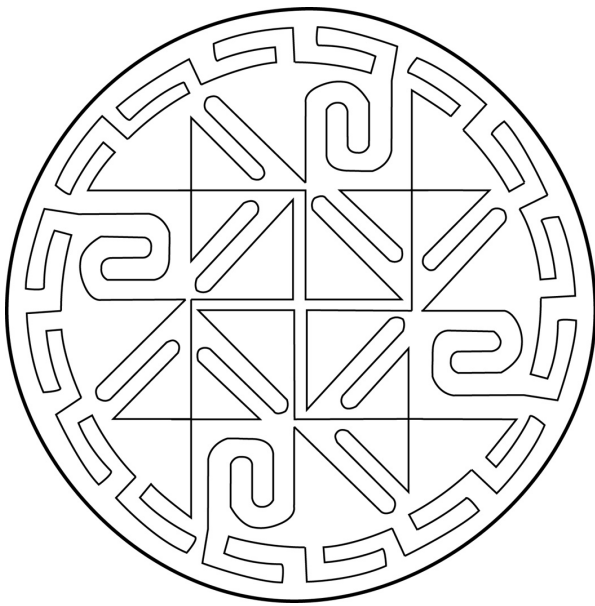


ANNUAL REPORT

FOR FISCAL YEAR 2003-2004



ARKANSAS ARCHEOLOGICAL SURVEY

A DIVISION OF THE UNIVERSITY OF ARKANSAS SYSTEM



Introduction	3
Map of the Survey Research Stations.....	4
The Director's Pages: Highlights for 2003-2004.....	5
The State Archeologist	16

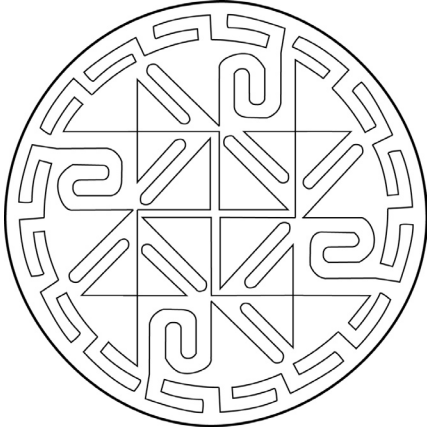
REPORTS OF THE SURVEY RESEARCH STATIONS

Toltec Mounds Archeological Park.....	20
Parkin Archeological State Park.....	24
University of Arkansas at Fayetteville	28
University of Arkansas at Monticello.....	34
University of Arkansas at Pine Bluff.....	38
Henderson State University.....	43
Southern Arkansas University	48
Arkansas Tech University	52
Arkansas State University	56
Blytheville Aeroplex	60

REPORTS OF THE COORDINATING OFFICE, FAYETTEVILLE

Sponsored Research Program	64
Computer Services and Archeogeophysical Applications	68
Office of the Registrar.....	73
Education Specialist	76
Publications and Editorial Office	79
Photographic and Graphic Arts Support	81
Partners in Preservation.....	82
Appendix 1. Publications and Reports by Survey Staff, 2003-2004	87
Appendix 2. Presented Papers, Symposia and Workshops, 2003-2004.....	89
Appendix 3. SRP Titles for 2003-2004	91
How to Contact the Arkansas Archeological Survey	92

This Annual Report was edited and produced by Deborah Sabo.
Cover by M. Jane Kellett. Cover image: pictographs from The Narrows site.



UNIVERSITY OF ARKANSAS SYSTEM

ARKANSAS ARCHEOLOGICAL SURVEY

ANNUAL REPORT FOR FISCAL YEAR 2003-2004

INTRODUCTION

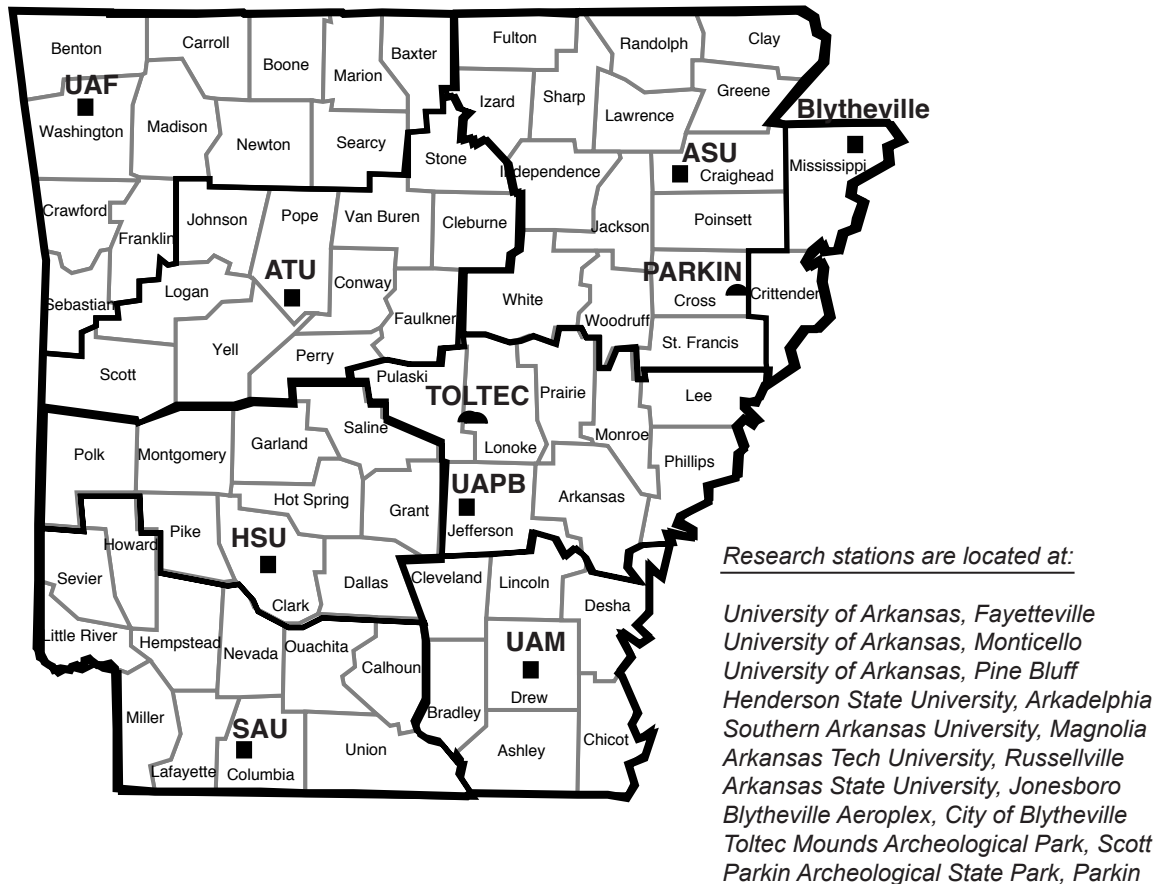
The Arkansas Archeological Survey is a part of the University of Arkansas System. Our mission is to study and protect archeological sites in Arkansas, to preserve and manage information about those sites, and to communicate what we learn to the people of Arkansas. Cooperative agreements with seven state universities, two state parks, and the City 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 in the United States and around the world.

Our coordinating office in Fayetteville is the Survey's administrative body. The Director, the State Archeologist, the Survey registrar, the fiscal officer, administrative assistant, publications staff, and outreach programs operate from the CO. The registrar maintains a central archive of all archeological site records for the state. The coordinating office building also contains the University of Arkansas Collections Facility. The Survey acts as a repository for archeological collections originating from state and federally funded projects in Arkansas, our own research, private consulting firms, and donations. Also at the coordinating office are our sponsored research program (SRP) and computer services program (CSP), which support themselves in part through grants and contracts with local, state, and federal agencies and with the business community. The CSP maintains several web sites 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 Ph.D. archeologists at our research stations teach courses in anthropology and assist their university museums, or develop materials for public interpretation at the state parks, in addition to conducting basic research in their areas. They, along with scholars at the coordinating office, are a living resource for the people of Arkansas, serving the needs of cultural heritage education and preservation in many ways. Local, state, and federal governmental agencies, American Indian tribes, college students, school teachers and K-12 students, tourists, fellow scholars, landowners, amateur archeologists, and all Arkansas residents interested in the archeology, prehistory, and early history of the state are beneficiaries of the Survey's programs and expertise.

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

ARKANSAS ARCHEOLOGICAL SURVEY RESEARCH STATIONS



Cooperative agreements between the Survey, seven state universities, two state parks, and the City of Blytheville provide the ten research stations with office, laboratory, and collection storage facilities. Each station is staffed by a Ph.D. archeologist and a full- or part-time archeological assistant. The station archeologists provide appropriate services to their hosts: teaching, student advising, committee work, museum support, and other campus service in the case of the universities; data collection and analysis for public interpretation, exhibit development for the Visitor Information Centers, and public contact in the case of the parks. At Blytheville, Survey personnel are working closely with community leaders to help develop area heritage tourism and a new archeology curriculum for the public schools. Staff at the coordinating office in Fayetteville support the stations and contribute to research and education across the state. All station archeologists and other Survey staff members are available to the public, providing information about prehistoric and historic archeology, American Indians, and early settlers of Arkansas to schools, civic groups, and many types of local, state, national, and international organizations.

THE DIRECTOR'S PAGES: HIGHLIGHTS FOR 2003-04

Dr. Thomas J. Green

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

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

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

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

The Survey's unique contribution and enduring success are products of our balanced science and service design, the expertise and integrity of our personnel, and the dedication and energy of our supporters. Accomplishments and challenges in 2003-2004 are outlined below.

CONTRIBUTIONS TO HIGHER EDUCATION IN ARKANSAS

- ◆ Survey archeologists taught 19 college classes to 490 undergraduate and graduate students at seven university campuses in Arkansas.
- ◆ 16 students at Arkansas campuses enrolled in Independent Study courses taught by Survey faculty.
- ◆ Courses taught by Survey archeologists fulfill basic education requirements and contribute to several undergraduate majors and graduate degree programs at seven Arkansas universities, including, for example, Anthropology, History, Geosciences, Environmental Dynamics (UAF), Heritage Studies (ASU), and the new African Studies Program at UAPB.
- ◆ Survey archeologists contributed 15 guest lectures, lecture-tours, or departmental colloquium presentations at Arkansas campuses.
- ◆ Survey archeologists filled 46 thesis or internship committee positions for UAF graduate students in Anthropology and Environmental Dynamics, and one HSU graduate student in History.
- ◆ Survey archeologist George Sabo III is an assistant director of the interdisciplinary Environmental Dynamics Ph.D. program in the Fulbright College of Arts and Sciences at UAF.
- ◆ Survey archeologists served on five graduate student committees at colleges and universities in other states.

- ◆ Survey archeologists at all ten research stations and the coordinating office provided opportunities for hands-on research experience in archeological fieldwork and laboratory analysis for undergraduate and graduate students.

CONTRIBUTIONS TO PUBLIC SCHOOLS AND K-12 EDUCATION

- ◆ The Survey distributed about 400 Teacher Packets containing information, activities, and lesson ideas for classroom use to Arkansas schoolteachers.
- ◆ During the fiscal year, the last copies of *First Encounters*, the Survey's educational CD-ROM, were distributed free of charge in Arkansas and elsewhere. The coordinating office still receives regular requests for *First Encounters* from teachers and educational institutions in the United States and abroad. Over 2000 copies were given away. George Sabo III and Deborah Weddle, who developed the CD, are working to make the content available as a web site.
- ◆ Survey archeologists gave over 44 presentations on archeology, American Indians, and early Arkansas to K-12 students and their teachers at schools across the state, with combined audiences of more than 2200.
- ◆ Participation in large-scale outreach events such as Pioneer Days in Jonesboro reached audiences of at least another 3800.
- ◆ Survey staff members gave presentations about using archeology in the classroom at the Teachers of Arkansas Studies Council (TASC) Resource Fair in Fort Smith, the Arkansas Conference on Teaching in Little Rock, and University Day on the UAF campus.
- ◆ Survey staff members served as judges in several divisions at the Northwest Arkansas and Northeast Arkansas Regional Science Fairs.



School-aged children learn how American Indians made pottery vessels during a hands-on demonstration at the summer Training Program for amateur archeologists, held this year at the Eaker site in Blytheville.

PUBLIC SERVICE AND OUTREACH

- ◆ The Survey works closely with several state and federal agencies whose responsibilities under environmental and cultural preservation statutes include the management and protection of archeological sites:
 - Arkansas Highway and Transportation Department
 - Arkansas Department of Parks and Tourism
 - Arkansas Game and Fish Commission
 - Department of Arkansas Heritage and the Arkansas Historic Preservation Program
 - National Park Service
 - USDA Forest Service
 - U.S. Natural Resources Conservation Service
 - U.S. Army Corps of Engineers
 - U.S. Fish and Wildlife Service
- ◆ Over 1200 copies of various leaflets and flyers produced by the Survey about Arkansas archeology and history were sent out in response to requests for information from members of the public.
- ◆ Over 77 public lectures and other presentations by Survey staff served audiences of more than 3300 persons.
- ◆ 70 members of the Arkansas Archeological Society attended our jointly managed annual Training Program for amateur archeologists. The 2004 program at the Eaker site in Blytheville was directed by Dr. Claudine Payne. Twenty-eight participants received technical certification in one or more areas.
- ◆ Our main web site received, on average, 1455 visits per month, with a year-end total of 17,462.
- ◆ Our service web site, *Archeological Parks*, had 8525 visits in 2003-2004.
- ◆ Our interactive educational web sites—*First Encounters* and *Rock Art in Arkansas*—had 14,979 and 4356 visits respectively during 2003-2004.
- ◆ We continued our NAGPRA compliance program in cooperation with several American Indian Tribes. The federal Native American Graves Protection and Repatriation Act requires institutions such as museums and universities to inventory their archeological and ethnographic collections of human remains, funerary objects, sacred artifacts, and items of cultural patrimony. These objects must be returned to modern representatives of the appropriate culturally affiliated American Indian Tribe. NAGPRA tasks accomplished this year:
 - With a \$74,709 grant from the National Park Service, the Survey began the process of determining cultural affiliation and ultimate disposition of Native American sacred objects, objects of cultural patrimony, and/or unassociated funerary objects in the control of the University of Arkansas Fayetteville Collections Facility. Of 1571 pottery vessels in these categories, 525 will be covered by the present grant. This work is in consultation with the Osage Nation of Oklahoma, the Tunica-Biloxi Tribe of Louisiana, the Quapaw Tribe of Indians of Oklahoma, the Caddo Indian Tribe of Oklahoma, and the Wichita and Affiliated Tribes.
 - “Notices of Inventory Completion” for skeletal material from the Toltec Mounds site were published in the Federal Register on November 26, 2003.
 - The Survey registrar’s office continued work on the “Notices” for eastern Arkansas sites, and completed scanning most NAGPRA records for computer data files.

PROFESSIONAL SERVICE

- ◆ Survey staff provided consultation, advice, or other assistance to over 140 agencies, firms, museums, schools, parks, civic groups, and other bodies, in addition to service rendered to research station host institutions.

- ◆ Survey staff served as officers, members of various committees, or in other service capacities for seven professional organizations: Society for American Archaeology, Southeastern Archaeological Conference, Society for Historical Archaeology, South Central Historical Archeology Conference, Society for Bead Researchers, Arkansas Museums Association, and Arkansas Historical Association.

GRANTS, HONORS, AND AWARDS

- ◆ \$74,709 granted by the National Park Service for NAGPRA-related inventories and documentation of pottery vessels in the University of Arkansas Fayetteville Collections Facility.
- ◆ \$4991 granted by the Arkansas Natural and Cultural Resources Council to salvage and study (prior to reinterment) the remains of Confederate soldiers discovered in a Civil War era grave in the City of Helena.
- ◆ \$1200 granted by the Ross Foundation for radiocarbon dating of the Arkadelphia dugout canoe.
- ◆ \$2520 in three grants to Martha Rolingson (Toltec), John House (UAPB), and Frank Schambach (SAU) from the Arkansas Archeological Society's Archeological Research Fund, for radiocarbon dates at various sites.
- ◆ \$1250 granted by the Arkansas Game and Fish Commission to Frank Schambach (SAU) for pollen analysis from the Tom Jones site at Grandview Prairie.
- ◆ Capitol Historian Dr. David Ware created an exhibit celebrating the Survey's 35th anniversary, with cases displaying artifacts, tools of the trade, publications and other items reflecting three and a half decades of research and service to the state of Arkansas. The exhibit was in the rotunda of the State Capitol Building for three months.



One of the display cases at the State Capitol celebrating 35 years of service, research, and education by the Arkansas Archeological Survey. The exhibit was designed and constructed by Capitol Historian Dr. David Ware. State Archeologist Dr. Ann Early coordinated the loan of items for the exhibit from the Survey's 10 research stations.

- ◆ Mary Beth Trubitt (HSU) and colleagues received grant funds from the Cahokia Mounds Museum Society for 2004 fieldwork on the Cahokia Palisades Project.
- ◆ Marion Haynes (Blytheville) was appointed by Governor Huckabee to the Arkansas Governor's Earthquake Advisory Council.
- ◆ *Arkansas: A Narrative History* (University of Arkansas Press, 2002), coauthored by George Sabo III (UAF), received the Arkansas Library Association's *Arkansiana* Award.

SCIENTIFIC ACHIEVEMENTS & ARCHEOLOGICAL MISSION

- ◆ Survey professional staff authored or coauthored 40 publications and reports, and presented 27 papers and workshops at professional meetings in 2003-2004.
- ◆ 1522 new archeological sites were recorded, bringing the total number of sites in Arkansas site files to 38,808.
- ◆ Our sponsored research program administered new grants and contracts with budgets totaling \$175,708 and submitted four final project reports.
- ◆ The Survey registrar facilitated 210 requests for access to Arkansas site files by students, researchers, and project managers.
- ◆ The Survey logged over 8300 hours of volunteer help from students and citizens of Arkansas on various field and laboratory projects around the state.
- ◆ The Survey's AMASDA database (Automated Management of Archeological Site Data in Arkansas) is one of the first and best computerized site file systems in the country. Our computer services program and registrar's office personnel are constantly working to expand and upgrade the AMASDA system and to add new databases. This work is currently proceeding under grants or contracts from Mack-Blackwell Transportation Center, Arkansas Highway and Transportation Department, and the U.S. Forest Service.
- ◆ Archeological research projects at all 10 stations and at the coordinating office produced new knowledge about the prehistory and early history of Arkansas. Much of this work was made possible through the support and cooperation of various agencies, including the Arkansas Game and Fish Commission, the U.S. Forest Service, U.S. Fish and Wildlife, the U.S. Army Corps of Engineers, Arkansas State Parks, the National Park Service, National Endowment for the Humanities, and the Quapaw Tribe of Oklahoma, and with the help of volunteers from across the state.
 - Information on nearly 500 historic cemeteries was added to the Survey's archeological site files in response to State Archeologist Ann Early's Historic Cemetery Recording Project, initiated last year.
 - Ann Early collected information from the site files to compile a separate database of rockshelter sites that will aid development of a plan for ongoing assessment of damage and priorities for research, protection, and management. In 2004 the Historic Preservation Alliance of Arkansas named Arkansas rockshelters to its list of Most Endangered Historic Sites.
 - *Read more on pages 16–18*
 - Martha Rolingson continued analysis of material from past excavations at the Toltec Mounds site in preparation for a comprehensive report. A grant from the Arkansas Archeological Society provided a radiocarbon date of A.D. 900-1000 for Mound E. The stone tools found at Mound E were unique for the site, reflecting resharpening and repair activities, but no evidence of tool manufacture. Finds at the earlier (ca. A.D. 700) Mound S indicate food preparation and feasting. There were also fragments of pipes and decorated artifacts suggesting a ceremonial function.
 - *Read more on pages 20–21*



ATU station archeologist Skip Stewart-Abernathy (right) and Quapaw tribal member Larry Kropp at the Wallace Bottom site, where French Colonial artifacts have been found along with American Indian artifacts. Excavations at Wallace Bottom were part of "Cooperation Then and Now," a project sponsored by the Quapaw Tribe.

