remains and funerary artifacts to the culturally affiliated Native American tribes.) Current efforts are focused on collections in the HSU station area.

The Registrar's Office was awarded

a \$55,000 grant from the National Park Service to inventory sacred objects, items of cultural patrimony, and unassociated funerary objects in our collections. Included are culturally significant (as specified in NAGPRA) artifacts for which tribal affiliation is currently unknown. The grant will help support a two-day workshop with representatives of the Osage Nation, Tunica-Biloxi Tribe of Louisiana, Quapaw Tribe of Indians, Caddo Indian Tribe of Oklahoma, and the Wichita and Affiliated Tribes to determine disposition of these artifacts.

Service Activities

The Registrar's Office is responsible for about one-third of the practical instruction offered to students in the Survey Internship program for UAF anthropology graduate students. However, there was no student intern this year.

We conducted tours for students in the UAF Anthropology Department's archeology classes, and for Museum Docents.

The Registrar worked closely with eleven students from UAF (Anthropology Department and Environmental Dynamics program) and other institutions (University of Memphis, University of Texas at Austin, UALR) on class and thesis projects. Topics included GIS, tree-ring studies in the Buffalo National River, quaternary research, geomorphology, local history, and historical archeology within Beaver Lake State Park.

We hosted visiting archeologists from Jordan and South Korea.

A local high school student "job-shadowed" in the Registrar's Office.

The staff provided general assistance to all Survey research stations, other University departments, government agencies, private consulting and research firms, and amateur archeologists throughout the year.

Arkansas Archeological S	Survey Site F	ile Activity for 2000-2001
New Sites		Total number of sites now in
Recorded	805	Arkansas site files = 35,391
New Data		
Recorded for		
Known Sites	187	
No. of Requests		
for Access to		
Site Records	142	
No of Collections		
No. of Collections Accessioned	12	
Accessioned	12	
No. of New Projects		Total number of projects now
Entered in AMASDA	161	in AMASDA = 4457

Who Reports New Sites? 20	000-2001
Survey Staff Stations SRP	52 31
Private CRM Firms	405
State & Federal Agencies	262
Amateur Archeologists	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 research 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, former student intern and holder of the Survey Graduate Assistantship in Anthropology, works as the NAGPRA Grant Coordinator. Dawn Novak is current holder of the Survey Assistantship. Work-study students Doyle Loughren, Christie Longlois, and Alicia Underdown do data entry and clerical duties. Ahmed Yousef Dalqamouni is a student hourly employee. Mary McGimsey, former UA Museum photographer, volunteers her time to bring the photographic records and archives up to date. Survey staff member Kathy Alsobrook works part-time on data entry.

Publications and Editorial Office

Mary Lynn Kennedy, Editor Gilbert P. Verser III, Sales and Distribution

Robert C. Mainfort, Series Editor Deborah Sabo, Popular Series Editor Lindi Holmes, Research Reports and Reprints

The Survey's Publication Program incorporates four formats. The Research Series, Research Reports, Technical Series, and Popular Series facilitate dissemination of archeological knowledge to audiences ranging from professional scholars and students to public school teachers, government officials, and the general public. The program is managed by a five-member Publications Committee, the Series Editor, and the Production Editor.

CURRENT ACTIVITIES

New Publications

The Survey published two new volumes in its Research Series, Forest Farmsteads (RS 57), and Historical Perspectives on Midsouth Archeology (RS 58). A third, Mortuary Behavior at Upper Nodena (RS 59), was being edited and revised. A new edition of Historic Indians of Arkansas in the Popular Series was also produced, with new color illustrations. Another Popular Series volume, Ghost Boats of the Mississippi, continues in production.

Backlist Demand

The Survey's older titles continue to be in demand, including requests for out-of-print volumes, which we have filled in the past by making photocopies. The Publications Office has embarked on a long-range effort to transfer all the Survey's backlist titles to digital format, which will essentially eliminate the "out-of-print" category and restore these titles to the regular Catalog. Five reprints were digitized in the Research Series. Research

Reports that have been digitized (20 titles) still need further corrections for efficient use of the CD format.

Sales and Distribution

Sales are up again. Internet outlets, university bookstores, and state park and museum bookstores carry our books. We advertise on the web and via a print catalog. Book displays at meetings of professional and amateur archeological organizations are also important.

Publications Sales and Distribution for 2000-2001

	Research Series	Research Reports	Popular Series	Technical Series	Special Publication	Total
No. of Titles	56	29	2	12	1	100
Sold	1401	58	248	3	0	1710
Free Total	330 1731	9 67	8 256	4 7	0 0	351 2061

Publications, 2000-2001

- FOREST FARMSTEADS: A Millennium of Human Occupation at Winding Stair in the Ouachita Mountains, edited by Ann M. Early. With contributions by Randall L. Guendling, Roger E. Coleman, and Michele L. Williams. 2000, 138 pp., 50 illus., paper; ISBN 1-56349-090-0, \$25.00 (Research Series 57).
- HISTORICAL PERSPECTIVES ON MIDSOUTH ARCHEOLOGY, edited by Martha Ann Rolingson. 2001, 134 pp., 13 illus., paper; ISBN 1-56349-091-9, \$25.00 (Research Series 58).
- HISTORIC INDIANS OF ARKANSAS (Paths of Our Children), by George Sabo III. Rev. ed. 2001, 144 pp., 37 illus., paper; ISBN 1-56349-092-7, \$6.00 (Popular Series 3).

Forthcoming:

MORTUARY BEHAVIOR AT UPPER NODENA, by Rita Fisher-Carroll. 2001, 112 pp., 15 illus., paper; ISBN 1-56349-093-5, \$12.00 (Research Series 59).

In Press:

GHOST BOATS ON THE MISSISSIPPI: Discovering Our Working Past, edited by Leslie Stewart-Abernathy. (Popular Series)

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 a visual archive for Arkansas archeology through its photographic and graphic arts support office at the CO 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.

CURRENT ACTIVITIES

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 35 mm black-and-white negative archive. She prepares figures, illustrations, and photographic plates for Survey publications, SRP contract reports, and staff publications in other professional journals or 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.

Photographic Documents

Kellett processed 180 rolls of film and made contact sheets for the Registrar and Station record books. She photographed approximately 60 artifact plates for various collections and projects.

As part of the NAGPRA grant to inventory Native American funerary artifacts and objects of cultural patrimony, Kellett photographed 180 pottery vessels and vessel fragments. This amounted to 17 rolls of black and white film, 288 color slides, and 250 digital images. The NAGPRA project is ongoing.

Slide Duplication

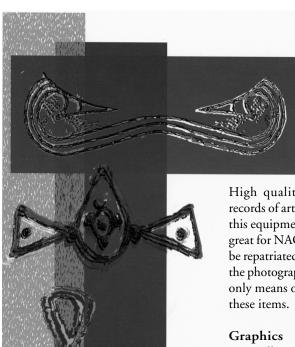
Six hundred slides were made for public and professional presentations, and 230 slides for various field projects or archives.

Digital Scans

Scans of illustrations for various print and web publications amounted to 340 digital images. The images appeared in newsletters, the Arkansas Archeological Society's *Field Notes*, journal articles, contract reports, publication reprints, and the new rock art website.

Technical Improvements

The NAGPRA grant allowed the Survey to purchase a Fine Pix S1 Fuji digital camera with 3040 x 2016 resolution and Nikon macro lens capability.



High quality archival photographic records of artifacts can be produced with this equipment. The need is particularly great for NAGPRA materials which may be repatriated to Native American tribes; the photographic record may become the only means of further study for some of these items.

Kellett made approximately 50 presentation slides for staff at various research stations. She designed and produced book covers for the Survey publications program. She also designed jewel case packaging and inserts for the *First Encounters* CD-ROM.

Photographic and Graphic Arts Staff

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 graphics, and added photographic duties in 1982.

PARTNERS IN PRESERVATION

Hester A. Davis, Treasurer and Editor Gilbert Verser, Research 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 use 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 665 members of all ages throughout Arkansas and across the country. There are now six active chapters working closely with the Survey research stations in their areas.

Volunteers

Society members donate thousands of hours in the field and laboratory each year, working on station research projects and emergency salvage. Survey staff and Society members cooperate in local and statewide public archeology activities ranging from school talks to Archeology Week, the State Fair Booth, and 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.

Last year, a larger than usual grant request was made by David Jeane, SAU station assistant, for radiocarbon dates on samples from the Grandview Prairie site. The full amount of \$2500 was awarded.