- John House and Mary Farmer at UAPB again emphasized research projects related to Arkansas Post, especially the Wallace Bottom site, where evidence of early French colonial interaction with the Quapaw has been found. In 2003 the Quapaw Tribe of Oklahoma sponsored this research. A historic preservation grant to the tribe from the National Park Service for a project titled "Cooperation Then and Now" provided \$30,000 for new remote sensing surveys and follow-up excavations. Quapaw Tribal Elders visited the site. Other projects in station territory included salvage for reburial of a Confederate soldiers' mass grave in Helena, and site survey in Arkansas County in cooperation with the White River Wildlife Refuge and Trustan Holder Wildlife Refuge.

• *Read More on pages 38–40*

- Jeffrey Mitchem and Timothy Mulvihill continued laboratory analysis of a 10-year backlog of excavated material from the Parkin site. Results are expected to aid revisions to the permanent exhibits at the Visitor Information Center. Dr. Mitchem attended an international conference in Spain devoted to the study of jet artifacts. Tim Mulvihill continued a comprehensive topographic mapping program at the Parkin site. With the Ted Morris Artwork project now complete, Parkin Archeological State Park staff planned ways to showcase the results.

• *Read more on pages 24–25*

- George Sabo at UAF continued to lead his Rock Art Research Team in a comprehensive exploration of Arkansas' rich body of prehistoric and early historic pictographs and petroglyphs under a \$175,000 grant from NEH. In addition to the rock art project, Jerry Hilliard focused on historic sites research, with brief excavations at a 19th century residence near Cane Hill, at the Fitzgerald Station tavern, a Butterfield Stagecoach Line stop in Springdale, and at the Cross Hollows Civil War encampment site.

• *Read more on pages 28–31*

- Marvin Jeter at UAM expanded on previous test excavations at the Lake Enterprise Mound, a Poverty Point culture site in southeast Arkansas that is the oldest known Indian mound in the state. His work with certain Middle and Late Archaic period projectile point types led to some revisions of style criteria and chronological relationships among the types. Jeter also completed two reports of his new analysis of the Goldsmith Oliver 2 site in Pulaski County.

• *Read more on pages 34–36*

- The Blytheville station hosted this year's Arkansas Archeological Society Training Program, which the Survey has jointly sponsored since 1967. Training Program excavations at the Eaker site in Blytheville, directed by Claudine Payne and her assistant Marion Haynes, marked the beginning of a long-term research plan to study one of the best-preserved Late Mississippian sites in the region. Geophysical remote sensing technologies helped guide the excavations. Other research continued the station's cooperation with geologists and seismologists in the study of ancient earthquakes in the New Madrid Seismic Zone.

• *Read more on pages 60–62 & 85*



Visitors gather round an excavation unit to see archeology in progress at the Eaker site in Blytheville during the 2004 joint Arkansas Archeological Survey/ Arkansas Archeological Society Training Program.

- Mary Beth Trubitt at HSU continued several research projects related to novaculite quarries in the Ouachita Mountains. A formal research design coauthored with Survey Director Thomas Green and State Archeologist Ann Early was completed for the Forest Service. Additional work was done on material from sites around Lake Ouachita, sites near Lake Catherine, sites in Hot Springs National Park, and a Polk County quarry site where Arkansas Archeological Society Training Program excavations took place in 1993. Trubitt also completed a report on test excavations around Hyten House, a historic residence related to the Eagle and Niloak potteries.

• *Read more on pages 43–45*

- Frank Schambach and David Jeane at SAU continued work on the Grandview Project, leading two field sessions with volunteer crews made up of Arkansas Archeological Society members to complete work begun during last year's Training Program excavations at the Tom Jones site, a Caddoan ceremonial center. One prehistoric structure had a long entry passage with massive door posts. Inside another structure, the team found evidence of deer ceremonialism. Soil samples containing preserved pollen were collected and will be analyzed by University of Texas palynologist Dr. Bruce Albert to reconstruct details of the native plant communities 600 years ago. Arkansas Game and Fish Commission is a partner in this research.

• *Read more on pages 48–49*

- Leslie Stewart-Abernathy and his assistants at ATU pursued research on several projects related to settlement history in Arkansas. The Cherokee Project is a search for sites representing Cherokee occupation of Arkansas in the 1800s and the Trail of Tears. For the Arkansas River Valley GLO Project, station assistant Larry Porter searched homestead patents and GLO (General Land Office) records to match site locations with documentary and genealogical sources. The team also recorded 19 new historic sites as part of the interdisciplinary Early Arkansas Settlement Project, funded by Arkansas Humanities Council. Stewart-Abernathy and Porter collected oral history interviews and studied old photographs to complement the archeological data for these sites.

• *Read more on pages 52–53*

- Juliet Morrow at ASU worked on an edited volume of papers on Paleoindian, the earliest culture of North and South America. She also continued working on materials from the late prehistoric Greenbrier site, where Training Program excavations were held several years ago. Results of a pilot study using neutron activation analysis to identify clay sources of Greenbrier pottery vessels were summarized in cooperation with scientists at the University of Missouri Research Reactor. Morrow found that the technique could help identify the vessels that were most likely to have been imported rather than locally made.

• *Read more on pages 56–58*

- Sponsored Research Program excelled in historical archeology this year, with a field project at Old Davidsonville Historic State Park, research for a book on past excavations at Old Washington State Park, and completion of a monograph on the Becky Wright and Eddy Cemeteries, which had to be moved due to the expansion of Lake Fort Smith. The work at Old Davidsonville, funded by Arkansas State Parks, revealed foundations of the 1815 courthouse. Remote sensing was used to target the excavation areas.

• *Read more on pages 64–66*

Setting up remote sensing equipment at Old Davidsonville Historic State Park.



ARCHEOGEOPHYSICAL APPLICATIONS

◆ Our program of archeogeophysical research—remote sensing—continued to grow under the direction of Jami Lockhart. This technology is at the leading edge of archeological field methodology. It allows archeologists to “see” beneath the ground surface, to maximize labor, time, and dollars by planning their excavation units accordingly, and in some cases to interpret certain aspects of a site without any excavation at all. Why would archeologists want to limit excavation? Because digging effectively destroys the site. Remote sensing is a noninvasive technique with the potential to revolutionize archeological research design. It does not replace excavation, but makes it more efficient and cost-effective at a time when research dollars are becoming ever more precious and scarce.

- Archeogeophysical applications were part of 6 major field projects during 2003-2004.
- Two projects provided field training experience for university students.
- Major projects were at the Eaker site in Blytheville, in preparation for the nationally recognized annual Training Program for amateur archeologists; at the Wallace Bottom site, as part of a program of research sponsored by the Quapaw Tribe and the National Park Service to explore sites related to Arkansas Post; and at Old Davidsonville State Historic Park, as part of a multiyear project with State Parks to develop and interpret the 1815 town for park visitors.

• *Read more on pages 70–71*

CHALLENGES

◆ Budgetary constraints remained as the Survey’s most pressing challenge. Budget cuts during the previous fiscal year only exacerbated an already trying situation. These are some of our most immediate needs.

- We need to re-hire a full-time archeological assistant at the HSU station. (The UAM station was without an archeological assistant for two and a half years. That position was finally filled shortly after the end of the 2003-2004 fiscal year. The HSU station assistant resigned in March 2004.)
- We need to re-hire a full-time research assistant at the coordinating office to manage our joint Survey/Society activities and publications sales.
- We need funds to replace old computers. Most of our computers are now five to six years old.
- We need to purchase digital projectors and laptop computers for our 10 research stations. Since Kodak announced they will no longer make slide projectors, the Survey will have to join the power point era. As noted above, our staff gave talks to audiences of over 5500 Arkansas citizens, including school children, last year. Most of these talks were illustrated with slides. The professional societies are also moving to power point technology for presentations at conferences and annual meetings.
- We desperately need to increase salaries. We lost two valued employees to higher paying jobs this year. Budget cuts have prevented meaningful raises for the last several years. Many of our staff are compensated well below what they would receive from universities in Arkansas or from the private sector.

THE DIRECTOR OF THE ARKANSAS ARCHEOLOGICAL SURVEY

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

Selected Academic and Service Activities for 2003-2004

- Taught the Cultural Resource Management graduate seminar (ANTH 5443) for the Anthropology Department at UAF during Fall 2003 (6 students) and Spring 2004 (9 students).
- Served on five M.A. exam committees during 2003-2004.
- Currently a member of five M.A. committees, four of which he chairs, and three Ph.D. committees at UAF.
- Taught a Cultural Resource Management class for the U.S. Army Corps of Engineers in Santa Fe, New Mexico (30 students).
- Taught the Basic Excavation seminar at the joint Arkansas Archeological Survey/Arkansas Archeological Society annual Training Program for amateur archeologists at the Eaker site in Blytheville.
- Team member of the Northern Jordan Tourism Development Plan, a project sponsored by USAID. William Schwab (UAF, Sociology Department) is Project Director.
- Participated in planning the African-American Cemetery Project, a cooperative project with Arkansas Humanities Council and the State Archeologist to provide guidance and funding for documentation and preservation efforts at historic Black cemeteries in Arkansas.
- Invited presenter at the Native American Graves Protection and Repatriation Workshop, March 25, 2004, sponsored by the Missouri and Arkansas humanities councils.
- Presented a guest lecture on the Native American Graves Protection and Repatriation Act to an introductory anthropology class at Hendrix College (15 students).

THE ASSISTANT DIRECTOR FOR FISCAL AFFAIRS

Betty Grant took over the Assistant Director for Fiscal Affairs position in July 2002. Prior to this she had been the Survey's Accountant for 11 years. She is responsible for all budgeting functions of the Survey. This includes fiscal year budgets, quarterly budgets, and biennial budgets. She balances our accounts monthly against the Departmental Budget Reports in order to stay within our allocated fiscal year budget. She also manages the finances for all grants and contracts the Survey is awarded. She is in charge of all building maintenance functions. She also supervises the Survey Accounting Tech I (Mary Worton), Administrative Assistant (Barbara Scott), and the Custodial position (Kathy Alsobrook). She works very closely with the Survey Director in many areas.

THE SURVEY ADMINISTRATIVE ASSISTANT

Barbara Scott has been the Survey's Administrative Assistant at the coordinating office in Fayetteville since 1998. In addition to normal office duties, Ms. Scott coordinates communications throughout the Survey's statewide organization. At the CO she manages the reception area and workroom, supervises work-study students, and performs numerous tasks for other staff members. Among these, she helped the Survey's education specialist prepare and distribute Teacher Packets and Archeology Month materials. When budget cuts prevented the Survey from filling its research assistant position for liaison with the Arkansas Archeological Society and publication sales, Ms. Scott took on a number of that person's duties as well, including preparation and set-up of the State Fair exhibit and making the logistical arrangements for the summer Training Program and the Society's Annual Meeting—an enormous job.



Left to right: White River Wildlife Refuge Manager Larry Mallard, U.S. Fish and Wildlife Service Regional Archeologist Rick Kanaski, and Survey Director Tom Green at the Wallace Bottom site.

THE STATE ARCHEOLOGIST

Dr. Ann M. Early

The State Archeologist is responsible for various administrative activities relating to management and protection of archeological sites and site data in Arkansas, as well as public education and outreach programs. These activities include preservation planning, review of nominations of archeological properties to the National Register of Historic Places, and establishing guidelines for archeological research in the state. The State Archeologist oversees the Survey registrar's office and the education specialist. The State Archeologist also advises the Arkansas Archeological Society, an active organization of amateur archeologists, on their various educational activities.

CURRENT ACTIVITIES

This year several programs and activities already under way in the State Archeologist's office were continued and one new program was begun. In addition, Ann Early worked with Arkansas State Capitol historian Dr. David Ware to develop a major exhibit commemorating the Arkansas Archeological Survey's 35 years of research and service in Arkansas.

The State Capitol Exhibit

The anniversary exhibit used artifacts, artworks, tools of the trade, and text panels to illustrate the Survey's history, activities, and contributions to the State of Arkansas. Some of our most significant projects over the years were highlighted, with equal emphasis on the Survey's three-pronged mission of research, education, and service. Four exhibit cases flanking the rotunda of the State Capitol housed the three-month exhibit, which was viewed by legislators, citizens, and hordes of schoolchildren on their annual spring fieldtrips.

Endangered Sites: Rockshelters in Northwest Arkansas

A new preservation initiative begun this year focused on rockshelter sites. In Arkansas, rockshelters are found primarily along the high bluffs of stream and river valleys in the northwest part of the state. These natural rock overhangs and shallow caves were used by American Indians for thousands of years for storage, residence, burial, and ritual activities, and later by immigrant settlers for storage, animal pens, and occasionally for residence or other specialized activities.

Because of their confined dimensions, rockshelter sites tend to contain an abundance of refuse left behind by their human inhabitants: artifacts, food debris,

fireplaces, and sometimes architectural features. Some shelters are permanently dry, creating a desiccated soil environment where normally perishable materials such as fur, hide, and plant fibers have been preserved.

Some rockshelters also contain examples of prehistoric (and historic) artworks—pictographs that were painted on the rock walls and ceilings and petroglyphs that were incised or pecked. These fragile images can tell us about a part of ancient life that usually remains hidden from analysis: how did ancient peoples see and represent their world, and how did they portray the supernatural beings that were important in their spiritual lives? Arkansas possesses one of the greatest concentrations of rock art in the Southeast.

In addition to the evidence of human lifeways, the dry shelters contain a remarkable record of past environmental conditions in the layered soils which accumulate inside them. Preserved pollen and seeds, animal bones and shell, and even insect parts give clues to fluctuations in climate, rainfall, and vegetation communities.

Such well-preserved sites are very rare in North America, so northwest Arkansas' dry shelters are a repository of cultural and environmental information with national as well as local significance.

Despite their importance, few rockshelter sites have been studied using modern archeological methods. Only recently, a research program to systematically document the artworks within them was undertaken by the Survey's UAF research station. Many rockshelters are under immediate threat from deliberate vandalism and theft, and from destruction brought about by changing land use in the region. Some vandalism is inspired by the illicit commercial trade in antiquities. Other destructive incidents have been linked to the area's burgeoning



Ann Early sewing shrouds for reburial of skeletal remains of several Confederate soldiers from a Civil War-era grave discovered in Helena.

methamphetamine manufacture and use. Timber cutting and lake developments have flooded once-dry shelters.

There are nearly 1400 rockshelters in the Survey's computerized AMASDA database, most on federal lands. More shelters exist in remote areas and need to be located and documented. Unfortunately, most known shelters have not been visited by land managers or archeologists for 20 years or more. In the meantime, reports of wide-scale looting and commercial sale of artifacts continue to arrive at the Survey's offices (such trade is illegal if the artifacts were taken from private property without permission, from burials, or from any public lands).

Without a strong effort to protect at least the most important and most vulnerable of these sites in the immediate future, we may lose some of the state's rarest and most significant archeological resources to deliberate destruction and neglect. In an action to highlight this threat, Arkansas' rockshelters were named by the Historic Preservation Alliance of Arkansas this year to the list of Most Endangered Historic Sites in the state.

Ann Early gathered data on the current condition and state of knowledge about the 1400 recorded rockshelter sites as a step toward developing a plan to assess the status of each site and to establish priorities

for future research, protection, and management. The resulting rockshelter database will aid our search for new sources of financial support to study and protect this important category of archeological sites.

Historic Cemetery Recording Project

Ann Early continued to devote considerable time to the Cemetery Recording Project that was begun in the previous fiscal year. This program is a response to growing concerns among Arkansas citizens about the safety and protection of historic cemeteries threatened by development and neglect. Goals of the program are to place every at-risk cemetery in Arkansas into the state's archeological database, and to assist citizens with information about the legal and practical problems associated with finding, studying, and preserving historic cemeteries.

Early receives dozens of requests for assistance with cemetery protection issues every year. Pleas come from landowners, law enforcement officials, local preservation groups, museums and historical societies, and other interested parties. Many of these individuals and organizations have become active in the project by submitting official Arkansas Archeological Survey site forms and other documents to enter their local cemeteries into the

Survey's computerized AMASDA database. For instance, members of White County Historical Society prepared site forms for every cemetery in that county.

At the start of Early's initiative, only about 800 of an estimated 15,000 cemeteries were in AMASDA. After 18 months, 492 more cemeteries had been added.

New information about at-risk cemeteries arrives at the Survey coordinating office almost daily. Even so, the task of identifying and recording these endangered

cemeteries has barely begun.

African-American communities have been especially hard hit by cemetery destruction. The Survey worked with the Arkansas Humanities Council and members of the Arkansas Legislature to develop a small grants program targeted to this constituency. Ann Early made presentations about finding, recording, and protecting African-American cemeteries at workshops sponsored by the Humanities Council in Magnolia and Jonesboro.

SERVICE AND PROFESSIONAL ACTIVITIES

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

Grants, Honors, and Awards

A \$4991 emergency grant for "Forensic Documentation of Helena Civil War Casualties" was awarded by Arkansas Natural and Cultural Resources Council.

A pre-proposal grant request for \$1200 to obtain radiocarbon dates for the Arkadelphia dugout canoe was accepted by the Ross Foundation.

Academic Service and Activities

By agreement with the University of Arkansas System, Early has a faculty title of Associate Professor in the UAF Department of Anthropology. During 2003-2004 she helped three graduate students with thesis and research projects and served as advisor to a graduate student intern.

Scholarship and Research

Early continued working on analysis of material from the Georgia Lake site, a Caddo occupation in Ouachita County excavated during the 1987 Arkansas Archeological Society Training Program. She also continued exploring the French Colonial presence in Arkansas with research on sites relating to the Second Chickasaw War. A third project involved rescue, documentation, dating, and exhibition of a dugout canoe found at Arkadelphia.

Records and Collections Management

Early coordinated requests for permission to reproduce Survey work in various media.

Collections from the Zebree site, which had been on loan in Canada, were retrieved and reintegrated to the main collection. Information on an Arkansas collection at the Smithsonian Institution was gathered for the Survey's archives.

Early entered historic house sites, historic cemeteries, Civil War-related sites, and Trail of Tears sites into the Survey's AMASDA database for the Arkansas Historic Preservation Program.

Review of Projects

Early reviewed 53 Corps of Engineers permit applications for projects in Arkansas, and provided comments where needed. She reviewed reports and monitored archeological work in Arkansas being done as part of Section 106 environmental regulations.

Early responded to over 110 contacts from land managers, archeologists, and other professionals with advice and comments, and answered at least another 135 inquiries from private citizens and landowners about archeological sites (including requests related to the Historic Cemetery Project). Examples of those assisted include: Arkansas Highway and Transportation Department, Morrilton Public Library, State Representative Steve Faris, Central Arkansas Transit Authority, Revanna City Council, U.S. Fish and Wildlife Service, National Park Service, Texas Archaeological Research Laboratory, Ozark National Forest, Buffalo National River, several cultural resource management firms, and UA administrators.

Public and Professional Service

Early served as President of the Arkansas Historical Association. She was chair of the Southeastern Archeological Conference Lifetime Achievement Award Committee and the planning committee for the 2006 SEAC annual meeting (to be held in Little Rock). She was a member of the Encyclopedia of Arkansas History and Culture Advisory Board, the Arkansas Historic Tree Committee, the Arkansas Museum Association Awards Committee, the Old State House Museum Advisory Committee for the Dellinger Exhibit, the State Review Board for the National Register of Historic Places, the Arkansas State Review Board for Historic Preservation, and the National Association of State Archeologists.

Early was a consulting advisor for a film about Cherokee Removal and the Trail of Tears, being made under a grant from the Arkansas Humanities Council.

Early assisted several law enforcement agencies with information related to looting of archeological sites.

Early served on the Survey's Publications Committee.

Early peer-reviewed an article for *American Archaeologist* magazine, a book for Louisiana University Press, and a children's book for Butler Center, Little Rock.

Early gave presentations at the Morrilton Public Library, the Scottish Society, the Arkansas Trail of Tears annual meeting, the Arkansas Press Association conference, and Potlatch Corporation Natural Resources Management Division. She presented two lectures on Caddo Pottery and Prehistoric Arkansas Pottery in Fort Smith during Archeology Month.

Early conducted Cemetery Documentation and Preservation Workshops at Magnolia, at Jonesboro, and at the Ashley County Library in Crossett.

Service to the Arkansas Archeological Society

Early is the Survey's liaison with the Society. She managed some preparations for the annual Training Program, and taught Beginner Orientation, a five-day Basic Lab seminar, and an Archeological Site Stewards workshop at the Training Program in Blytheville. She replied to queries forwarded from the Society's web site, provided information for Archeology Month programs, and wrote brief articles for *Field Notes*, the Society's newsletter.

TOLTEC MOUNDS ARCHEOLOGICAL STATE PARK

Dr. Martha A. Rolingson, Station Archeologist
Marilyn Whitlow, Secretary/Laboratory Assistant

The Toltec Mounds site in Lonoke County was the religious, social, and political center for people of the Plum Bayou culture of central Arkansas. Built and occupied between A.D. 650 and 1050, it is one of the largest and most complex American Indian sites in the Mississippi Valley. Archeologists who visited the site more than 100 years ago found 16 mounds inside a 5298-foot-long ditch and earthen embankment. Though many of the mounds have been plowed down or mined for fill dirt, several remain visible today, along with remnants of the embankment. The mostly square and flat-topped mounds were aligned according to astronomical observations. The two largest are 39 and 49 feet high. The site had a small permanent population of religious and political leaders and their families; most people lived in scattered villages and hamlets in the surrounding countryside, gathering at the site for religious and community activities. The Plum Bayou people grew a variety of native domesticated crops, harvested nuts, hunted, and fished. The Toltec Mounds site is a National Historic Landmark and has been protected and developed as a state park since 1975. The Survey's research program at Toltec Mounds began in 1976.

CURRENT RESEARCH

A Major Report on Toltec Mounds

Research emphasis for 2003-2004, as for the previous few years, was the continuing analysis of artifacts and other information recovered in many small excavation projects carried out over the years at Toltec Mounds, one of Arkansas' premier archeological sites. Rolingson's goal is to produce a comprehensive report describing the arrangement of mounds around the community plaza at the site, the various artifacts and activities associated with the mounds, and evidence for site planning. This report will be a major contribution to the archeological literature for Arkansas and the region.

During the last three years, Rolingson concentrated on pottery and animal bone from Mound S and artifacts from Mound G and from the lake bank. She also started on Mound E material. This year the final write-up on Mound E was drafted and the analysis shifted back to the stone artifacts from Mound S.

Mound E

Once the fifth highest mound on the site, Mound E originally stood about 1.2 m and covered 30 by 24 m of ground. Most of it was removed and used as fill dirt in the early 20th century, but a small remnant survives. Excavations in 1979 and 1980 provided structural information about the mound, but the artifacts recovered were from beneath the base of the mound, and had been used (and deposited there) before the mound was built.

The most interesting part of the excavation was at one corner of the mound where trash had been dumped on the ground surface and immediately covered with soil to raise the mound. The trash contained broken animal bones, charred seeds, large pieces of pottery, and stone tools.

The decorative style on the pottery is similar to the style found in deposits on Mound D, which was in use in the late A.D. 900s. A grant in 2003 from the Arkansas Archeological Society's Archeological Research Fund allowed a radiocarbon date on nutshell from this trash deposit in Mound E. The result was a date between A.D. 900 and 1000, confirming that Mound E and Mound D were contemporary.

Chipping debris from stone tool-making in the Mound E trash feature was especially interesting. Of the total count of 8757 stone flakes, roughly half were less than 1/8 inch in diameter, and another 34% were between 1/8 and 1/4 inch. With few large flakes or cores, and no hammer stones, the tiny size of this waste material suggests that stone tools were being repaired and resharpened on the spot, but had been made elsewhere. No other excavation at Toltec Mounds has produced a similar stone tool deposit.

The animal bone, burned bone, greasy texture of the soil, charred seeds, and pottery together indicate that food preparation activities probably account for most of the material.

Mound S

Mound S was built and used in the late A.D. 700s during the early period of occupation at the site. It is one of the smaller mounds, about 20 m by 16 m and only 60 cm high. This mound, too, had been mined for fill dirt in the 1960s. Scientific excavations in 1979, 1980, and 1988-1990 uncovered a low earthen platform that was a remnant of the original mound. A large deposit of refuse from food preparation activities was located next to the mound, on the side away from the public plaza. The large amount of food remains and the kinds of tools present support Rolingson's hypothesis that Mound S was used for feasting and similar community activities.

The bones are primarily from animals that produce a high yield of meat per total weight—white-tailed deer, turkey, and passenger pigeon. But among the animal bones are also some black bear, eagle, hawk, and white pelican. These species are thought not to have been food, but rather used in ceremony and ritual.

The majority of the chipped stone tools are arrow points and knives, tools used to kill and butcher prey animals. Hammer stones (small hand-held cobbles) in the assemblage would have been used to break up deer bones for marrow.

Woodworking tools such as axes or adzes are rare in the Mound S materials. Fragments of pipes and a thin sandstone tablet with red paint on one surface indicate special, perhaps ceremonial, activities. Pieces of hematite, limonite, and galena were used to make paint, perhaps for body decoration. A stone bead, bone hairpin, and incised and painted pottery found here are not the sort of thing usually present in ordinary domestic refuse.

While analysis of the thousands of artifacts and other remains is at times tedious, it is producing interesting and useful information for reconstructing the lives of the ancient Plum Bayou Culture people who occupied the area around Toltec Mounds more than 1000 years ago.

Other Research Projects

Rolingson also continued historical research on the American occupation of the Toltec Mounds site over the last 150 or so years. This time period has had considerable impact on the ancient archeological deposits, and it is important to sort out exactly what disturbances have occurred. Rolingson completed a draft on this topic, and one on the history of archeological work at the site, both to be included as chapters in the final comprehensive report.

Cemetery Recording Project

Responding to State Archeologist Ann Early's 2001 initiative, Rolingson continued collecting information about historic period cemeteries in her area. She visited 28 cemeteries in Pulaski County and three in Lonoke County during 2003-2004.

General Station Management

Station secretary Marilyn Whitlow continued to care for records and collections at the Toltec Mounds Research Station. She documented photographic slides to be duplicated and archived, and continued a project to transcribe the handwritten field notes and other records from past projects into a computer database. Mrs. Whitlow also did the computer work relating to Rolingson's research projects.

Martha Rolingson (second from right) leads a site tour for an Outreach Program group from Northwest Arkansas Community College, led by Brian Renfro. The group is gathered on the observation deck by the lake, next to Mound A.



TOLTEC MOUNDS STATION PERSONNEL

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

Marilyn Whitlow has been Secretary at the Toltec Mounds station since 1985. She works with Dr. Rolingson on many aspects of station management, from daily operations to data entry and database management and laboratory work. This year's projects included work with Mound S, Mound G, and Mound A artifacts, updating of computer database programs, transfer of old handwritten field notes and other records to the computer, and re-boxing of artifact collections.

Grants, Honors, and Awards

Rolingson was awarded \$1190.00 from the Arkansas Archeological Society's Archeological Research Fund for AMS radiocarbon date analysis of two samples. Beta Analytic performed the analysis.

Academic Service and Activities

By agreement with the University of Arkansas System, Dr. Rolingson has a faculty title of Professor in the UAF Anthropology Department. She provides assistance to students with thesis and other projects related to Toltec Mounds, Plum Bayou culture, and archeology of the Central Mississippi Valley and Mid-South region. This year Dr. Rolingson led a tour of the site and lab for eight students in George McCluskey's Southeastern Archeology class at UALR. There were also two visits by groups in the Outreach Program of Northwest Arkansas Community College, led by Brian Renfro (26 students).

Professional Service and Activities

Rolingson provided slides, artifacts, and equipment to Dr. David Ware, Arkansas State Capitol historian, for use in an exhibit about the Arkansas Archeological Survey at the State Capitol.

Rolingson served on the Survey's personnel committee and on a planning committee for the 2006 Southeastern Archaeological Conference (SEAC), to be held in Little Rock, Arkansas. She met with the SEAC Board to present the Survey's proposal regarding the meeting.

Service to Arkansas Department of Parks and Tourism

Rolingson is the primary resource person for development of all interpretive programs at Toltec Mounds State Park, and assists State Parks staff with other matters pertaining to archeology. She also acts as consultant to park staff on maintenance and general operations at the park. This year she monitored digging of a trench for a new sewer line and a trench for a water pipeline. She attended a predesign meeting for planned construction and renovations at the park. At the dedication ceremony of the new teaching pavilion, she was interviewed by reporters from KARK Channel 4, Little Rock, which covered the event on the evening news, June 4, 2004.

Park Superintendent Randall Watts consulted Rolingson on several matters: landowner concerns with the south boundary of the park; clearing of undergrowth and protection of the site embankment and ditch (both prehistoric features); repaving of the parking lot area; reconstruction of Mound S to make it visible to visitors; repair of erosion on Mound B, where previously placed fill is slumping, causing erosion of the upper corner of the mound; and possible plans for a stairway for public access to a viewing platform on top of Mound B.

Rolingson helped park interpreters Susan Rice and Robin Gabe with several matters: a new draft of the trail guide brochure; a talk to park staff about site research; development of programs on Pioneer Cooking; improvements to a "dig" program for visiting school groups; information about American Indian groups participating in the Sunfest (solstice) event; historic period alterations to the site; plans for the education pavilion dedication; topics and schedule for temporary exhibits for 2004-2005; and an archeology camp for school-aged children.



George McCluskey of UALR with his Southeastern Archeology students, visiting the Toltec Mounds station laboratory.

Rolingson provided additional advice or assistance to State Parks personnel at the central office in Little Rock, and at the Prairie County Museum.

Marilyn Whitlow performed front desk duties for the park on several occasions when park personnel were unavailable. This included greeting visitors, admission and gift sales, running slide shows, and other tasks.

Public Service and Outreach

Rolingson provided assistance to State Capitol historian Dr. David Ware, Cary Bradburn of the North Little Rock History Commission, and the Arkansas Chapter of the Afro-American Historical and Genealogical Society.

Rolingson gave seven talks and site tours at Toltec Mounds State Park. These included three programs for Sky-watchers of Ancient Arkansas (77); two groups from Northwest Arkansas Community College Outreach (26); a group of visiting students doing fieldwork in southeast Missouri, led by Dr. Carl Lipo and Dr. Robert C. Dunnell (10); and George McCluskey's UALR anthropology students (8). Combined audiences of 121.

Rolingson answered 58 requests for information from members of the public about archeology, artifacts, American Indians, and Toltec Mounds. She also accepted two donations of artifacts from private citizens.

Service to the Arkansas Archeological Society

Rolingson and Whitlow each volunteered at the Society's State Fair information booth.

Rolingson met with the Society Board of Advisors for Toltec Mounds research station. She attended the Society's annual meeting and contributed two articles to the Society newsletter *Field Notes*.

PARKIN ARCHEOLOGICAL STATE PARK

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

The Parkin research station was established in 1990 at Parkin Archeological State Park in Cross County. The station's primary mission is to study the Parkin site and related sites in the region and to aid State Parks staff in interpreting and presenting this research to the general public. The Parkin site is a 17-acre Mississippian period American Indian village located on the banks of the St. Francis River. It has a large flat-topped earthen mound surrounded by hundreds of buried house remnants, and was enclosed by a log palisade and moat. The site was occupied from about A.D. 1000 until at least 1541, when the expedition of Hernando de Soto passed through the area. Parkin has been identified as the Indian village of Casqui that was visited by the Spaniards and described in the four written accounts left by survivors and chroniclers of the expedition. The entire village is within the state park boundaries.

CURRENT RESEARCH

Artifact Processing and Analysis Continue

Station personnel continued to focus on washing, sorting, and cataloguing the huge body of excavated material from the Parkin site. A series of major excavations throughout the 1990s (with Survey staff, University of Arkansas field school students, and volunteer crews) yielded quantities of artifacts and debris from centuries of occupation. The sheer volume of material resulted in a backlog that is taking years to process. Analysis of these remains is essential to the task of interpreting the park for its many visitors' enjoyment and education. Archeological findings have already produced a more refined understanding of the site and its occupants, leading to revision of some of the permanent exhibits at the Visitor Information Center.

Parkin Archeology Serves the Park and the Public

Changes in Arkansas State Parks interpretive and supervisory staff affected the operation of the Parkin research station in 2003-2004. The park superintendent and a senior interpreter both moved to other positions during the year, diverting some research time to the process of hiring replacements. Station staff also monitored construction of a new maintenance facility at the park. Mitchem and Mulvihill handled consultations and testing of locations for a new employee residence on park property. Proposals for any new construction or development at the park must be assessed by the archeologists,

and building sites monitored during construction, to avoid damage to archeological remains.

Interaction with the public is a major part of activities at the Parkin station. Throughout the year, park visitors bring artifacts and collections, seeking identifications and information. These informal contacts give Parkin station archeologists a chance to highlight the value of archeology and to explain how uncontrolled digging can damage or destroy sites. Many such visitors express interest in joining the state's avocational interest group, the Arkansas Archeological Society. Station personnel also conduct tours of the site and laboratory for specialized groups such as the Archeological Conservancy, an organization that, through donations and fund-raising endeavors such as "adventure holidays," purchases important endangered sites in order to protect and preserve them for the public interest.

Other Parkin Research Activities

As weather and time permitted, Mulvihill continued his Total Station transit survey in order to produce computer-generated topographic maps of the site and its environs. The maps will incorporate locations of present and former historic and modern structures to provide a record of land use within the park boundaries. This kind of information is extremely valuable, not only for interpreting the site, but for planning any kind of new archeological projects. Mulvihill also continued his analysis of artifacts from a 1950s University of Arkansas

field school carried out at the Parkin phase Rose Mound, and from 1996 Arkansas Archeological Society Training Program excavations at the Graves 3 site in Cross County.

Other Research: Trade Beads and Jet

Mitchem is an internationally recognized expert in the analysis of Spanish trade beads and is often called upon to study archeological bead assemblages from Florida and other New World sites.

This year Mitchem was invited to participate in the first Jornadas Internacionales sobre el Azabache in Villaviciosa, Spain, a conference organized by a group of artisans and researchers in northern Spain to study artifacts made from jet, a type of coal that can be carved and polished into beads, pendants and other jewelry. The conference was funded by the European Union, the Spanish government, and the provincial government

of Asturias. Mitchem represented both the Society of Bead Researchers (of which he was formerly president and is currently secretary) and the Arkansas Archeological Survey. His expenses were covered by the European organizers.

Included were presentations on archeological and historical studies of artifacts made from jet. True jet is a fossil of a particular species of tree and is found only in northern Spain and eastern England. Artisans from both areas participated. Religious artifacts made from jet were among the many objects brought to the New World by Franciscan missionaries from Spain in the 17th century. Mitchem has been studying jet artifacts from Spanish mission sites for years. At the conference he was able to observe and photograph the process of manufacture of jet beads and other objects, and to ask questions of the artisans about particular styles. He also visited some of the mines where jet was extracted for centuries.



Jeff Mitchem watches as British jet artisan Hal Redvers-Jones fashions a piece of jet jewelry during the first Jornadas Internacionales sobre el Azabache in Villaviciosa, Spain. The conference brought together specialists on archeological and historical study of artifacts made from jet, a rare type of coal that has been used for centuries to carve jewelry and other ornamental objects.

Parkin Station Personnel

Jeffrey M. Mitchem received his Ph.D. in anthropology from the University of Florida in 1989. After brief appointments at Florida State University and Louisiana State University, he joined the Survey in 1990 to establish the Parkin research station. His specializations include late prehistoric and early historic archeology of the Southeast and the Mississippi Valley, early Spanish contact sites in the New World, ceramic technology, glass bead studies, and the history of archeology in the Southeast.

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

E. Faye Futch earned an Associate of Arts degree in 2002 from Mid-South Community College. She joined the Survey staff in 1990 as secretary at the Parkin station. In addition to secretarial duties, she also helps process artifacts in the laboratory. Ms. Futch is working toward a teaching degree at Arkansas State University.

Academic Service and Activities

By agreement with the University of Arkansas System, Mitchem has a faculty title of Associate Professor in the UAF Department of Anthropology. He was promoted to Group I status on the UA Graduate Faculty in March 2004. He occasionally teaches archeological field school for UAF.

Mitchem served on the graduate thesis committees of one student in the Anthropology Department at Florida Atlantic University, Boca Raton, and one student in the Anthropology Department at Southern Illinois University at Carbondale. The Florida Atlantic student completed her degree in April 2004.

Mitchem assisted an ASU Heritage Studies Program student with a project related to Parkin.

Service to Arkansas Department of Parks and Tourism

Mitchem and Mulvihill are the primary resource persons for development of interpretive content at Parkin Archeological State Park.

Mitchem and Mulvihill monitored construction at a new maintenance building and assisted Parks staff with archeological assessments in the proposed location of a new interpreter's residence. Other assistance rendered to park staff included advice on a new video presentation, plans for exhibiting and marketing the Ted Morris artworks, changes to exhibits in the Visitor Information Center, and planning for a tenth anniversary commemoration of the park's dedication. Mitchem led an in-depth tour of the site and station facilities for new park staff members. Mulvihill helped facilitate activities for the Living History Fair, led a tour of the site for Americorp trail workers, and monitored digging at a trail extension in the park.

Public Service and Outreach

Mitchem gave talks at Winterville Mounds, Mississippi (10), the Delta Archeological Society in Blytheville (20), the Central Mississippi Valley chapter of the Arkansas Archeological Society in Jonesboro (40), and the Archaeological Conservancy's "Cultures of the Mississippi Valley" tour group (22). Mitchem and Mulvihill conducted an Artifact Identification Day during Archeology Month (7). Combined audiences of 99.

Mulvihill was "shadowed" by a junior high school student.