Annual Meeting

The 2000 annual meeting was held September 28-30 at the Arlington Hotel in Hot Springs. It was the largest meeting ever, with 144 in attendance. The Ouachita Chapter organized the meeting. Survey personnel authored or coauthored six of the 14 formal papers and participated in the Business Meeting, Banquet, tours, and other events.

State Fair Booth

The Survey and Society cooperate each year to put up a booth at the Arkansas State Fair and Livestock Show. 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. We also give away hundreds of teacher packets at the State Fair. Survey staff and Society members volunteer to mind the booth for the full ten days.

Thousands of people receive at least minimal exposure to Arkansas archeology and the idea of archeological site preservation, making the State Fair booth one of our most wide-reaching outreach efforts.

Archeology Week

The Survey and Society jointly organize Archeology Week, a diverse array of events around the state promoting awareness of Arkansas's archeological heritage. The theme for Archeology Week 2000 was "Archeological Parks," but events do not necessarily have to stick to the designated theme. There were 30 programs at 21 different venues on the official schedule for October 20-28. Slide talks, exhibits, demonstrations, video shows, open houses, and workshops took place around the state. The Schedule of Events was distributed to schools, educational coops, museums, public libraries, state and national parks, and Travel Information Centers in Arkansas, and was posted on the Survey and Society websites. The Survey produced free educational packets and downloadable educational materials on the web for classroom use.

"Society Dig": The Training and Certification Program

This unique program is managed cooperatively by the Society and the Survey. Every year in June a two-and-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 is invited to tour the site, ask questions, and observe the work in progress.

The 2001 Training Program at Grandview Prairie

The 2001 Training Program was at Grandview Prairie Wildlife Management Area in Hempstead County. There were 102 participants from throughout Arkansas and many other states. Excavations were planned and directed by SAU station archeologist Frank Schambach, who first visited Grandview in 1973 and recorded the most significant prehistoric site known on the property—the Tom Jones site, a large Caddo mound group. SAU assistant David Jeane, other Survey professionals, and qualified Society members helped supervise the field and laboratory work.

Eight of the nine seminars were taught by Survey staff members: Anne Early (State Archeologist), Tom Green (Survey Director), Claudine Payne (Blytheville station archeologist), Jim Phillips (UAM station assistant), Robert Mainfort (SRP Adminstrator), Tim Mulvihill (Parkin station assistant), Martha Rolingson (Toltec Mounds station archeologist), and Mary Beth Trubitt (HSU station archeologist). The ninth seminar was taught by certified Society member Peggy Lloyd. Total enrollment in the nine seminars was 104.

Excavations concentrated on the Tom Jones site and were planned with the help of remote sensing investigations carried out earlier in the season by Jami Lockhart of the Survey Computer Services Program (see the SAU station chapter in this report for more details). With the help of this new technology, Training Program field hands were able to quickly establish the north-south limits of the site, to confirm the presence of house mounds, and collect samples from them of artifacts and charcoal for radio-

carbon dating. Excellent information about the architecture of the houses was obtained. Soil samples from the house floors should yield floral remains—seeds and other plant parts—that will tell us about the local environment and domestic economy of the Caddo people who occupied the houses.

A bonus discovery was exposure of a 500-year-old sod that represents the actual ground surface at the time the houses were built. Preserved vegetation from this feature should reflect the species composition of the tallgrass prairie in southwest Arkansas around A.D. 1550.

Other features of the site offer intriguing research possibilities; for instance, remains of an "Old Military Road" may turn out to reflect continuous historical use of pre-Columbian trade routes between the Caddo area of southwest Arkansas and the major Mississippian centers of the Midwest, such as Cahokia (near modern St. Louis).



The 2001 Training Program t-shirt was designed by Adam Olson, son-in-law of Society member and Kadohadacho Chapter Board of Advisors member Rita Rhea.

Appendix 1. Publications and Reports by Survey Staff, 2000-2001.

Brose, D. S., C. W. Cowan, and R. C. Mainfort, Jr. (editors)

2001 Societies in Eclipse. Smithsonian Institution Press, Washington, D.C.

Cande, Kathleen H.

2000 Spradley Hollow Habitations, Four Rock Shelters and a Historic Homestead. Arkansas Archeological Survey, Research Series 56. Fayetteville.

2000 Ritual and Material Culture as Keys to Cultural Continuity, Native American Interaction with Europeans in Eastern Arkansas, 1541-1682. In: *Interpretations of Native North American Life: Material Contributions to Ethnohistory*, edited by Michael S. Nassaney and Eric S. Johnson, pp. 32-52. Society for Historical Archaeology and the University of Florida Press, Tallahassee.

Davidson, James M., Jerry E. Hilliard, and Lela D. Donat

2001 Archeological Investigations of the Droke Graveyard, 3BE655, Benton County, Arkansas. Management Summary submitted to landowner.

Davis, Hester A.

2000 Review of Cultural Resource Laws and Practice: An Introductory Guide, by Thomas F. King. Historical Archaeology 34(2):123-124.

Davis, Hester A., and Charles R. McGimsey, III

2000 The Old Order Changeth: Or, Now That Archaeology Is in the Deep End of the Pond, Let's Not Just Tread Water. In: *Teaching Archaeology in the Twenty-First Century*, edited by S. J. Bender and G. S. Smith, pp. 5-8. Society for American Archaeology.

Early, Ann M. (editor)

2001 Forest Farmsteads: A Millennium of Human Occupation at Winding Stair in the Ouachita Mountains. Arkansas Archeological Survey, Research Series 57. Fayetteville.

Farmer, Mary V.

2000 Wrecked Car, Jail, Bullet: The Untold Story of Volunteering for the Mastodon Dig. Field Notes, Newsletter of the Arkansas Archeological Society 293:11.

Green, Thomas J., and Hester A. Davis

2000 The Arkansas Archeological Survey: A Statewide Cooperative Programme to Preserve the Past. In: *Cultural Resource Management in Contemporary Society*, edited by Francis P. McManamon and Alf Hatton, pp. 142-159. Routledge, London.

Guendling, Randall L. (contributor)

2001 Forest Farmsteads: A Millennium of Human Occupation at Winding Stair in the Ouachita Mountains, edited by Ann M. Early. Arkansas Archeological Survey, Research Series 57. Fayetteville.

House, John H.

2001 Preliminary Report on Artifacts and Material Culture Samples from Colonial-Era Indian Graves at the Lake Dumond Site, Arkansas County, Arkansas. Report to the Quapaw Tribe of Oklahoma by the Arkansas Archeological Survey.

House, John H., and Mary V. Farmer

2001 Phase II Testing of Seven Archeological Sites on the Pine Bluff Arsenal, Jefferson County, Arkansas. Report submitted to the United States Department of the Army, Pine Bluff Arsenal, by the Department of Social and Behavioral Sciences, University of Arkansas at Pine Bluff.

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

2000 Phase II Testing of Seven Archeological Sites on the Pine Bluff Arsenal, Jefferson County, Arkansas. Draft final report submitted to the U.S. Department of the Army.

Hutchinson, Dale L., and Jeffrey M. Mitchem

2001 Correlates of Contact: Epidemic Disease in Archaeological Context. Historical Archaeology 35(2):58-72.

Jeter, Marvin D.

2000 Review of *James A. Ford and the Growth of Americanist Archaeology*, by Michael J. O'Brien and R. Lee Lyman, and *Measuring the Flow of Time: The Works of James A. Ford, 1935-1941*, edited by Michael J. O'Brien and R. Lee Lyman. *Mississippi Archaeology* 35(1):117-123.

2000 A Summary of the AP&L Project, 1977-1982: Archeological Survey Transects and Testing, Central to Northeast

Arkansas. The Arkansas Archeologist 39:69-88.

2001 Edward Palmer and Other Victorian Pioneers in Midsouth Archeology. In: *Historical Perspectives on Midsouth Archeology*, edited by Martha A. Rolingson, pp. 23-51. Arkansas Archeological Survey, Research Series 58. Fayetteville.

Kwas, Mary L.

2000/01 Public Education News. Column appearing regularly in Field Notes, Newsletter of the Arkansas Archeological Society.

Mainfort, Robert C., Jr.

The Late Prehistoric and Protohistoric Periods in the Central Mississippi Valley. In: *Societies in Eclipse*, edited by D. S. Brose, C. W. Cowan, and R. C. Mainfort, Jr., pp. 173-189. Smithsonian Institution Press, Washington, D.C.

Mainfort, Robert C., Jr., and Rita Fisher-Carroll

2000 Late Prehistoric Mortuary Behavior at Upper Nodena, Mississippi County, Arkansas. *Southeastern Archaeology* 19(2):105-119.