Mulvihill taught the Site Survey seminar to nine participants at the Arkansas Archeological Society Training Program in Blytheville. He helped Blytheville station archeologists with preparations for the Training Program fieldwork. Mitchem supervised excavations in one area of the site at the Training Program.

Mulvihill served as treasurer for P.A.S.T., a citizens' support group for the park. He supervised volunteers in the Parkin station laboratory, worked at the joint Arkansas Archeological Society/Survey information booth at the Arkansas State Fair, and assisted Society members Scott Akridge with a cemetery mapping project and Danny Crumbliss with a records check.

Other public archeology or service was rendered to: Crowley's Ridge Nature Center, Pinellas County (Fla.) Parks Department, the Arkansas State Capitol historian, the Archaeological Conservancy, the Encyclopedia of Arkansas History and Culture, the *Wall Street Journal*, Cross County Library, and an author working on a 4th grade textbook.

Professional Service and Activities

Mitchem served as secretary-treasurer of the Society of Bead Researchers.

Mitchem served on the Editorial Review Board of the Florida Anthropological Society, and the Editorial Advisory Board for *American Archaeology*. He reviewed an article submitted to *The Florida Anthropologist*.

Mitchem and Mulvihill served on the Survey's publications committee and reviewed two submitted manuscripts.

Mitchem provided professional consultation, advice, or service to the Arkansas Highway and Transportation Department, Cross County Sheriff's Department, Florida Museum of Natural History, Robert Dunnell and James Feathers of the University of Washington (as part of an NSF-funded research project), the Arkansas State Capitol historian, Arkansas bead artisans Tom and Sage Holland, the University of Alabama Press, the Blytheville research station, the ASU research station, and many other individuals and projects.

Mulvihill provided professional consultation, advice, or service to various other Survey archeologists, including Juliet Morrow (ASU), John House and Mary Farmer (UAPB), Claudine Payne and Marion Haynes (Blytheville), Frank Schambach and David Jeane (SAU), and the SRP project at Old Davidsonville. He contributed to the NSF-funded thermoluminescence dating project with Robert Dunnell and James Feathers of the University of Washington, and collected archeomagnetic dating samples for Mid-Continental Research Associates, a Fayetteville research firm working at a site in Poinsett County.

UNIVERSITY OF ARKANSAS AT FAYETTEVILLE

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

The UAF station territory covers 12 counties and lies almost entirely within the Ozark Mountain region of northwest Arkansas; only the extreme southwestern portion dips down into the Arkansas River Valley. The archeology of the Ozarks is justly known for the excellent preservation of organic material such as basketry, textiles, woven sandals, and plant food remains in dry bluff shelters along the White and Illinois rivers. Rock art, both painted (pictographs) and pecked (petroglyphs), is also found in some shelters. Station research in the last 25 years has broadened the archeological picture by focusing on ceremonial mound sites that link the Ozarks to the Mississippian and Caddoan cultures. Other projects have emphasized historical sites left by pioneer Arkansans, and environmental history. The station's newest initiative is a comprehensive study of prehistoric and historic rock art in Arkansas.

CURRENT RESEARCH

Rock Art Research Funded by NEH: High-Tech Solutions to Age-Old Questions

Sabo's multiyear NEH-funded research on rock art in Arkansas is the first comprehensive look at one of the state's important and unique archeological resources. Considerable progress was made on several project goals.

Project collaborators Dr. John Russ (ASU), his student Sarah Spades, and Karen Steelman (Texas A&M)—all geophysicists—completed field assessment at three major sites and collected pigment and oxylate accretion samples for radiocarbon dating. Their work was part of a pilot study to determine whether Arkansas' prehistoric rock art can be directly dated by radiocarbon assay of organic substances, such as animal fat, that were used to paint some of the ancient images. The technique has been used successfully in other parts of the world.

Meanwhile, Sabo's archeological team visited 21 rock art sites, using new standardized procedures to document 311 art elements and 113 art panels. An unexpected boost to the project's 3D visualization component came through cooperation with the UA's Center for Advanced Spatial Technologies. CAST received an NSF equipment grant to purchase several high-resolution survey and imaging implements. As a cooperating institution for the grant, the Survey has access to this equipment. The rock art team used the new Optech 3D laser scanner to collect 3D imaging data from two important sites, and processed the data with new InnovMetric PolyWorks software to create computerized wireframe models of the sites and surrounding terrain. Photoreal-

istic elements, including geo-referenced rock art images and surrounding topographic images, were added using SoftImage XSI software. Instead of the rough "artist's reproduction" models originally planned for this project, the new equipment enables the team to produce highly accurate true-scale models of selected sites that will be incorporated in research-oriented presentations on the project web site. Users will be able to make virtual visits to the sites, and to compare and contrast specific site settings, geographical context, and image contents via the online databases. These computer imaging technologies are essentially the same as those used to create cinematic special effects in the movie and game industries.

Also during the year, the Survey's Jami Lockhart developed a Geographic Information System for the rock art project, containing data layers for cultural, geophysical, and political variables. The GIS is integrated to a Global Positioning System (GPS) and can be taken into the field to capture more extensive and higher quality information on rock art sites and their landscape contexts.

More traditional archeological methods were employed to begin comparative study of rock art imagery and the iconography of the Southeastern Ceremonial Complex (a late prehistoric religious system), as represented in engraved shell art from the Spiro site. Artifacts curated at the UA Collections Facility were used in this analysis. Sabo was invited by Dr. James A. Brown (Northwestern University) to take part in a Southeastern Ceremonial Complex Iconography workshop at Texas State University. Participants examined the iconogra-



George Sabo and Michelle Berg Vogel recording rock art images at a site in the Ozark National Forest. The white streaks are mineral stains. Berg Vogel works on a mylar tracing of a black painted pictograph.

phy of shell art in the context of Southeastern Indian mythology, language, and social organization to identify thematic links between the art motifs and religious and mythological beliefs. Since some of the same motifs are found in rock art, Sabo's contribution is the first systematic attempt to understand rock art as an expression of SECC beliefs.

Historical Ecology in the Ozarks

A study of the ecological impacts of late prehistoric Indian land use practices in the Arkansas Ozarks, presented by Sabo, Jami Lockhart, and Jerry Hilliard at the 2002 Upland Oak Ecology Symposium sponsored by the U.S. Forest Service's Southern Research Station, appeared in print this year. The study used GIS models, archeological site distributions, and ethnohistoric data to examine the impact of Indian timber harvesting and agricultural clearing on forest ecology in the Ozark National Forest.

Preserving the Full Circle: How Caddo Indians Understand History

Sabo's paper "Dancing into the Past: Colonial Legacies in Modern Caddo Indian Ceremony" was published in the *Arkansas Historical Quarterly* for winter 2003. The article examines the Caddo Turkey Dance, a women's victory dance always performed at the beginning of any modern ceremonial gathering. The Turkey Dance can be traced at least as far back as 1687, when the French explorer Henri Joutel wrote the first known European description, but likely has considerably greater antiquity. Songs accompanying the dance recall legendary victories over former rivals and enemies. Nearly 50 songs survive to this day, and are sung by the drummers at the center of the dance circle in various Caddo dialects. Analysis of the song texts reveals that nearly all the surviving songs refer to diplomatic alliances and military victories dating to the colonial era. No songs significantly postdate the Louisiana Purchase of 1803, which must reflect the



The Caddo Culture Club performs the Turkey Dance at the Tribal Complex in Binger, Oklahoma. Sabo has been assisting the Caddo Nation with a project to record the stories, songs, and dances through which the people maintain connections to their history.

tremendous cultural, linguistic, and population losses experienced by the Caddo throughout the last two centuries. Yet, performance of the dance and songs enables the modern Caddo community to enact their own history—a history that is neither static nor mute—and to shape their identity as a people linked dynamically with previous generations in the face of disruption and loss.

Contributions to Survey Database Projects

Sabo has been working with Survey registrar Lela Donat and the Survey's computer services program on efforts to update the AMASDA integrated database system. A Mack-Blackwell Rural Transportation Center grant supports this activity because the upgraded databases improve delivery of archeological site information needed for environmental review and project planning by Arkansas Highway and Transportation Department archeologists. This year Sabo developed an Archeological Study Units database, containing information on cultural phases and prehistoric and historic time periods. He also began work on a web application that will allow archeologists to search all the project databases for specific information needs.

A Pleistocene Cave in the Ozarks

Jerry Hilliard and UA Environmental Dynamics Ph.D. candidate Blaine Schubert excavated a cave near Boxley, Arkansas, where bones of Pleistocene Epoch (Ice

Age) animal species were discovered. The Survey's Jared Pebworth and Mike Evans assisted the fieldwork. The cave deposits seem to be the remains of an animal den, where carcasses were dragged in by a predator. Although no evidence of human occupation was found, the site provides significant information about environmental conditions in the Ozarks during the time period when humans made their first entry into the New World.

Cross Hollows Civil War Research

Hilliard continued his research at Cross Hollows, site of major Civil War activity and historical significance. This year he and Sabo worked with Jami Lockhart, the Survey's archeogeophysical specialist, who conducted a remote sensing survey at the site. Carl Drexler, a University of Nebraska graduate student, Jamie Brandon, University of Texas-Austin Ph.D. candidate, and UA undergraduate Richard Donat assisted. Excavations have already produced personal artifacts belonging to soldiers at the Confederate encampment. Results of the remote sensing can be used to guide further work at the site.

Fitzgerald's Station: A Tavern Site on the Old Butterfield Trail

Hilliard began a new station research project at one of the few surviving Butterfield Stage Stop sites in the country, located in Springdale. In 1858, John Fitzgerald, operator of a tavern in the area since the 1830s,

contracted with John Butterfield to make his establishment one of the stops along the Overland Butterfield Mail Route and Stagecoach Line. Hilliard, assisted by landowner Sarah Berryman and volunteers from the Arkansas Archeological Society, mapped the site and began a systematic metal detector survey to locate activity areas. Jami Lockhart began geophysical remote sensing surveys, assisted by Terri Bruce, a UA anthropology graduate student.

Archeology Month at Cane Hill

For four days in November 2003, and later in March 2004 as part of Arkansas Archeology Month, Hilliard led volunteers from the Ko-ko-ci chapter of the Arkansas Archeological Society in excavations at a historic site on the Springfield Ranch, which is owned by T. A. Sampson of Cane Hill. Structures identified are an I-plan house and Pioneer period detached kitchen that was later reused as a tool shed. The floor inside the kitchen was packed earth laid onto a natural sandstone rubble base. Artifacts show the kitchen was built around 1835-

1840, converted to a tool shed around 1880, and still in use for that purpose in the 1930s.

Various types of ceramics were found, including a pearlware plate, saucer and cup fragments, annular ware, mocha, stoneware, and whiteware. Some stoneware crock fragments were marked "Boonesboro" and were made at the nearby (Cane Hill) pottery works. Also among the finds were glass medicinal bottles, storage jugs, and other containers. Building hardware included wire and machine cut nails, a doorpull, and hinges. Stove parts were located inside the building. Stone foundations of the kitchen were still in place, outlining a 16-foot-square plan with south-facing door. Besides the volunteers, the Survey's Jared Pebworth also participated in the project.

The theme of 2004 Archeology Month was "Containers before Plastic." Hilliard's excavation allowed visitors to witness archeological work in progress of recovering the kinds of artifacts that could be seen in museum exhibits and other displays related to that theme around the state.

UAF Station Personnel

George Sabo III received his Ph.D. in anthropology in 1981 from Michigan State University. He joined the Survey in 1979 as UAF station archeologist, after nine years of archeological research in the Upper Great Lakes and the Canadian Arctic and a position as assistant to the State Archeologist of Michigan. His work in northwest Arkansas has ranged from mound excavations in the western Ozarks to studies of historic pioneer farmsteads, ethnohistory of Arkansas Indians, and development of New Media educational resources.

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

Grants, Honors, and Awards

The station continued a multiyear rock art research project funded by Sabo's \$175,000 grant from the National Endowment for the Humanities.

Academic Service and Activities

By agreement with the University of Arkansas System, Sabo has a faculty title of Professor in the UAF Anthropology Department. In lieu of his regular teaching assignment of one course during spring term, he taught independent study classes to six graduate students in the Anthropology and Environmental Dynamics programs during the 2003-2004 academic year.

Sabo served on 10 M.A. committees, four of them as chair, and four Ph.D. committees, two as chair, in the Anthropology Department. He served on five Ph.D. committees, two as chair, in the Environmental Dynamics Program. Three of his anthropology students (Chris Branam, Mary Brennan, and Doyle Loughren) completed their M.A. degrees in 2003-2004. He also chaired the undergraduate Honors Program committee for anthropology student Ed Tennant, who received a prestigious SILO/SURF grant to support his work on the Van Winkle Mill site. Tennant graduated Magna cum Laude in 2004 and was accepted for graduate study at Michigan Technological University.

Sabo represented the Anthropology Department and served as Assistant Director of the Environmental Dynamics interdisciplinary Ph.D. program steering committee in the Fulbright College of Arts and Sciences.

Sabo presented an ENDY colloquium titled "Heavenly Twins, the Serpent Monster, and the Dead Raccoon: Environmental Allegory in Southeastern Ceremonial Complex Art."

Sabo participated in an ad hoc UA "Campus Distance Education Group" that met monthly and sponsored various technology-based presentations during the year. Sabo and Prof. Bill Brescia (Educational Technology) presented a program on classroom use of online role playing games.

Hilliard served as informal advisor to two undergraduate and three graduate students in anthropology, helping them with research projects in the UAF station area.

Professional Service and Activities

Sabo reviewed one book manuscript for the University of Alabama Press and wrote one book review for the *Arkansas Historical Quarterly*.

Sabo reviewed a major grant proposal for the National Endowment for the Humanities.

Sabo continued his three-year term on the Board of Directors of the Arkansas Humanities Council. He attended the annual planning retreat, two grant review meetings, and a special staff meeting to address issues concerning preservation programs for historic African-American cemeteries.

Sabo served on the Survey's personnel committee and participated in staff promotion reviews.

Public Service and Outreach

Sabo continued service on the Caddo Heritage Museum Board of Trustees. He attended five board meetings, and continued his research project "Preserving the Full Circle of Caddo History," documenting ceremonies, songs, stories, objects, and places that are important to Caddo history and tradition. He and Deborah Sabo produced a brochure for the museum's fund-raising and advertising activities.

Sabo presented public talks at the Historic Arkansas Museum and at the Louisiana Purchase Conference at UA Fayetteville. Combined attendance was about 200.

Hilliard presented a Civil War Roundtable lecture at Shiloh Museum in Springdale (20).

Hilliard conducted monthly lab workshops for members of the Ko-ko-ci chapter of the Arkansas Archeological Society. He directed excavations at Cane Hill during Archeology Month, with a crew of Society volunteers.

Hilliard also serves as coordinator of the Certification Program for amateur archeologists. He taught a seminar on mapping at the annual Society Training Program in Blytheville. Hilliard and Sabo, with Michelle Berg Vogel, presented a paper at the Society's annual meeting in Fort Smith. Hilliard presented programs at the Tunican and Arkansas River Valley chapters of the Arkansas Archeological Society. Sabo presented a talk at the Central Mississippi Valley chapter (97).

Sabo presented five talks to Arkansas public schools (total audience, 150); two talks to Arkansas and Missouri college classes (total audience, 50), and one talk to 30 high school "Wilderness Writers" educational summer camp participants at Ozark Natural Science Center. Combined audiences were 230.

Hilliard presented ten talks to Arkansas public schools (total audience, 325). He also spoke for the Fayetteville Public Library Kids Day series (20), and led tours of the Survey coordinating office and discussed archeology with Washington County 4-H students (50), Boy Scouts (40), and children enrolled at Fayetteville Martial Arts (10). Combined audiences were 445.

Sabo and Hilliard consulted with Arkansas State Parks on archeological and historical resource development at Hobbs State Park Conservation Area. They also documented surface landscape features that will be affected by trail development.

Sabo consulted on environmental review and historic preservation concerns with U.S. Army personnel at Fort Chaffee in Fort Smith.

Hilliard and Jamie Brandon (University of Texas Ph.D. candidate) prepared an exhibit about their recent excavations on the grounds of the Peel Mansion for the Peel House Foundation in Bentonville.

Hilliard assisted the City of Fayetteville and the City of Eureka Springs with matters concerning archeological sites on city property.

Hilliard worked with the Carroll County Sheriff's Office in their investigation of three bluff shelters that had been looted and used as labs for methamphetamine production.

Hilliard assisted five private landowners wishing to document archeological sites on their property (a total of 11 sites).

Sabo was interviewed for a feature story about Indian rock art on National Public Radio's "Earth & Sky" science news program. The broadcast aired November 14, 2003.

UNIVERSITY OF ARKANSAS AT MONTICELLO

Dr. Marvin D. Jeter, Station Archeologist

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. This area contains numerous small to moderate sized habitation sites and occasional mound centers dating to the later prehistoric and protohistoric periods. Several mound sites are mentioned in the reports of Victorian era archeological teams. The western two-thirds of station territory are uplands of the West Gulf Coastal Plain, dissected by the Saline-Ouachita drainage and its tributaries. This area contains some older Archaic period sites as well as the later sequence. Among many significant sites in station territory, the small Lake Enterprise Mound is affiliated with the famous Poverty Point culture and appears to be the oldest known Indian mound in Arkansas. At the opposite end of the time scale 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

UAM Station Facility Moved to New Quarters

After several years housed in temporary quarters, awaiting renovation of Harris Hall, a change of plans on the UAM campus sent the station to the “Old Student Union” building instead. The move provided larger rooms and more space for offices, library, site files, maps, special projects, and exhibits. Additional rooms in the coincidentally named Jeter Hall are used for basic collections curation, field equipment storage, and the station laboratory. The move took place in August 2003 and occasioned a large-scale reorganization of equipment, site records, and collections. The station’s research library is now shelved and accessible, instead of packed away in boxes. In addition to UAM campus staff, who did the heavy moving, several Arkansas Archeological Society members volunteered their time to help. (Special thanks to Bob Cooper and Jim Hudgins for this service above and beyond the call of duty.)

Lake Enterprise Mound

In April 2003 Jeter resumed fieldwork at Lake Enterprise Mound, the oldest known mound site in Arkansas, finishing out the season in July. The site has been dated about 1200 B.C. and is affiliated with the Late Archaic Poverty Point culture centered in northeast Louisiana. Working with a crew of regional Arkansas Archeological Society members and UAM students, Jeter expanded previous test excavations to locate the edge of the little mound’s north slope. Another trench unit found the edge of the south slope. Artifacts recovered included

stone tools and flakes plus some of the characteristic Poverty Point objects—baked silty-clayey objects of various shapes, thought to have functioned as substitutes for stones so that “hot rock cooking” could be done in an essentially stoneless land.

The crew also extracted numerous soil samples for flotation (a water-sorting technique that recovers tiny organic remains) and soil columns for microstratigraphy analysis. Additional test units placed over underground anomalies mapped out by remote sensing unfortunately turned up no prehistoric features, only buried pieces of scrap metal of recent age. The materials collected from this excavation await analysis, which was delayed by Jeter’s teaching commitment, a move of the station facilities, and the lack of a station assistant to help with the work.

Middle/Late Archaic Chronology

Stone tools even older than Lake Enterprise Mound and the Poverty Point Culture are the subject of another piece of research in 2004. Jeter has suggested a reversal of the chronological relationships of two groups of Archaic Period artifacts, Evans points and Williams points. Even very fine distinctions of artifact chronology can be extremely important in archeology, since styles and types, especially of projectile points, are used to propose relative date ranges for pre-ceramic sites, and therefore to track cultural developments through time.