McGimsey, Charles R., III

2001 Headwaters, or How the Federal Government Became Involved in Archeology in the Midsouth and Elsewhere after World War II. In: *Historical Perspectives on Midsouth Archeology*, edited by Martha A. Rolingson, pp. 93-102. Arkansas Archeological Survey, Research Series 58. Fayetteville.

Mitchem, Jeffrey M., and Timothy S. Mulvihill

2001 The 1995 Salvage Excavations at the Armorel Site (3MS23). The Arkansas Archeologist 40:1-7.

Mitchem, Jeffrey M.

2000 An Update on the Meador Site Project, May 2000. Field Notes, Newsletter of the Arkansas Archeological Society 295:9-10.

2001 The Willcox Copper Plate from Florida. *Expedition* 43(2):5-6.

2001 Faunal Analysis and Radiocarbon Dates from the Meador Site: ARF-Funded Studies Yield New Insights. *Field Notes, Newsletter of the Arkansas Archeological Society* 300:3-9.

2001 Review of *The Hernando de Soto Expedition: History, Historiography, and "Discovery" in the Southeast*, edited by Patricia Galloway. *Mississippi Archaeology* 36(1):61-65.

Morrow, Julie

2000 The King Mastodon Excavation Project. Field Notes, Newsletter of the Arkansas Archeological Society 296:13.

2000 Review of *Hardaway Revisited: Early Archaic Settlement in the Southeast*, by I. R. Daniel, Jr. *Plains Anthropologist* 45(173):336-338.

2001 Review of *The Lamb Site: A Pioneering Clovis Encampment*, by Richard Michael Gramly. *Lithic Technology* 26(2)157-159.

Mulvihill, Timothy S.

2000 A Shell Mask from the Rose Mound Site (3CS27). Field Notes, Newsletter of the Arkansas Archeological Society 296:7.

Payne, Claudine, and Marion Haynes

2000 Northeast Arkansas Archeology and the New Blytheville Research Station. *Field Notes, Newsletter of the Arkansas Archeological Society* 297:3-5.

Rolingson, Martha A.

2001 Archeology of the Midsouth Region to 1960. In: *Historical Perspectives on Midsouth Archeology*, edited by Martha A. Rolingson, pp. 1-22. Arkansas Archeological Survey, Research Series 58. Fayetteville.

2001 Contributions of Women to the Archeology of the Midsouth Region. In: *Historical Perspectives on Midsouth Archeology*, edited by Martha A. Rolingson, pp. 73-84. Arkansas Archeological Survey, Research Series 58. Fayetteville.

Rolingson, Martha A. (editor)

2001 Historical Perspectives on Midsouth Archeology. Arkansas Archeological Survey, Research Series 58. Fayetteville.

Sabo, George, III

Review of American Indians in the Lower Mississippi Valley: Social and Economic Histories, by Daniel H. Usner, Jr. William and Mary Quarterly (July):739-742.

Sabo, George, III, Linda C. Jones, Luis Restrepo, and Deborah Weddle

2000 First Encounters: Native Americans and Europeans in the Mississippi Valley. CD-ROM. Arkansas Archeological Survey, Fayetteville.

Schambach, Frank F.

2000 The Significance of the Sanders Site in the Culture History of the Mississippi Period Southeast and the Southern

- Plains. In: The 1931 Excavations at the Sanders Site, Lamar County, Texas; Notes on the Field Work, Human Osteology, and Ceramics, by A. T. Jackson, Marcus S. Goldstein, and Alex Krieger (with Introduction by Frank F. Schambach, and Preface by Darrell G. Creel), pp. 1-7. Texas Archeological Research Laboratory, Archival Series 2. The University of Texas at Austin.
- 2001 Fourche Maline and Its Neighbors: Observations on an Important Woodland Period Culture of the Trans-Mississippi South. *The Arkansas Archeologist* 40:21-50.
- 2001 Fieldwork at Grandview. Field Notes, Newsletter of the Arkansas Archeological Society 299:7-8.

Stewart-Abernathy, Leslie C.

- 2001 Kitchens and Slavery. Chapter 6 in The Archaeological Investigations of the Sanders Kitchen, 1981 and 1992, Old Washington Historic State Park, by Randall J. Guendling, Kathleen H. Cande, Leslie C. Stewart-Abernathy, and Dawn Novak, pp. 89-97. ANCRC Report, Project 01-001, AAS Project 01-01. Arkansas Archeological Survey, Sponsored Research Program, Fayetteville.
- 2001 Research Plan for the 1981 Society Training Program at the Sanders Block at Old Washington (3HE236). Appendix 1 in *The Archaeological Investigations of the Sanders Kitchen, 1981 and 1992, Old Washington Historic State Park*, by Randall J. Guendling, Kathleen H. Cande, Leslie C. Stewart-Abernathy, and Dawn Novak, pp. 107-119. ANCRC Report, Project 01-001, AAS Project 01-01. Arkansas Archeological Survey, Sponsored Research Program, Fayetteville.

Trubitt, Mary Beth

- 2000 Mound Building and Prestige Goods Exchange: Changing Strategies in the Cahokia Chiefdom. *American Antiquity* 65(4):669-690.
- 2000 A Preliminary Report of the Results of the Cahokia Palisade Project's 2000 Season. Report of the Central Mississippi Valley Archaeological Research Institute, submitted to the Cahokia Mounds Museum Society.
- 2000 Review of *Grit-Tempered: Early Women Archaeologists in the Southeastern United States*, edited by Nancy Marie White, Lynne P. Sullivan, and Rochelle A. Marrinan. *Arkansas Historical Quarterly* 59(4):465-467.
- 2000 Review of *The Archaeology of Downtown Cahokia: The Tract 15A and Dunham Tract Excavations*, by Timothy R. Pauketat. *American Antiquity* 65(3):599.
- 2001 A Cultural Resources Survey of Proposed Reservoir Construction, James Hendrix Property, Pike County, Arkansas. Revised Final Report submitted to the U.S. Army Corps of Engineers, Vicksburg. AAS Project 00-14. Arkansas Archeological Survey, Sponsored Research Program, Fayetteville.
- 2001 Palisade Building and Landscape Modification at Cahokia. Cahokian, Spring 2001, pp. 5-8.
- 2001 A Preliminary Report on Archeological Test Excavations at Lake Ouachita, Arkansas. Report submitted to the U.S. Army Corps of Engineers, Vicksburg District, ARPA Permit No. DACW38-4-01-49. Arkansas Archeological Survey, Henderson State University Research Station, Arkadelphia.

Wright, Kate, and Mary Beth Trubitt

2001 Recent Excavations in Saline and Montgomery Counties. Field Notes, Newsletter of the Arkansas Archeological Society 300:10.

Appendix 2. Presented Papers, Symposia, and Workshops by Survey Staff, 2000-2001.

Cande, Kathleen H.

2001 Broadening Historic Site Interpretation through Archeology. Arkansas Museums Association, Springdale.

Early, Ann M.

2001 Prehistoric Human Ecology in the Ouachita Forest of Western Arkansas: Archeological Recovery of Preserved Evidence at the Winding Stair Site. Joint Annual Meeting of the American Society for Environmental History and the Forest History Society, Durham, North Carolina.

2001 Panel Participant: Regional Variation and Protohistoric Caddo Identity. Joint Meeting of the 43rd Caddo Conference and 23rd Flint Hills Conference, Norman, Oklahoma.

Farmer, Mary V.

2000 Sweep It Under the Rug. Annual Meeting of the Arkansas Archeological Society, Batesville.

Green, Thomas J.

2000 Cultural Resource Management. Teaching workshop for the U.S. Army Corps of Engineers. Santa Fe, New Mexico.

2001 Moderator and Discussant for a Symposium: Compliance or Complacence? The Current State of Geophysics in North American CRM. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

2001 The Economic Impact of Archeological Parks. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

Haynes, Marion

2000 Archeology and Earthquakes in Northeast Arkansas. Annual Meeting of the Arkansas Archeological Society, Batesville.

House, John H.

2001 Time Exposure: Explaining Mississippian Settlement Variation in the Lower St. Francis Basin, Eastern Arkansas. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

Jeter, Marvin D.

2000 Spanish Trade Goods at Lower Mississippi Valley, Southeastern, and Southwestern Sites. 73rd Pecos Conference, Mesa Verde, Dolores, Colorado.

Kwas, Mary L.

2001 Archaeological Parks and Heritage Tourism: Opportunities and Obstacles. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

Lockhart, Jami J.