The unusual Evans blade-notching, Jeter suggests, probably did not represent a stylistic point type, but



Dr. Jeter in new quarters at UAM

rather should be considered as a technological and/or functional *mode* crosscutting several types. The traditional criterion, stem form, should be used to define the types. Jeter's new proposal is that the Evans mode is earlier, dating from some time after 4000 B.C. to some time after 3000 B.C., with Williams points spanning some time before 2500 B.C. to perhaps well after 2000 B.C. The two almost certainly overlapped in time, and indeed, the Evans mode occurs on some points with Williams-like expanded stem forms. Jeter consulted with colleagues who have worked on the problem, including the Survey's Frank Schambach (SAU), Joe Saunders of the Louisiana Archaeology Program, and Roger Coleman, archeologist with the Ouachita National Forest. Jeter and Coleman are coauthoring a paper for *The Arkansas Archeologist*.

3BR119: First Maize in the Felsenthal Region

UAF anthropology graduate student Amber Horne began compiling and analyzing data from General Land Office (GLO) records for the vicinity of site 3BR119, located in the northeast corner of Bradley County. Jeter's 1990 salvage excavations there produced the first (and so far the only) evidence for maize in the Felsenthal archeological region of Arkansas. Ms. Horne is studying the original land surveyors' notes on landscape and vegeta-

tion to provide environmental context for Jeter's report on this important site. Dr. Donald Bragg of the U.S. Forest Service's Southern Research Station at UAM, who has used GLO records to study the ecology of southeastern Arkansas, also provided helpful information.

Jeter's research on this site was also supplemented by consultations with Susan Wilkerson of Michael Baker Jr., Inc., a cultural resource management firm that has been working on archeological sites in the right-of-way of the Interstate Connector Project between Pine Bluff and Monticello. The Hood site (3DR263) in particular, which is near Monticello, appears closely related to 3BR119.

Publications on Goldsmith Oliver 2

Jeter's long saga of involvement with the important Goldsmith Oliver 2 site in Pulaski County is nearing completion. The site, located near the Little Rock airport, dates to the early 1600s and was excavated by the Survey's sponsored research program in 1986-87. When the excavators left the Survey's employment, a report on the work was not yet completed. Jeter took over the write-up and was lead author of the final contract report.

Unsatisfied with the limitations of the contract report due to budgetary restrictions, Jeter pursued ad-

ditional analysis of Goldsmith Oliver 2 over the years, and especially during an off-campus duty assignment in spring 1998. His work was hindered, however, by a lack of suitable maps showing the distribution of different artifact types across the site. These were finally available in 2001 and led to significantly revised interpretations of site structure.

Jeter published a chapter in a 2002 University Press of Mississippi volume, edited by Robbie Ethridge and Charles Hudson, presenting his revised view of the site in its regional context, including a new theory of the complex movement and interrelationships of various ethnic groups in the protohistoric period. Late in

2003 he completed his draft chapter for a forthcoming volume on a related site in Mississippi, summarizing the new findings about Goldsmith Oliver 2.

And on Plaquemine

Jeter was invited to participate in a symposium on the Plaquemine culture of the Lower Mississippi Valley at the 2003 Southeastern Archaeological Conference held in Charlotte, North Carolina. His paper, "The Outer Limits of Plaquemine Culture: A View from the Northerly Borderlands" will appear in an edited volume based on the symposium that will be published by University of Alabama Press.

UAM Station Personnel

Marvin D. Jeter received his Ph.D. in anthropology in 1977 from Arizona State University. He was UAM station archeologist from 1978 to 1983 and returned to the post in 1989 after serving as Director of the Center for American Archeology's Kampsville Archeological Center in Illinois. His extensive archeological experience in the Southeast, Southwest, and Midwest reflects eclectic interests. His research in Arkansas has focused on the late prehistoric, proto-historic, and historic/contact periods in the Lower Mississippi Valley, but he has also studied the history of archeological exploration in that region and various aspects of African-American culture in the Southeast.

Academic Service and Activities

By agreement with the University of Arkansas System, Marvin Jeter has a faculty title of Associate Professor in the UAF Anthropology Department and teaches in the UAM School of Social and Behavioral Sciences. His courses in Spring 2004 were Cultural Anthropology (ANTH 2203) and World Prehistory (ANTH 2223), with 6 and 4 students, respectively.

Jeter served on UAM's Museum Committee. He advised the committee chair on the purchase of some fossil hominid skull casts, provided summary information about the species they represent, and helped with plans for a new exhibit.

Jeter advised UAF anthropology graduate student Amber Horne on a research project in the Survey registrar's office that is related to site 3BR119 in UAM station territory.

Professional Service and Activities

Jeter was invited participant and discussant at the Mid-South Archeological Conference, held at the Tunica County Museum in northwestern Mississippi.

Jeter consulted with Dr. Dorothy Lippert of the Smithsonian Institution's Office of Repatriation about human skeletal remains from Arkansas, and about Maxwell-Best, a probable 19th century Choctaw site where he has worked recently. He also consulted with Dr. Randel T. Cox, a University of Memphis geologist working on earthquake-related sandblow features in southeastern Arkansas, and assisted one of Cox's graduate students with a thesis project.

Jeter continued to share his research about MTA tombstones dating from 1913 to the 1930s with the Mosaic Templars of America Building Preservation Society. The MTA was headquartered in Little Rock and became the largest Black burial benefits organization in the 1920s.

Jeter assisted other Survey personnel from the ATU and UAPB stations in collecting oral histories and documenting old family photographs as part of the Lakeport Plantation Preservation Project. He also consulted with archeologists working for Michael Baker Jr., Inc., a private research firm conducting archeological surveys along the I-69 connector route between Pine Bluff and Monticello, and the main I-69 corridor. He assisted independent contract archeologist Toby Morrow, who was working on a site in Bradley County.

Jeter consulted with Dr. Charles “Chip” McGimsey of the Louisiana Regional Archaeology Program on a publication project.

Jeter served as book reviewer for *Southeastern Archaeology* and manuscript reviewer for *The Arkansas Archeologist*, *Louisiana Archaeology*, and *American Antiquity*.

Public Service and Outreach

Jeter served as Corresponding Secretary, Treasurer, and Program Chair for the Arkansas Archeological Society’s Southeast Arkansas Tunican Chapter. He arranged programs for the monthly meetings, helped organize Arkansas Archeology Month programs, and presented programs to the Chapter at the February and April meetings (combined audiences 35). He taught the Arkansas Archeology seminar to six participants at the annual summer Training Program jointly sponsored by the Survey and the Arkansas Archeological Society. He also worked with Arkansas Archeological Society member Bob Cooper and others to begin recording rural African-American cemeteries in the Survey’s archeological site database.

Jeter presented talks to the Monticello Daughters of the American Revolution (20), the Monticello Lions Club (16), and two groups of high school students participating in “Youth Opportunities Limited” on the UAM campus (50). Combined audiences of 86.

WELCOMING A NEW STATION ASSISTANT

Just at the end of the 2003-2004 fiscal year, Jeter prepared to welcome the UAM station’s first full-time assistant since Jim Phillips left the position early in 2002. Many research projects which had to be seriously curtailed over the last two years may now regain the momentum they deserve. Robert J. Scott began work at the UAM station on July 19, 2004.

UNIVERSITY OF ARKANSAS AT PINE BLUFF

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

The UAPB station is responsible for eight counties of east-central Arkansas extending from Little Rock to the Mississippi River. This territory encompasses portions of diverse physiographic regions including the Delta, the Gulf Coastal Plain, and the Ouachita Mountains. The archeological heritage of the area includes sites representing the entire temporal sequence from the earliest Paleoindians at about 10,000 B.C., through Colonial and Historic Arkansas. The most well known site in station territory is the Arkansas Post National Memorial. The Menard-Hodges site, now also part of the National Memorial, has been identified as the 17th century Quapaw village Osotouy, and a nearby complex of related sites are thought to represent the earliest Arkansas Post, which was the first European settlement in the Lower Mississippi Valley.

CURRENT RESEARCH

Arkansas Post and the Menard Complex

The main research focus of the UAPB station continues to be a group of sites at the Menard Locality which are thought to represent colonial French and Indian interactions, including the site of the earliest Arkansas Post, established by Henri de Tonti in 1686. The Menard Locality is now protected as the Osotouy Unit of the Arkansas Post National Memorial.

Menard-Hodges is a large ceremonial mound site associated with the late 17th century Quapaw village Osotouy. The French established the original Arkansas Post near Osotouy in order to trade with the Quapaw.

The Lake Dumond site, an outlier of Menard-Hodges, contains late Mississippi period artifacts. In 2003, House was awarded a grant from the Arkansas Archeological Society's Archeological Research Fund for radiocarbon dating of two samples from the Lake Dumond site, which confirmed a date for the village in the late 12th through early 15th centuries.

The Wallace Bottom site was discovered during the joint Survey/Society Training Program in 1998. This site is on the floodplain adjacent to Menard-Hodges, within the White River National Wildlife Refuge. In 2003 the Quapaw Tribe of Oklahoma became partners in research at Wallace Bottom when the National Park Service awarded a historic preservation grant to the Tribe for a project titled "Cooperation Then and Now." This project is a partnership between the Quapaw Tribe, White River National Wildlife Refuge, National Park Service, the Arkansas Archeological Survey, and the Arkansas Archeological Society for the purpose of furthering studies to support management and interpretation of the

site. Under this grant, the Tribe sponsored new archeogeophysical research and excavations at Wallace Bottom in 2003.

John House and Mary Farmer joined the Survey's archeogeophysical applications specialist Jami Lockhart for remote sensing surveys at the site. This work resulted in geophysical maps showing underground anomalies that might indicate the remains of buildings and other cultural features. Society volunteers helped with fieldwork. "Ground-truthing" excavations were then carried out to explore the anomalies.

A linear wall trench was identified in one excavation area. This could be the wall of an Indian longhouse, or possibly the footing of a French *poteau en terre* structure. Another anomaly turned out to be a large refuse pit containing early 18th century European artifacts as well as Indian artifacts and well-preserved faunal and botanical remains. Thus, the excavation not only produced important information about the site, it also validated the use of remote sensing technologies to identify subsurface features in this locale.

The Quapaw grant also allowed on-site consultation with Tribal Elders and other Tribal members. One Tribal member, Larry Kropp, was able to participate in the excavations.

Volunteers joined House and Farmer in the UAPB station laboratory to wash and catalog the specimens from this fieldwork. Farmer enlisted the help of the Components Division at Central Maloney, Inc. of Pine Bluff, who provided radiographs of two highly corroded iron artifacts. These turned out to be a key and the breech plug from a musket. The metal artifacts were sent



Arkansas Archeological Society volunteers work on material from the Wallace Bottom site in the UAPB station lab.

to Fayetteville for conservation in the Survey laboratory.

House also consulted with Dr. Gayle Fritz, paleo-ethnobotanist at Washington University in St. Louis. Fritz and her students agreed to analyze samples of charred corn cobs and other botanical specimens as part of ongoing research about prehistoric American Indian use and cultivation of plants.

***Gifts of the Great River: A New Book* by John House**

John House's new book *Gifts of the Great River: Arkansas Effigy Pottery from the Edwin Curtiss Collection, 1879-1880* was published by the Peabody Museum Press in late 2003. The book results from House's study of effigy-styled ceramic vessels from Arkansas that were collected for the Peabody Museum of Harvard University by Edwin Curtiss in the late 19th century. The Museum invited the study for its new Collections Series publications. Effigy vessels are ceramic vessels which include modeled images of animals, humans, or other objects as part of the vessel shape. The volume includes 25 color plates of Arkansas examples of this vital American Indian art form.

A Confederate Gravesite at Helena

In May 2004, House, helped by HSU station assistant Kate Wright, directed volunteers in salvage excavations to recover human remains discovered in a wooded tract within the Helena city limits. The remains were identified as those of Confederate soldiers who died during the Battle of Helena on July 4, 1863. At least five individuals had been buried together in a single grave.

House, Farmer, and ATU station archeologist Skip Stewart-Abernathy worked together to study buttons found in the grave, apparently from clothing worn by the fallen soldiers. UAF graduate student Diana Wilks studied the skeletal remains, supported by a grant from Arkansas Natural and Cultural Resources Council. On March 20, the Sons of Confederate Veterans, Arkansas Division, reburied the soldiers' remains with military honors at Maple Hill Cemetery in Helena. The personal items excavated from the grave site were also reinterred.

Other Project Updates

The Lower St. Francis Project is House's multiyear study of prehistoric Mississippian culture settlement, economic, and political change in the Mississippi River

floodplain landscape of eastern Lee County. During the last few years, this research has focused on collaboration with James Feathers and Robert C. Dunnell of the University of Washington-Seattle on a pilot study of thermoluminescent dating of ceramic sherds from Mississippian farmstead sites. This dating technique measures the amount of residual radioactive “glow” in clay minerals that have been fired, such as ceramic vessels. A suite of dates from six farmsteads and one “vacant” ceremonial center (so-called because few people actually lived at the site, but many from the surrounding countryside gathered there periodically for group political or ceremonial events) showed a trend of A.D. 1000 to 1400, supporting earlier inferences that settlement was more dispersed in the early part of the Mississippi period sequence in this region, with more nucleated or aggregated settlements becoming common as time went on. Results of the study were presented in a poster session at the annual meeting of the Society for American Archaeology.

Archeological site reconnaissance in Arkansas County was undertaken in collaboration with White River Wildlife Refuge Manager Larry Mallard, Trustan Holder Wildlife Refuge Manager Andy Horn, and volunteer Chester Shaw. This project’s goal was to visit sites in

the wooded lowlands between the Arkansas and White rivers. Three prehistoric mound sites along Owens Lake were monitored, including one that had been reported as destroyed by bank erosion in recent decades. The team also visited Cooper Mound, which was excavated by Preston Holder for the National Park Service in 1956. The 2003-2004 work was conducted because the U.S. Army Corps of Engineers is currently studying alternatives to control erosion caused by flooding in the area. Archeological sites on the heavily wooded lowlands have particularly significant research potential, since they have never been disturbed by modern agriculture. Under federal regulations, impact on the sites must be considered when planning the flood control project.

Mary Farmer participated in the Lakeport Plantation Preservation Project, joining ATU station archeologist Leslie Stewart-Abernathy in collecting oral histories from persons whose families are connected to the site, and copying historic family photographs brought to a family reunion sponsored by the project. Farmer also took part in the State Archeologist’s new Historic Cemetery Recording Project by preparing documentation of several local cemeteries. She joined HSU station staff in fieldwork at the Dry Run Cemetery in Dallas County.



Students respond to a question from Dr. House in the classroom at UAPB.

UAPB Station Personnel

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

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

Grants, Honors, and Awards

House received an Archeological Research Fund award of \$755 from the Arkansas Archeological Society for radiocarbon dates for the Lake Dumond site.

Academic Service and Activities

By agreement with the University of Arkansas System, John House has a faculty title of Associate Professor in the UAF Anthropology Department. He teaches Introduction to Anthropology (SOCI 2330) in the Department of Social and Behavioral Sciences at UAPB. The class had 45 students in Fall 2003 and 33 in Spring 2004.

House chaired the M.A. Internship committee of UAF anthropology student Susan Wilkerson, who graduated in Fall 2003. He assisted UAF Ph.D. candidate Eric Proebsting with his dissertation project in the Environmental Dynamics program. He also assisted UALR graduate student Julie Hendrix with research for her master's thesis in Public History.

House contributed a guest lecture on "Colonial Archeology in Arkansas" to George McCluskey's Archeology of the Southeastern United States class at UALR.

House continued working with UAPB's distance education coordinator Tanya Colento to develop WebCT delivery of materials for his course (including study guides, assignments, web links, and other materials).

House revised the syllabus for Peoples and Cultures of Africa (SOCI 3360) as part of UAPB's developing African Studies Program, which is supported in part by a 2003 grant from the U.S. Department of Education. House gave a presentation about the course at the annual University of Arkansas at Pine Bluff Student/Faculty Research Forum.

Professional Service and Activities

House reviewed a manuscript submitted for publication in the journal *Southeastern Archaeology*.

House assisted Peabody Museum of Harvard University with a grant application to National Endowment for the Humanities for collections curation.

Farmer organized and coordinated volunteer crew members for fieldwork at the Wallace Bottom site under the Quapaw Tribe's historic preservation grant.

Farmer assisted with projects at other Survey research stations, including the Lakeport Plantation research project in Chicot County (UAM/ATU), and the Dry Run Cemetery project in Dallas County (HSU).

Public Service and Outreach

House gave presentations or slide shows to Lakeside Methodist Church Keen-Agers (25), Gifted and Talented classes at Jefferson Elementary School in Little Rock (30), students at Altheimer Elementary School (35), high school and college students at Phillips County Community College Career Fair on the DeWitt campus (9), an Archeology Month program at Arkansas Post National Memorial (25), the Tunican Chapter of the Arkansas Archeological Society (25), and the Delta Archeological Society in Blytheville (10). Combined audiences of 159.

Farmer gave presentations or slide shows to the Desha County Museum (30), Gifted and Talented students at Jefferson Elementary School in Little Rock (30), and Jefferson County Historical Museum in Pine Bluff (20). Combined audiences of 80.

House was “shadowed” by a Gillett High School student in the career day program.

House worked with the Archaeological Conservancy to identify candidate sites for purchase and preservation. He reviewed an item for the Conservancy’s magazine *American Archaeology*, and led a tour of the Menard-Hodges site for 30 participants in the Conservancy’s Lower Mississippi Valley tour.

House worked with staff members at the Arts and Science Center for Southeast Arkansas in Pine Bluff to help develop an archeology exhibit titled “Can You Dig It,” and a summer enrichment course for public school students called “Archeology for Kids.”

House assisted Swanee Bennett of Historic Arkansas Museum in developing an exhibit titled “Colonial Arkansas Before the Louisiana Purchase” to commemorate the bicentennial of the Louisiana Purchase.

House provided information and materials to Arkansas State Capitol historian Dr. David Ware for an exhibit about the Survey at the State Capitol.

House served on the Pine Bluff-Jefferson County Historical Museum’s Acquisitions Committee. Farmer made artifact replicas for the Museum’s interpretive program on local prehistory. She also prepared an exhibit and presented a talk at the Museum for Archeology Month.

House directed fieldwork at the Wallace Bottom site as part of the Quapaw Tribe’s historic preservation grant from the National Park Service. He worked with Project Director Carrie Wilson of the Quapaw Tribe and White River Wildlife Refuge Manager Larry Mallard to host a visit to the site by Tribal Elders and others. House also collaborated with Tribal representatives, Arkansas Post National Memorial Superintendent Ed Wood, and landowners on repatriation and reburial issues.

House consulted throughout the year with White River National Wildlife Refuge personnel on management of cultural resources within the Refuge, and with Arkansas Post National Memorial personnel on management of archeological resources within the Osotouy Unit.

House participated in the joint Arkansas Archeological Survey/Arkansas Archeological Society annual Training Program, which this year had about 70 registrants. He supervised field and lab work and taught the Basic Excavation seminar (9 students). Farmer helped with preparations for the Training Program and delivered field equipment to the site. She also organized and supervised weekend “lab days” for Society volunteers at the UAPB station.

HENDERSON STATE UNIVERSITY, ARKADELPHIA

Dr. Mary Beth Trubitt, Station Archeologist

Kate McLaurin Wright, Station Assistant (through March 2004)

The HSU station is responsible for archeological resources in nine counties of southwestern Arkansas. Station territory is dominated by the Ouachita Mountains, but extends across parts of the Little Missouri, most of the Middle Ouachita, and the Middle Saline river basins on the Gulf Coastal Plain. Ouachita novaculite, mined extensively in the 19th century as “Arkansas whetstone,” and also quarried by prehistoric American Indians for tool-making and trade, is a resource that affected early settlement and land use in the upland areas. In the river basins, salt-making was an industry pursued by American Indians and later by settlers. Novaculite mining and salt-making are represented in station territory by important archeological sites.

CURRENT RESEARCH

Novaculite: A Lithic Resource in the Ouachita Mountains

Much of the station’s research this year focused on investigations of novaculite quarry sites to answer questions about the procurement, use, and exchange of this important raw material in the Ouachita Mountains region. Novaculite is a fine-grained silica stone that is easily chipped to make arrow and dart points, hide scrapers, and woodworking tools.

Stone quarries are among the largest and most complex of all prehistoric archeological sites. The quantity of material and relative inaccessibility of these sites present peculiar challenges to researchers, but understanding how these sites were used is essential for a full reconstruction of regional land use patterns. Furthermore, novaculite, like other useful types of stone, was widely traded in prehistoric times. Investigations at the quarries form an important part of any attempt to map social and economic patterns of the past.

Trubitt, with coauthors Tom Green (Survey Director) and Ann Early (State Archeologist), completed a report for the U.S. Forest Service detailing a formal research design to guide work at novaculite quarry sites in the Ouachitas. Ancient activities at novaculite quarries will be studied within a broader context of regional novaculite tool production and exchange systems that left residues not only at the quarries, but also at workshop and habitation sites in and beyond the region. The report, which has been revised for publication, outlines a number of potential research problems for long-term investigation.

Work on several ongoing station research projects is linked to the subject of novaculite tool production and

exchange systems. These projects also add to our general understanding of lifeways during the Archaic, Woodland, and Caddoan periods in this area.

Kate Wright made progress on a report of her analysis of stone artifacts from two multicomponent sites on Lake Ouachita. Meanwhile, Trubitt and Wright continued lab work from the 2003 testing project done at two more sites west of Lake Ouachita in Montgomery County. A grant proposal was written to fund a series of Oxidizable Carbon Ratio dates on soil samples from the latter two sites.

Some follow-up was done on a recent mapping project at a novaculite quarry in Hot Springs National Park. Trubitt presented a poster on this project at the Plains Anthropological Conference. She also consulted with Hot Springs National Park personnel on the feasibility of using aerial photographs to identify aboriginal quarrying activities.

With HSU students and Arkansas Archeological Society volunteers, Trubitt began analysis of artifacts recovered from a 1993 Society Training Program at a novaculite quarry site in Polk County. The sizes and types of novaculite debitage were compared between quarry, workshop, and habitation sites to find out if various stages of tool production were spatially segregated from other activities. This project provided students in Trubitt’s spring 2004 classes with hands-on involvement in archeology.

Trubitt also participated in a hike to a novaculite quarry site in the Ouachita National Forest, and recorded a new quarry site in Hot Spring County near Lake Catherine. Several sites around Lake Catherine have been the scene of smaller field projects by Trubitt with



Dr. Trubitt consults a USGS quad map in preparation for fieldwork.

assistance from Society members and other volunteers. Testing at these sites is providing additional information about area chronology, lifeways, and novaculite use by ancient American Indians.

Saline River Borderlands Project

Trubitt and Wright continued lab work and analysis of material collected during the 2002 joint UA/HSU archeological field school at the Hughes Mound, a Caddoan period site in Saline County. The field school contributed to the larger “Borderlands Project,” a collaborative effort by the UAM, UAPB, and HSU stations that targets the middle Saline River and Moro Creek drainages for archeological investigation. This project area not only straddles the Survey station territories; it was a boundary zone in the past as well—between A.D. 1000 and 1500 the Saline River separated Caddoan Indian groups of southwest Arkansas from Mississippian cultures of the Southeast. The 11 students from both universities who participated in excavations at the site helped add new information to the archeological record about this important but relatively neglected zone.

Historic Pottery Production and Exchange

Trubitt completed an article reporting the results of the Hyten House/Niloak project. The Hyten House is

a Craftsman style residence built in 1921 for Charles Hyten, owner of the Eagle Pottery and manager of the Niloak Pottery, which produced art pottery from a distinctively “swirled” multicolored clay that was marketed both locally and nationwide in the early decades of the 20th century. Many potteries across Arkansas produced utilitarian stoneware and art pottery in the 19th and early 20th centuries. During the late 1800s several companies operated in Benton. Pottery manufacture became the town’s leading industry, making this topic an important part of local history.

Trubitt’s involvement at the Hyten House arose in response to the landowner’s request for information to help nominate the property to the National Register of Historic Places. Trubitt, Kate Wright, and UAPB station assistant Mary Farmer, along with volunteers from the Arkansas Archeological Society and an HSU student, mapped the house site and excavated some small test units in 2001. The archeology suggests that subsurface deposits could contribute additional valuable information about the life and times of Charles Hyten and his family.

Trubitt finished the artifact analysis, maps, and background research, including archival studies. Her report was published shortly after the close of the 2003-2004 fiscal year.

Mississippian Warfare and the Cahokia Palisade Project

Trubitt continued her involvement with the Cahokia Palisade Project, a program of excavations to uncover evidence of the fortifications around the central precinct at the Mississippian mound center of Cahokia, near East St. Louis, Illinois. Cahokia was the capital of Mississippian culture, a town that once had a population perhaps as high as 30,000 or more, and containing the largest American Indian earthworks in North America.

Trubitt consulted with colleagues about fieldwork plans, prepared a report on results of the 2003 field season, co-wrote a grant proposal to fund the 2004 field season, and worked with coauthors on a manuscript

about palisades and warfare in the central Mississippi River Valley.

Farewell to Kate Wright

The Survey lost another valued employee when HSU station assistant Kate Wright left at the end of March to accept a position as an archeologist for the Arkansas Highway and Transportation Department. Survey budget constraints did not allow for her immediate replacement, leaving the station without an assistant, which places limitations on several projects. Kate's expertise in lithic studies, especially valuable to the HSU station's long-term commitment to study the novaculite quarry sites in the Ouachita Mountains, will be missed.



Dr. Trubitt (second from left) and a crew of Arkansas Archeological Society Ouachita Chapter volunteers getting ready to map and record gravestones at the historic Dry Run Cemetery in Dallas County. (Photo by Mary Farmer.)

HSU Station Personnel

Mary Beth Trubitt received her Ph.D. in anthropology in 1996 from Northwestern University. She joined the Survey in 2000 as the HSU station archeologist, following a teaching position at Western Michigan University. She has field experience in ten states and Belize, including work in southern Arkansas in the 1980s. Before coming to the Survey, most of her own research was at the Cahokia site, where she studied the role of prestige goods in the political strategies of chiefdoms, among other topics. She is an expert on the prehistoric shell bead industry, which was one element of a huge network of long-distance trade during the Mississippi period. In Arkansas her research focuses on the production and exchange of other kinds of materials, including novaculite.

Kate McLaurin Wright joined the Survey in 2000 as HSU station assistant, after earning a B.A. at the University of South Alabama. She is writing a thesis to complete her M.S. degree in anthropology 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.

Grants, Honors, and Awards

Trubitt and colleagues were awarded a grant by the Cahokia Mounds Museum Society to fund the 2004 field season of the Cahokia Palisade Project. Trubitt was project director, with Dr. John Kelly (Washington University, St. Louis) as project coordinator and Ms. Robin Machiran (University of Missouri at St. Louis) as field director.

Academic Service and Activities

By agreement with the University of Arkansas System, Mary Beth Trubitt has a faculty title of Assistant Professor in the UAF Department of Anthropology. Dr. Trubitt's UA graduate faculty status is Group I, enabling her to supervise Ph.D. students. She teaches two courses per year in the Sociology and Human Services Department at HSU. North American Indians (ANTH 3043) had an enrollment of 40, and Introduction to Physical Anthropology and Archeology (ANTH 2023) had 10 students. Trubitt also mentored one HSU graduate student in an independent study on animal imagery in Native American folklore (ANTH 5083, Readings and Research in Anthropology), and chaired the thesis committee of another HSU graduate student working on Caddo history. The latter student's thesis was completed and approved in December 2003.

Trubitt corresponded with UAF graduate school applicants interested in research at novaculite quarries, and agreed to be advisor for one student.

Trubitt made preparations for the Summer II 2004 HSU Archeological Field School and continued to develop other course content. She met with the Sociology Department chair to discuss development of a new course on Anthropology of Religion.

Trubitt presented a guest lecture in Prof. Charles Leming's Physics/Non-Western Cosmology class at HSU (20 students).

Trubitt advised an incoming HSU student who is a member of the Caddo tribe, and helped an OBU student who took classes at HSU with plans for graduate school. She also advised a student seeking to complete an old independent study project.

Trubitt hosted an Open House at the station's archeology lab for the larger HSU community.

Professional Service and Activities

Trubitt served on the Survey's Publications Committee, which reviewed two book manuscripts.

Trubitt provided peer review of manuscripts submitted to *The Arkansas Archeologist*, *American Antiquity*, and *Southeastern Archaeology*.

Trubitt lectured on Arkansas prehistory for a U.S. Forest Service Heritage Resource Technician (HRT) Regional Training Session at Camp Clearfork. She also led a tour at site 3GA23 and explained problems of looting at archeological sites for an ARPA (Archeological Resources Protection Act) Training Session hosted by the Forest Service and Hot Springs National Park.

Trubitt and Wright met with archeologists involved with cultural resource management projects in the station area during the year to discuss known sites and new finds. She reviewed information on proposed construction projects in the station area as part of federal permit public notices.

Public Service and Outreach

Trubitt and Wright supervised students and volunteers during “lab days” at the station. Volunteers also participated in a number of field projects during the year.

Trubitt worked with the Dry Run Cemetery Group to record this African-American cemetery in Dallas County. Volunteers assisted with gravestone documentation and mapping of marked and unmarked graves. Trubitt is currently working with the Vaden Cemetery Committee in Clark County on a similar project.

The station continued its commitment to research, curation, and exhibit development with the Hodges Collection, owned by the Joint Educational Consortium and curated at HSU. The collection includes a large number of Caddo ceramic vessels, among other artifacts.

Trubitt and Wright continued to participate in the Ouachita Chapter of the Arkansas Archeological Society. Trubitt is editor of the newsletter. Wright served as Vice President in 2003 and Treasurer in 2004. Both attended monthly chapter meetings in Hot Springs and the Society’s annual meeting in Fort Smith, and volunteered at the State Fair booth. Trubitt presented a talk to the Ouachita Chapter in November (20). Trubitt taught the Lithics Seminar to nine participants at the Society Training Program in Blytheville and helped supervise field-work.

Trubitt participated in a series of radio programs on the Cahinnio Caddo aired in July 2003 on Charlie Sandage’s “Arkansas Stories,” and in a half-hour radio show, with Harry Hammond and Meeks Etchieson of the U.S. Forest Service, on a Hot Springs station in March 2004.

Trubitt prepared and installed exhibits at the Clark County Historical Museum in Arkadelphia and the Nevada County Historical Museum in Prescott. She installed another exhibit at Garland County Library in Hot Springs for Archeology Month. Wright assembled items for an exhibit at the State Capitol.

Trubitt and Wright hosted an “Archeology Day” at the Clark County Historical Museum (30) and a display table at the Malvern Pow Wow (about 40).

Trubitt gave a presentation on archeology to Gifted & Talented Program students at Bismarck High School (5).

Wright presented a talk in honor of Native American Heritage Month at the Little Rock District U.S. Army Corps of Engineers (audience about 65).

Wright represented the Survey at the reburial of remains of Civil War soldiers in Helena, Arkansas.

SOUTHERN ARKANSAS UNIVERSITY, MAGNOLIA

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

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

CURRENT RESEARCH

Caddoan Archeology: The Grandview Project Continues

Fieldwork at Grandview Prairie during the 2002 and 2003 joint Arkansas Archeological Survey/Arkansas Archeological Society Training Programs produced results that Schambach and Jeane, with the help of their volunteer lab assistants, will be studying for years to come. Two follow-up field sessions during the year, with crews composed of Society volunteers, capped off the last Training Program.

Eight days in July were devoted to the Area 7 house at the west side of Mound A, the large temple mound at the Tom Jones site, a Caddoan ceremonial center. Schambach, Jeane, and Mr. Anthony Clay Newton finished excavating the doorway and long entrance passage of the house. They established that a one-meter berm of clay had surrounded the house, making it a semisubterranean structure. The ramped passageway was a little over two meters long, leading down into the house and ending in two massive door posts. The floor of the passage was covered with a thick layer of carbonized cane matting, and this matting continued away from the passage as a matt-covered path. The appearance of the house thus conformed to a depiction on the late 17th century Teran Map, which shows a partially buried building atop a Caddo temple mound, with only the thatched roof visible above the ground.

A second follow-up field session in March 2004 involved a crew of 10 Society volunteers (Mr. Danny Crumbliss, Mr. Russell Poole, Mr. Chester Shaw, Mr. Mark Walters, Ms. Mildred Grissom, Mr. Harry Hammond, Mr. Vernon Perry, Mr. Julian Cranfill, Mr. Paul Knapp, and Ms. Marilyn Johnson, who co-supervised the work). The excavation of the Area D house at the Tom Jones site was completed, and pollen samples were collected from Area 7. Mr. Paul Knapp contributed

his vest-pocket Kubota backhoe and front end loader to backfill the finished excavation units. The Arkansas Game and Fish Commission contributed by making the Grandview lodge available during the week. (Thanks to Mrs. Linda Goodner, Facility Manager for the Rick Evans/Grandview Prairie Conservation Education Center.)

A new example of deer ceremonialism was uncovered during this session. This theme seems to extend throughout the sequence of Caddo cultural development. Years ago, Schambach found an "antler temple" at Crenshaw, the earliest known Caddo ceremonial center, at around A.D. 1100. That feature contained the antlers of over 1000 white-tailed deer, along with human skulls and various ritually important artifacts, inside a ceremonial building. At Ferguson, a Caddo site dating to around A.D. 1300, he found a single intact deer mandible deliberately placed inside a building that had a perfectly clean, white sand floor. The new example at the Tom Jones site was a pair of large, well-preserved deer scapulae that had been placed on top of the fireplace, probably as part of a ritual to extinguish the hearth before the whole house was ceremonially burned down. Similar ritually extinguished fireplaces inside ritually burned houses have been found at the Ferguson site.

Also retrieved in March were additional soil samples from Area D that contained preserved pollen in pristine condition, according to Dr. Bruce Albert, a University of Texas palynologist who will analyze the remains for environmental reconstruction. This quality of preservation is rare for archeological sites, and possibly was due to the placement of the heavy, wet, sticky clay that was piled around the walls to create the semisubterranean Area 7 house. Albert's work is being funded by the Arkansas Game and Fish Commission because the information on local plant communities of 600 years ago, in addition



A portion of SAU collections on moving day; the collections were moved to temporary storage until permanent space at the Bruce Center on campus became available in late summer 2004.

to providing a window on past conditions that helps archeological interpretation, will also be useful for the prairie restoration project at Grandview.

One possible outcome of the pollen analysis could be evidence that the Caddo Indians who inhabited Grandview circa A.D. 1450 were practicing silviculture by transplanting *Maclura pomifera*—osage orange trees—brought from northeast Texas to Arkansas. The wood of this species was desired for making hunting bows, known to have been an important trade item in protohistoric times.

Solving Archeological Mysteries: Shell Beads and Poverty Point

Schambach completed a paper summarizing his solution to one of the great mysteries of Southeastern archeology: What did the people of the well-known and very important Poverty Point culture of northern Louisiana and southern Arkansas offer in exchange for the estimated 300 tons of foreign lithic materials, in the form of raw material as well as finished artifacts, that somehow made their way to the great Poverty Point site in northeastern Louisiana?

Exotic stone found at Poverty Point—such as novaculite, various kinds of chert, galena, quartz crystals, slate of various colors, greenstone and other igneous rock, soapstone, and even a little native copper—can be traced to diverse sources, including the Ouachita Mountains of Arkansas, the Ozark Rim area of eastern Missouri, the Upper Mississippi Valley of Iowa, Wisconsin, and Illinois, the Shawnee Hills of southern Illinois, the Knobs region of northern Kentucky and southeastern Indiana, and the Piedmont province of Alabama and Georgia.

Sites of similar age in the northern source areas of these exotic lithics, and far from the Gulf Coast, contain their own mysteries in the form of significant quantities

of beads, other ornaments, and cups made from marine shell. Schambach argues that the marine shell artifacts were made at Poverty Point and at Jaketown (another major Poverty Point culture site in Mississippi), to be traded for the northern stone. Poverty Point people, he says, obtained the shell by trading with Gulf Coast inhabitants, and then set up a shell manufacturing industry sufficiently productive to attract those 300 tons of northern lithics.

The difficulty in making this argument is that no shell has been found at Poverty Point. But this can be attributed to the acid soils of the Lower Mississippi Valley landforms favored by Poverty Point people. No bone is found at these sites either, despite the fact that archeological sites are typically littered with food refuse, especially animal bone. The acid soils have consumed all trace of these organic remains. But one clue does exist in abundance: small stone tools known as microflints. Chief among these are tools classed as “perforators”—mistakenly, according to Schambach.

The common type of “Jaketown perforator” is the single largest tool category at Poverty Point. But what were they used for? Perforators, as a general class of stone tool, have a long narrow point, usually thick in cross section, and are thought by archeologists to have been used to punch holes in animal hides, or to drill holes in woodworking, or some similar task. The microflint Jaketown perforators would be suitable for more delicate work. Schambach believes they were used to drill shell beads. He compares the Poverty Point microperforators with virtually identical microflint assemblages at various other Mississippi period sites in northeastern Arkansas and in the Midwest, usually in association with the residue of shell bead and shell ornament manufacturing. Schambach argues that this association can be extended by analogy to the Poverty Point site, where the shell itself has not been preserved.

SAU Station Personnel

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

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

Grants, Honors, and Awards

A \$575 grant was awarded from the Arkansas Archeological Society's Research Fund to process an AMS radiocarbon dating sample from the Hayfield site at Grandview.

The Arkansas Game and Fish Commission provided \$1250 for analysis of pollen samples from Grandview.

Academic Service and Activities

By agreement with the University of Arkansas System, Frank Schambach has a faculty title of Professor in the UAF Department of Anthropology. He teaches two courses per year in the School of Liberal and Performing Arts at SAU. In the Spring 2004 semester, Introductory Anthropology and North American Indians enrolled 30 and 15 students, respectively.

Schambach served on Jami Lockhart's Ph.D. committee in the Environmental Dynamics program at UAF.

Schambach was invited to serve on the M.S. thesis committee of a Bard College student, and was awarded an appointment as thesis reader in the Graduate School of Environmental Studies by the Dean of Graduate Studies at Bard College, Annandale-on-Hudson, New York. He attended the student's successful thesis defence via conference call in April.