2000 A Bigger Toolbox: Geophysical Applications in Archeology. Annual Meeting of the Arkansas Archeological Society, Batesville.

2001 Bringing Archaeogeophysics into Mainstream CRM. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

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

2001 Exploratory Applications in Human and Natural Ecology: Using GIS to Examine Historic Settlement and Change. Joint Annual Meeting of the American Society for Environmental History and the Forest History Society, Durham, North Carolina.

2001 Historical Landscapes of the Lee Creek Study Area in the Arkansas Ozarks. UAF Environmental Dynamics Program Colloquium Series, Fayetteville, Arkansas.

Mainfort, Robert C., Jr.

2001 Organizer and Chair of a Symposium: Understanding Variability in the Late Period in Northeast Arkansas. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

2001 Late Period Ceramic Variation in the Central Mississippi Valley. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

Mitchem, Jeffrey M.

2000 Changing Ideas about the Parkin Site, Northeast Arkansas. 57th Annual Meeting of the Southeastern Archaeological Conference, Macon, Georgia.

2000 Some of What We've Learned at Parkin. Annual Meeting of the Arkansas Archeological Society, Batesville.

2001 A Decade of Hypothesis Testing at the Parkin Site, Arkansas. 66th Annual Meeting of the Society for American

Archaeology, New Orleans, Louisiana.

2001 "Dr. Fanshaw" Digs Some Mounds: Thomas Featherstonhaugh's Work in Central Florida in the Late Nineteenth Century. 53rd Annual Meeting of the Florida Anthropological Society, St. Augustine, Florida.

Payne, Claudine

2001 Rethinking Mississippian Chiefdoms: A Closer Look at Scale and Power. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

Payne, Claudine, and Marion Haynes

2000 Northeast Arkansas Archeology and the New Blytheville Research Station. Annual Meeting of the Arkansas Archeological Society, Batesville.

Sabo, George, III

2001 The Teran Map and the Caddo Sky World. Annual Meeting of the Arkansas Archeological Society, Batesville.

Sabo, George, III, and Jami J. Lockhart

2001 The Forest as a Resource: From Prehistory to History in the Arkansas Ozarks. Joint Annual Meeting of the American Society for Environmental History and the Forest History Society, Durham, North Carolina.

Stewart-Abernathy, Leslie C.

2000 Roads of Hope: Native Americans, Missionaries, and Recreational Development in Pope County, Arkansas. Annual Meeting of the Arkansas Archeological Society, Batesville.

Trubitt, Mary Beth, and Jenna Hamlin

2000 The Cahokia Palisade Project 2000: Preliminary Results. Annual Meeting of the Illinois Archaeological Survey, Collinsville, Illinois.

Trubitt, Mary Beth, Suzanne Lowry, and Michael F. Kolb

2001 Earthmoving and Palisade Construction at Cahokia. 66th Annual Meeting of the Society for American Archaeology, New Orleans, Louisiana.

Appendix 3. SRP Titles for 2000-2001.

Cande, Kathleen H.

- 2001 A Cultural Resources Survey of Portions of the Washington Water Authority North Central Extension within the Ozark National Forest, Boston Mountain Ranger District, Washington County, Arkansas. Final Report, Project 99-06. Submitted to the Milholland Company, Fayetteville.
- 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. Draft Report, Project 00-08. Submitted to Barnard Dunkelberg and Company, Tulsa, Oklahoma.
- 2001 A Cultural Resources Survey of Portions of Phase V of the Lawrence County Regional Water District, Lawrence, Randolph and Sharp Counties, Arkansas. Final Report, Project 00-10. Submitted to Bond Consulting Engineers, West Memphis.
- 2001 A Cultural Resources Survey of the Commerce Park Development, Fayetteville, Washington County, Arkansas. Final Report, Project 01-07. Submitted to Atkins Benham, Inc., Norman, Oklahoma.
- A Cultural Resources Survey of the Alabam Transfer Station, Madison County, Arkansas. Final Report, Project 01-08. Submitted to Ozark Disposal Service, Kingston.
- The Ashley Mansion Site (3PU256): Archeological Collections Management of a Nineteenth through Early Twentieth Century Urban Assemblage. Final Report, Project 00-03. Submitted to the Arkansas Natural and Cultural Resources Council, Little Rock.

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