Schambach provided assistance to an incoming UAF anthropology graduate student exploring thesis topics, and supported a grant application by a doctoral student in the Environmental Dynamics Program at UAF.

Schambach and Jeane maintained several archeology exhibit cases on the SAU campus.

Schambach corresponded with Ph.D. candidates at Texas A&M University and University of Arizona about their thesis projects.

Jeane presented a lecture on American Indian art to 56 SAU art students.

Professional Service and Activities

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

Schambach, working under a professional services contract between the Survey and the LOPEZGARCIA Group of Dallas, Texas, reviewed and commented on a draft research design for an archeological project, and was invited to become a coauthor of the final research design report.

Schambach reviewed and commented on Dr. Steve Black's (University of Texas, Austin) online exhibit titled "Texas: Life and Times of the Caddo" for www.texasbeyondhistory.net. Schambach previously contributed much content, both text and graphics, for the web site.

Schambach reviewed and commented on a paper by Dr. George Lankford (retired professor at Lyon College and member of the Arkansas Archeological Society), a manuscript by Dr. Thomas E. Emerson (Director of the Illinois Transportation Department's Archeological Research Program) and Jeffrey S. Girard (Northwestern State University of Louisiana) for the journal *Southeastern Archaeology*, and a book chapter by Dr. Marvin D. Jeter (UAM station archeologist).

Schambach contributed professional advice and/or assistance to Mr. Roger Coleman (Archeologist, Ouachita National Forest), Dr. Timothy Baugh and LOPEZGARCIA Group of Dallas, Texas, Ms. Jane Dougal (Research

Librarian, Bard College), Ms. Linda Card (novelist, Antoine, Arkansas), and Ms. Amy Espinoza-Ar (Archaeological Conservancy).

Public Service and Outreach

Schambach and Jeane worked with Mr. J. C. Burke, general manager for Queen's Plantation, and Ms. Debra Crawford, a USDA Natural Resources Conservation Service representative, to assist with management of archeological sites in the Plantation. Most of the sites were already protected in Conservation Reserve Plots. Ms. Crawford and David Jeane marked the boundaries of remaining sites to protect them from land leveling. This successful cooperative effort produced good results for the archeology and for the property manager.

Schambach presented public lectures to the Valley of the Caddo Society in Paris, Texas (90), the Prescott and Nevada County Library (60), the Kadohadacho Chapter of the Arkansas Archeological Society (12), the Arkansas Chapter of the Wildlife Society (55), the Columbia County Genealogical Society (9), and participants and visitors to the annual Training Program of the Arkansas Archeological Society at Blytheville (48). Combined audiences 274.

Schambach served as faculty sponsor for the Kadohadacho Chapter of the Arkansas Archeological Society. He wrote and published two articles for the Society's newsletter and delivered a paper at the annual meeting, presented an evening program at the Society's Training Program at Blytheville, and one monthly meeting program to the Kadohadacho Chapter of the Society. David Jeane organized weekly volunteer lab sessions at the station for Society members. Schambach and Jeane led Society volunteers in two sessions of follow-up fieldwork at Grandview Prairie, where the Training Program was held for the previous two years.

Jeane served as president of the Kadohadacho Chapter of the Arkansas Archeological Society, produced the Chapter newsletter, and conducted weekly lab sessions for member volunteers. He was a supervisor at the Society's annual Training Program in Blytheville.

Jeane co-directed the station's 2004 Spring Fling archeological project at Grandview Wildlife Management Area, with volunteers from the Arkansas Archeological Society and Kadohadacho chapter.

Jeane set up a display and gave a presentation and tour to visiting Arkansas legislators at the Rick Evans Grandview Prairie Wildlife Management Area.

Jeane presented lectures, slide programs, and artifact identification workshops to various public schools and other groups, including the Ouachita chapter of the Arkansas Archeological Society (21), McNeal Elementary School (47), and the Arkansas Chapter of the Wildlife Society (20). Combined audiences 88.

Jeane set up displays and manned an information booth at the 2003 Archeological Fair at Texarkana, Arkansas, which had approximately 1000 visitors.

Jeane served as chairman of the Springhill Historic District Commission in Springhill, Louisiana.

ARKANSAS TECH UNIVERSITY, RUSSELLVILLE

Dr. Leslie (Skip) Stewart-Abernathy, Station Archeologist

Theresa Johnson, Station Assistant (half-time)

Larry Porter, Station Assistant (half-time)

The ATU research station covers 11 counties of mountainous west-central Arkansas, including the southern fringe of the Ozarks (the Boston Mountains) and a large chunk of the Ouachitas. The two ranges incorporate varied upland and river valley environments and are separated by the Arkansas River corridor, which roughly bisects station territory. Archeological resources in the station area range from bluff shelters and rock art sites—including Indian Rock House in Van Buren County and numerous pictographs and petroglyphs at Petit Jean State Park in Conway County that are listed on the National Register—to finely made prehistoric ceramics from Carden Bottom in Yell County, to the early 19th century town of Cadron in Faulkner County, also on the National Register of Historic Places.

CURRENT RESEARCH

Ghost Boats in the Museums

Stewart-Abernathy's 1988 salvage work at the West Memphis Boat Wrecks site—where wooden boats, including a stern-wheeled steamboat, were exposed at the bottom of the drought-stricken Mississippi River—culminated in a Survey publication last year, *Ghost Boats on the Mississippi: Discovering Our Working Past*. Stewart-Abernathy undertook a new round of public programs after the book was released, and the ATU station contributed to two museum exhibits related to the project.

Stewart-Abernathy worked with exhibits designer Scott Black and curator Margaret McNutt of the Tunica RiverPark Museum in Tunica, Mississippi, where a number of the larger boat wreck artifacts were donated and went on permanent exhibit in November 2003. The ATU station provided graphics research support, advice about the artifact collection, and background information for the exhibit. Stewart-Abernathy attended the RiverPark Museum grand opening in March 2004.

A portable exhibit, consisting of four posters about the ghost boats project, was developed by Stewart-Abernathy and station assistants Theresa Johnson and Larry Porter. The posters, along with the salvage project's signature artifact—a brass steam gauge from the steamboat wreck—accompanied Stewart-Abernathy to public presentations in Jefferson, Texas, Natchitoches, Louisiana, and Fort Smith, Hot Springs, Blytheville, and Fayetteville, Arkansas. When not on the road, the posters and steam gauge are on display at the ATU Museum of Prehistory and History.

Projects in ATU Station Territory

Research in ATU station territory has not been dominated by a single major project for the last few seasons, but a number of collaborative efforts continued. One of these is the Cherokee Project, involving station staff, volunteers from the Arkansas River Valley chapter of Arkansas Archeological Society, and Leonard Bland, Director of the Ozark Historical Museum, in a search for sites representing the brief Cherokee residence in Arkansas (1817-1828) prior to the Trail of Tears. The focus this year was on historical (documentary) research.

Stewart-Abernathy's interest in riverine sites is expressed in his Arkansas Riverine Heritage Project, or "archeology by john boat." The crew have undertaken to assess how erosion and development are impacting archeological sites along the shore of Lake Dardanelle. In particular, the staff are studying potential impacts of the Pope County Intermodal Transportation Project.

Riverine archeology and Cherokee archeology crossed paths this year, as Stewart-Abernathy researched the role of steamboats and other watercraft in Indian Removal between 1830 and 1840, bringing a new perspective to the effort to mark the routes of the Trail of Tears through Arkansas. Thousands of Cherokees and other Indians were either shipped by river or force-marched across the state into Indian Territory (Oklahoma) as part of the U.S. Government's policy to "resettle" Indian tribes and open existing tribal lands to white settlement.

Larry Porter continued working on the Arkansas River Valley GLO Project, searching homestead patents

in Logan County and comparing their dates to dates of notice on GLO (General Land Office) fields. The idea here is to match homestead site locations with documentary and genealogical sources. Porter concentrated on the Widow Logan site. Working closely with landowners, he conducted a ground survey and mapped the site.

Fieldwork in late fall of 2003 recorded 19 new sites as part of the Early Arkansas Settlement Project, an interdisciplinary project funded by Arkansas Humanities Council. The focus is on standing structures and early house sites or homesteads, with surface collections, mapping, test excavations, dendrochronology (tree-ring dating) of log structures, and careful documentation of architectural details. Stewart-Abernathy and Porter also conducted informant interviews about some of the sites and studied historic photographs for information complementary to the archeological results.

Other short field trips throughout the year included a new focus in response to the State Archeologist's call to gather data on historic rural cemeteries. Stewart-Abernathy and Porter visited cemeteries in Faulkner and Pope counties, and consulted with the U.S. Army Corps of Engineers, Mayflower city officials, and developers to avoid damage to two burial grounds. The station worked with the African-American Genealogical and Historical Society to help coordinate protection efforts for these cemeteries.

Research Outside the Station

Stewart-Abernathy and his assistants have been involved with the Lakeport Plantation Preservation Project for several years, working with historic photographs and oral histories, advising Survey SRP crews on archeological testing around the foundations of the antebellum house, and taking part in the excavations. Some poster exhibits describing results of the project so far were created during the year, and cd-roms containing copies of historic photographs were distributed to family members participating in the oral history project.

Stewart-Abernathy and Porter also contributed to John House's (UAPB) excavations at Wallace Bottom, a French and Indian colonial site at Arkansas Post. Stewart-Abernathy supervised excavation of a pit feature that contained both Indian and French colonial artifacts, and assisted with artifact analysis.

Larry Porter continued participation in the Arkansas Rock Art research project directed by UAF station archeologist George Sabo III. He also worked with the SRP crews at Old Davidsonville Historic State Park and the Lakeport Plantation.

Stewart-Abernathy helped with analysis of buttons found in the grave of several Confederate soldiers who died in the Battle of Helena, 1863. After documentation by Survey photographer Jane Kellett, these and other buttons were reburied along with the fallen soldiers' mortal remains.



Skip Stewart-Abernathy (left) and Will Walker cross Mill Creek to examine log foundation remains of the DeMunn Mill (ca. 1820s–1860s) near Pocahontas as part of the interdisciplinary Early Arkansas Settlement Project (directed by Joan Gould and funded by Arkansas Humanities Council). The ATU station has recorded more than 30 new historic sites while participating in the project.

ATU Station Personnel

Leslie Stewart-Abernathy received his Ph.D. in anthropology in 1981 from Brown University. He is also a graduate of Jonesboro High School and Arkansas State University. His archeological specialties include method and theory of historical archeology, historical archeology of Arkansas and the eastern United States, material culture (both industrial and pre-industrial), and underwater archeology, especially of riverine watercraft. He joined the Survey in 1977 as UAPB station archeologist and moved to the ATU position in 1989.

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

Larry Porter is a native of Logan County, Arkansas, and has been a member of the Arkansas Archeological Society since 1979. He participated in summer Training Programs and spent eight years doing contract archeology, mostly in the Ouachita National Forest, before joining the Survey in 1999 as a half-time assistant at ATU. His interests include the history and prehistory of the northern Ouachita Mountains and Petit Jean River Valley area. He is an accomplished artist and has created many original depictions of archeological subjects, some of which have appeared in publications and museum displays.

Academic Service and Activities

By agreement with the University of Arkansas System, Stewart-Abernathy has a faculty title of Associate Professor in the UAF Department of Anthropology. He teaches two courses per year for the Behavioral Science Department at ATU. Both classes are part of ATU's Basic Education curriculum. In Spring 2004 Introduction to Anthropology and Peoples and Cultures of the World enrolled 62 and 69 students, respectively. Johnson and Porter contributed as acting TAs. Also, one ATU student completed an Independent Study project and was admitted to the M.A. program in Anthropology at UAF.

Stewart-Abernathy served on two M.A. student committees at UAF and supervised their thesis projects. He was also on the graduate committee of one University of Memphis student. All three students graduated in December 2003. He is now serving on two Ph.D. committees at UAF, one in Anthropology and one in Environmental Dynamics.

Station assistance to the ATU Museum of Prehistory and History includes Stewart-Abernathy's service as Curator of Anthropology and member of the Acquisitions Committee. He also advises on museum policy and grant applications. Johnson and Porter contribute to various Museum projects, including visitor tours, curation, and exhibits. Porter produced a limited edition of prints of his original artwork for sale at the Archeology Month Open House, to benefit the ATU Museum.

Professional Service and Activities

Stewart-Abernathy added three papers from past meetings of the South Central Historical Archeology Conference to the organization's web site. Theresa Johnson worked with the Survey's Internet Applications specialist Deborah Weddle to prepare the papers for electronic publication. Johnson developed and maintained a membership database for the Conference and developed other materials for the SCHAC web site.

Stewart-Abernathy wrote a book review for *American Antiquity*.

Stewart-Abernathy, with Jamie Brandon (a University of Texas-Austin doctoral student doing research in north-west Arkansas), organized and chaired a symposium for the 2004 annual meeting of the Society for Historical Archaeology in St. Louis.

Stewart-Abernathy advised archeologists working on impact assessment and public hearing process regarding licensing of Arkansas Nuclear Plant No. 2, and continued to assist with the assessment of archeological impacts of the Intermodal Transportation Facility.

Porter provided four drawings of historic clay pipes to Forest Service archeologist Michael Pfeiffer for a report.

Public Service and Outreach

Stewart-Abernathy provided advice and assistance on matters relating to archeology to the State Historic Preservation Office, Ozark-St. Francis and Ouachita National Forests, Arkansas Highway and Transportation Department, Russellville Intermodal Transportation Facility, Arkansas State Parks (Old Washington, Old Davidsonville, Powhatan, and Plantation Agricultural Museum), Hot Springs National Park, Arkansas Post National Memorial, the Quapaw Tribe of Oklahoma, and the U.S. Army Corps of Engineers.

Stewart-Abernathy assisted MainStreet Russellville with preservation efforts regarding the former Masonic Hall and other structures in downtown Russellville. He also assisted with preservation efforts for the Gallas Rock Town Cemetery in Pope County.

The ATU station organized 11 monthly meetings and 11 lab sessions for the Arkansas River Valley Chapter of the Arkansas Archeological Society. Theresa Johnson served as Secretary/Treasurer, prepared the quarterly Chapter newsletter, coordinated volunteers, and handled press relations and publicity. Stewart-Abernathy acted as Program Chair, presenting three programs and arranging for guest speakers. He also spoke at monthly meetings of three other Society chapters, and gave a paper at the Society's annual meeting. Stewart-Abernathy and Porter supervised fieldwork at the Society's annual summer Training Program. Stewart-Abernathy did follow-up research on historical archeology results from the 2003 Training Program. He helped two Society members with a research project and a USACE ARPA permit report. Porter contributed a piece of his original artwork to benefit the Society's Archeological Research Fund. He also provided a drawing for use on the Archeology Month poster. The station held an Open House attended by 110 persons during Archeology Month, with craft demonstrations by flint-knapper Ben Swadley and basketmaker John Hampton.

Johnson and Porter distributed teacher packets with information on archeology, American Indians, and early Arkansas settlers to public school teachers.

Station staff assembled an exhibit for Cadron Day and participated at the event, which was attended by about 300 Conway middle school and high school students.

Stewart-Abernathy presented various programs at the Pope County Historical Association, the Texas Archeology Month Archeology Fair, the Arkansas River Valley, Ouachita, Delta, and Ko-ko-ci chapters of the Arkansas Archeological Society, Pottsville Middle School, an ASU-sponsored Historic Preservation Seminar at Lake Village (in association with the Lakeport Plantation Preservation Project), an ATU Museum Open House, Petit Jean State Park, the Ozark-St. Francis National Forests Passport in Time Project, the Economy (Pope County) Community 24th Reunion, the Teachers of Arkansas Studies Council Resource Fair in Fort Smith, and the Searcy County Historical Society.

Combined audiences for public presentations were 879 persons, including 345 middle and secondary school students.

Additional audiences included over 250 persons attending the grand opening of Tunica RiverPark Museum in Tunica, Mississippi, 110 persons attending the Lakeport Reunion, and 300 school children at Cadron Day. ATU staff created exhibits for these events.

ARKANSAS STATE UNIVERSITY, JONESBORO

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

The ASU research station covers 15 counties in northeastern Arkansas. American Indian cultural development from 12,000 B.C. to historic times and early Euroamerican settlements are all part of the archeological record. Among the well-known sites are Sloan, a Dalton period mortuary that is the oldest known cemetery in North America, and the King Mastodon, which was featured in *National Geographic* magazine. A large number of sites date from the scientifically critical transition that occurred about 10,000 years ago between the Ice Age (Pleistocene) and modern (Holocene) climatic regimes. Geographically, the ASU station incorporates the eastern border of the Ozark Plateau and the vast lowland areas of the Mississippi River basin and its tributaries. Station territory thus provides ideal natural laboratories for the study of diverse ecological adaptations in Arkansas prehistory.

CURRENT RESEARCH

The Judd Hill Heritage Project

Morrow and Thomas, along with students from Morrow's classes at ASU, conducted fieldwork at Tulot and Judd Hill cemeteries as part of an effort to preserve African-American heritage in northeast Arkansas. The cemeteries, located on the old Judd Hill Plantation, are two of the few extant African-American cemeteries in Poinsett County. The plantation is now divided between two trusts (the Purvis Trust and the Judd Hill Foundation Trust) that rent the land to local farmers for cotton, rice, and beans.

In 1995, the Judd Hill Memorial Scholarship Committee was formed to encourage African-American students, including descendants of Judd Hill sharecroppers, to pursue higher education. Committee members also researched the history of the old plantation, and participated in a conference, "Reclaiming Our Past to Preserve Our Future," about preservation of African-American cemeteries. These two severely damaged cemeteries are the only surviving above-ground evidence of the African-American culture that worked the land and built the Judd Hill Plantation. The group then obtained a grant from Arkansas Humanities Council to aid research efforts, and sought the Archeological Survey's help in obtaining information needed to nominate the cemeteries to the National Register of Historic Places.

Morrow and her student Debbie Anderson first visited the cemeteries on December 18, 2003, along with Mattie Wortham of the Scholarship Committee and Ken Heard, reporter for the *Arkansas Democrat-Gazette*. The group observed many damaged headstones,

numerous unmarked grave-sized depressions, and newer hilled-up soil mounds that had plant stands or flowers associated with them. In addition to vandalism, there was damage at the Tulot cemetery caused by encroachment of the adjacent farm field and county roads.

In February, ASU students from three of Morrow's classes (Introduction to Archeology, Native American Cultures of the Mid-South, and Environmental Geology) documented all the existing headstones using standardized recording forms. Headstone locations and perimeter corners of the cemeteries were mapped by Deric Wyatt of the Arkansas Highway and Transportation Department.

At both cemeteries, the crew placed pin flags at each headstone or suspected grave site and recorded the GPS location and basic data for each grave. At Tulot there were 80 depressions or soil mounds, only 22 of which were marked by headstones. At Judd Hill, 92 depressions or soil mounds were recorded, 31 of them with stones. The earliest birth dates on grave markers at Judd Hill and Tulot, respectively, were 1890 and 1881; however, archival sources indicate that the cemeteries were in use earlier, and both are still in use today.

The Judd Hill project was featured in the spring 2004 number of *Black Issues in Higher Education* and in the *Arkansas Democrat-Gazette*.

Paleoindian Research

Morrow continues to be active in research about the earliest occupants of North America, the Paleoindians. Current projects include editing papers and writing



The Judd Hill Cemetery. ASU station staff worked with the Judd Hill Memorial Scholarship Committee, the Arkansas Highway and Transportation Department, and the Arkansas Humanities Council to record information about the cemetery for a National Register nomination. Morrow's ASU students gained first-hand field experience in documentation and mapping during the project.

the introduction for a proposed volume on North and South American Paleoindian manifestations. During ASU's fall break, she visited the University of Arizona and measured and studied Paleoindian artifacts of the Clovis culture from Murray Springs and other sites in the San Pedro Valley. And at the annual meeting of the Society for American Archaeology in Montreal, Morrow presented a paper titled "Time, Space, and Technological Variation in the Clovis Age."

Results of Greenbrier Neutron Activation Analysis Point to New Interpretations of Pottery Decoration and Trade

Excavations at the Greenbrier site took place in 1999 and 2000 as part of the Arkansas Archeological Society's annual summer Training Program for amateur archeologists. Participants recovered over 8000 ceramic sherds. Analysis of these and other artifacts from the site continues as one of the ASU station's main research projects.

A sample of 50 sherds was subjected to neutron activation analysis at the University of Missouri Research Reactor (MURR) to help Morrow test the hypothesis that some sherds come from imported vessels, rather than being made from local clays. If the source of the clay can be identified, researchers would have more

precise information about social relations within a broad geographic region of the Central Mississippi Valley than has previously been possible.

Neutron activation analysis identifies the chemical composition of substances through a series of irradiations followed by gamma ray spectroscopy, which graphs the elements present in the sample and their concentrations. Sherds from pottery likely to have been made locally were submitted for analysis, along with unusual sherds, pottery "squeezes" (fragments of tempered but unformed clay paste that might be childrens' toys, or waste from a potter's work area), and modern raw clay samples collected from White River alluvial deposits near (not on) the Greenbrier site.

The raw clay samples had the simplest chemical composition. Next were the squeezes, which had crushed mussel shell and rock grit to add body and strength to the clay paste. The ceramic vessel sherd samples clustered into three groups. The squeezes were nearly identical to ceramic sherds in Group 1 and very close to those in Group 2. Both sherd groups, then, were likely to have been made from "local" clays obtained in the White River basin, rather than more distant Mississippi River deposits. Yet, the pottery types represented as local were not entirely as expected.

Group 3 consisted of sherd types that would easily be interpreted as imports from the Mississippi Valley, using traditional archeological arguments based on style and decoration. But the chemical composition of these sherds was still fairly similar to the local clays.

The process identified four sherds that probably were imported from the Mississippi Valley. Their chemical composition was closer to ceramic groups previously defined for the Cahokia site at East St. Louis, Illinois and for the Campbell site in the Missouri bootheel.

Neutron activation analysis of these 50 sherds from Greenbrier was a pilot project that points to new ideas for further study. The evidence suggests that certain vessel shapes (bowls, rather than jars) were more likely to have been imported. Combined with other methods of ceramic analysis, neutron activation can also help identify the variability of decorative techniques used within a single community, and this would go a long way to clarify the real meaning of pottery decoration as a defining cultural trait.

ASU Station Personnel

Juliet Morrow received her Ph.D. in anthropology in 1996 from Washington University in St. Louis. She joined the Survey as ASU station archeologist in 1997, after a position with the Office of the State Archeologist of Iowa's Highway Archeology Program and earlier work for private firms and the U.S. Army Corps of Engineers. Morrow's background in earth sciences provides expertise in geoarcheology, geomorphology, and site formation processes. Much of her archeological work has focused on the Paleoindian period and multidisciplinary studies of hunter-gatherer lifeways, stone tool technology, and Pleistocene/Early Holocene ecology.

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

Academic Service and Activities

By agreement with the University of Arkansas System, Juliet Morrow has a faculty title of Assistant Professor in the UAF Department of Anthropology. During 2003-2004 she taught six classes for the Department of Criminology, Sociology, Geology and Social Work at ASU: 26 students completed fall and spring sections of Introduction to Archeology (ANTH 3203); 19 students completed fall and spring sections of Native American Cultures of the Mid-South (ANTH 3233); 108 students completed fall and spring sections of Environmental Geology (GEOL 1003). In addition, Morrow taught Independent Study classes in several topics under Anthropology, Sociology, and History titles (five students). The topics were Physical Anthropology, Internship in Public History, Graduate Research in Archeology, Archeology for Elementary Education Teachers, and Human Osteology.

Morrow provided a field opportunity for students in her classes, who earned extra credit by volunteering for Survey-sponsored excavations at the Walnut Mounds and writing about their experience.

Thomas gave guest lectures to students in Prof. Rick Burns' Introduction to Anthropology classes and Prof. Donaghy's Introduction to Minority Groups classes in 2003-2004. The total number of ASU students served was 370.

Professional Service and Activities

Morrow wrote a book review for *Geoarchaeology*.

Morrow served on the Missouri Archaeological Society Board of Directors.

Morrow filed site forms for historic cemeteries in Poinsett County as part of the State Archeologist's Historic Cemetery Recording Project.

Public Service and Outreach

Morrow gave public talks and slide shows to the Pocahontas Rotary Club, a workshop of the Delta Heritage Initiatives Program (37)

Morrow provided an archeology lecture and tour of the station to secondary school teachers participating in ASU professors Marty Huss and Robyn Hannigan's course "Evolution and Science in the Classroom," which was sponsored by a grant from the Arkansas Department of Higher Education.

Morrow was "shadowed" by a Nettleton school student, who toured the station library, archives and lab, learned how to process artifacts, heard a lecture about the station's Early Americans research, and attended presentations by students in Morrow's Environmental Geology class at ASU.

Morrow served as a judge of Environmental Sciences projects in the Northeast Arkansas Regional Science Fair.

Morrow presented a slide lecture and co-organized and chaired a symposium on Middle Woodland Archeology for the Missouri Archaeological Society and Missouri Archaeology Month in Columbia, Missouri.

Thomas gave public talks and slide shows to the Truman Rotary Club, Westside School (two dates, 289), Marmeduke Elementary School (90), Hillcrest Elementary School (90), Hoxie schools (130), Pumpkin Hollow (230), and Parkin Archeological State Park (870). He also led a tour of the archeology lab for 70 local elementary school students and their teachers.

Thomas spoke at Parker Homestead on various dates, including Pioneer Days, with total combined audiences of approximately 3800 schoolchildren, teachers, and other adults.

Morrow and Thomas aided the Central Mississippi Valley chapter of the Arkansas Archeological Society by arranging guest speakers for monthly programs, supervising volunteer work in the station lab, and coordinating volunteers for fieldwork opportunities. Audiences for the nine evening programs ranged from 25 to 97 persons.

Morrow taught the Faunal Identification seminar to six participants at the Arkansas Archeological Society annual Training Program in Blytheville.

Morrow provided various kinds of assistance on archeological matters, including: salvage excavation of a burial and related report to the State Historic Preservation Officer; consultation with the Quapaw Tribe; letters to various private citizens from Arkansas, Iowa, and Kentucky concerning fluted point finds; Ms. Charlene Sykes, concerning the Scott Bond Cemetery; loan of artifacts to Arkansas Game and Fish Commission for an exhibit at the Crowley's Ridge Nature Center; loan of artifacts and scanned images to Dr. David Ware, Capitol Historian, for an exhibit at the State Capitol; a regional meeting on "Preservation of African-American Cemeteries" sponsored by Arkansas Humanities Council; a request from the Missouri Highway and Transportation Department; the Archaeological Conservancy, concerning a mound site in Tyronza, Arkansas; historian Jay Belew, concerning artifacts discovered in a pipeline excavation; and numerous other contacts with Arkansas citizens about archeological sites on their land, artifacts in private collections, and accidental discovery of some human skeletal remains.

BLYTHEVILLE AEROPLEX RESEARCH STATION

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

The tenth and newest Survey station, located at the Arkansas Aeroplex on the decommissioned Eaker Air Force Base, opened in July 1999. The station is responsible for Mississippi and Crittenden counties in northeast Arkansas, which together contain well over 1000 recorded archeological sites, including four American Indian sites that are listed on the National Register of Historic Places—Chickasawba Mound, Eaker, Nodena, and Zebree; Eaker and Nodena are also National Historic Landmarks. A site on Bradley Ridge is the probable location of the American Indian town of Pacaha, visited by Hernando de Soto in 1541. The former air base property itself incorporates a number of significant, well-preserved archeological sites. One focus of the station is a program of cooperative research with geologists and seismologists to identify and date ancient earthquake features. The result is a better understanding of the frequency and periodicity of earthquakes in this seismically active region, and of the ways in which earthquakes affect archeological sites.

CURRENT RESEARCH

The Blytheville station has developed a focused and coordinated program of research in which all activities contribute to one or more of the planned areas of long-term investigation: 1) Mississippian community patterning as revealed through architectural remains; 2) the nature of small chiefdoms; and 3) “earthquake” archeology. The three areas are interrelated. Cumulative results of all research benefit the Blytheville community’s goal of enhancing heritage tourism in the Delta area, and provide support for a proposed national park that would interpret the rich archeological record of the Lower Mississippi Valley.

The Eaker Site: A Long-Range Research Plan Guides New Excavations

Payne wrote a multiyear Research Plan for the Eaker site, located on decommissioned air base property now owned by the city of Blytheville. Eaker is a prehistoric American Indian site on Pemiscot Bayou that was occupied off and on by different cultural groups for as long as a thousand years. But the occupation of primary interest to current research was a Mississippian period village or small town inhabited about 400 to 800 years ago.

Eaker is a National Historic Landmark and is listed on the National Register of Historic Places. It also is recognized as a Quapaw Sacred Place by the Quapaw Tribe of Oklahoma. The site is significant archeologically as one of the largest intact Late Mississippian sites in the Middle St. Francis Basin. It is extremely well preserved in comparison to other sites in the region which have

been subjected to heavy agricultural use over the years, or lost or damaged by river erosion.

Previous work at Eaker proves that intensive archeological fieldwork at the site should produce excellent results. Geophysical remote sensing surveys have revealed underground features interpreted as prehistoric houses, perhaps lined up along “streets.” Other subsurface anomalies are probably sandblows and other earthquake features.

Proposed fieldwork outlined in the Research Plan includes a series of controlled surface collections, eventually covering the entire 30-hectare site, additional remote sensing surveys, and full scale excavation of selected areas to uncover house remains and to understand how the community was organized. Payne wants to find out whether the site had a central plaza, whether there were defensive structures such as a moat and palisade, and whether there was once a flat-topped temple mound. No mound exists today, but local memory recalls a mound and aerial photography reveals a possible mound location.

Research at Eaker will provide important baseline knowledge about the chronology, environment, and community organization of this significant period in American prehistory. A good beginning to the long-term Research Plan was accomplished near the end of fiscal year 2003-2004 when the Survey and the Arkansas Archeological Society held their jointly managed annual Training Program for amateur archeologists at Eaker last June. More about the 2004 Training Program—its goals

and preliminary results—can be found in the “Partners in Preservation” chapter of this Annual Report (see pages 85–86).

If a park is developed around Eaker, the archeological information gathered under the ongoing Research Plan can be used to create interpretive exhibits such as a reconstructed prehistoric village.

Small Chiefdoms: The “Real” Mississippian

The Mississippian culture of late prehistory was born in the river valley for which it is named, but stretched across a quarter of the United States before its decline, shortly before the colonial era. It was a society based on corn agriculture, with a far-flung trade network providing, among other things, exotic prestige goods that eventually found their way into the elaborate burials of hereditary chiefs and aristocrats. Other signs of a stratified social organization are the large platform mounds found at many sites, with the houses of religious and political leaders built on top of them.

The largest and most elaborate sites have naturally attracted the most attention from archeologists (and from the public) over the decades. But Payne has argued that this is like judging American culture solely on the basis of New York City. In fact, most Mississippian people lived outside the major centers, in smaller towns and villages or tiny hamlets and farmsteads, tending the agricultural fields that supported this large, diverse, and complex cultural system.

Archeologists need a model to help them recognize the archeological “signature” of smaller local chiefdoms—what Payne has called the “real Mississippian.” Developing such a model has been one of Payne’s primary research efforts, using ethnographic information about small chiefdoms around the world and comparing it with the archeology at smaller Mississippian sites. The Eaker site fits this need. Payne is also using her previous research at sites in Florida, where she was able to study transformations in the expression of chiefly power over time.

Lake Jackson Chiefdom

Payne’s presentation at the Southeastern Archaeological Conference in November 2003 outlined the rise and fall of the Lake Jackson site as a chiefly capital of the Apalachee region of Florida’s eastern panhandle. The earliest settlement at the site was a cluster of small farmsteads, with no mound and no indications of powerful leadership. By the mid-1100s, population had grown and at least one platform mound had been built, possibly two. Houses on top of these mounds emphasized the higher social position of leaders, but there were no artifacts decorated with Southeastern Ceremonial Complex (SECC) iconography and nothing to show ties



Claudine Payne photographs a completed excavation level under protective sunshades at the Eaker site.

with the larger Mississippian world. With several other similar sites in Apalachee at the time, it would appear that leadership was in the form of small chiefdoms with authority based on kinship rather than divine support.

But within a century, the Lake Jackson site had expanded dramatically to become the largest mound site in Apalachee, and probably the seat of the paramount chief of the region. It now had numerous mounds, a hereditary chief’s house, a chiefly temple, a plaza for public events, and elite burials containing exotic artifacts with SECC motifs that link high-status persons with the spirit world. These mythological connections argue for a shift in world view, with chiefly authority now legitimized by religion.

The Lake Jackson study allows an archeological exploration of the development from one type of chiefdom to another and helps define a material “signature” for each type. Payne and other archeologists can use this model to understand comparable sites in Arkansas.

Archeology and Paleoseismology

Station assistant Marion Haynes has worked for years in collaboration with earthquake scientists from the University of Memphis and the U.S. Geological Survey to study the unique earthquake-affected topography and stratigraphy of northeastern Arkansas, which is in the

New Madrid Seismic Zone. Archeological information is useful to the geologists because it can help provide dates for earthquake-caused features in the ground. Archeological sites disturbed or buried by earthquake features often contain artifact styles whose approximate dates are already known, or provide samples such as charcoal from ancient fireplaces that can be dated by radiocarbon or other methods.

The data of paleoseismology (the study of ancient earthquakes), in turn, is beneficial to archeologists, who need to understand the complex relationships of soil layers in the ground which might have been produced or deformed by earthquakes. In this seismically active region, it is also important to get a sense of how the ancient inhabitants' lives may have been affected by earthquakes: how often did earthquakes occur, and what sort of damage or disruption did they cause to prehistoric settlements?

During the fall of 2003, Marion Haynes worked again with scientists from the U.S. Geological Survey,

who were in Blytheville as part of a larger project to study the liquefaction potential during earthquakes in the Lower Mississippi Delta region. Haynes accompanied USGS seismologist Dr. Tom Noce, who used a Subsurface Exploration Cone Penetration Truck to identify different soil types and their distance below the surface.

Sand layers are prone to liquefaction, which occurs when sand and water are shaken and the mixture forced upward to erupt as geysers. Haynes guided Noce to known liquefaction feature sites from past earthquakes in the area to collect comparative data. The truck unit can also gather information on how rapidly seismic waves are dispersed by the soil, which helps predict how much ground shaking would occur in specific local areas in the event of an earthquake. This kind of data can help with emergency management planning.

Haynes' expertise led to his appointment to the Arkansas Governor's Earthquake Advisory Council in August 2003.

Blytheville Station Personnel

Claudine Payne received her Ph.D. in anthropology in 1994 from the University of Florida and joined the Survey in 1999 to run the new Blytheville research station. Previously, she taught anthropology at the University of Florida, the University of Illinois at Champaign-Urbana, and Armstrong Atlantic State University in Savannah, Georgia. Her research specialization in late Precolumbian archeology of the Southeast, especially political organization of chiefdoms, is ideal for the Blytheville station territory, which was home to a thriving and complex American Indian society 500 years ago.

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

Academic Service and Activities

By agreement with the University of Arkansas System, Claudine Payne holds a faculty title of Assistant Professor in the UAF Department of Anthropology. Like all station archeologists, she is available to assist students with research projects in station territory.

Payne contributed lectures to the Arkansas History class at Arkansas Northeastern College (12 students) and to a freshman archeology seminar at Washington University in St. Louis (12 students).

Professional Service and Activities

Payne served on the Media Relations Committee of the Society for American Archaeology.

Payne was chair of the Survey's Publications Committee, and reviewed several manuscripts.

Payne was Secretary of the Southeastern Archaeological Conference and Program Chair for the 2006 SEAC, to be held in Little Rock. She also wrote a book review for the SEAC journal *Southeastern Archaeology*.

Haynes was elected to the Arkansas Governor's Earthquake Advisory Council, which meets twice yearly. Haynes collected specimens for an osteological comparative collection for the Blytheville station. Haynes assisted field projects for other Survey research stations at Parkin and the Wallace Bottom site. Haynes assisted U.S. Geological Survey researcher Tom Noce with a soils study in the Blytheville area.

Public Service and Outreach

Payne presented talks on archeology to the Western Cherokee Tribal Council (20), Delta Archeological Society (25), Cahokia Archaeological Society in Collinsville, Illinois (20), Archaeological Conservancy tour group (35), Monticello chapter of the Arkansas Archeological Society (15), Blytheville Rotary Club (50), College Now's "Girls of Promise" group sponsored by Arkansas Northeastern College (25), Blytheville Kiwanis Club (35), Blytheville Lion's Club (50), three presentations to Arkansas Archeological Society Training Program participants (95), Blytheville First Baptist Men's Fellowship Group (20), and visitors to the Society Training Program (5). Combined audiences of 395.

Haynes presented talks (or guided tours) to the First Baptist Church of Osceola's Senior Group (20), Mississippi County Emergency Management Team (15), Progressive Women's Club, Osceola (10), Osceola High School Earth Sciences class (25), Jonesboro chapter of the Arkansas Archeological Society (50), Archaeological Conservancy tour group (35), Blytheville Middle School art class (45), Gosnell Middle School Career Day (35), and visitors to the Society Training Program (35). Combined audiences of 270.

Payne and Haynes served as organizers and advisors of the Delta Archeological Society, a local interest group. Payne acted as program chair to arrange guest speakers. The station hosted an Open House to start the year's program, and Payne presented two talks to the Society. Attendance at the nine monthly meetings averaged 13.

Payne and Haynes together staffed an information booth for the station and the Delta Archeological Society at Big Lake Wildlife Day at the Big Lake National Wildlife Refuge. Attendance about 50.

Payne and/or Haynes welcomed 201 visitors to the Blytheville research station.

Payne continued as advisor to the Blytheville Public School District's NEH-funded project, "Linking the Past with the Future."

Haynes and Payne continued to work with representatives of the Archaeological Conservancy to preserve important sites in station territory. Both gave presentations to participants in the Conservancy's "Peoples of the Mississippi Valley" tour.

Payne continued working on her comprehensive evaluation of the Arkansas Archeological Society Training and Certification Program. She presented a paper on preliminary results at the Society's annual meeting.

The Blytheville station hosted the Arkansas Archeological Society's annual Training Program for 2004. Payne directed the excavations at the Eaker site. Haynes supervised excavations and mapping.

Payne and Haynes staffed the Survey/Society information booth at the Arkansas State Fair.

Payne and Haynes served on the Blytheville-Gosnell Chamber of Commerce's Archeology/Heritage Committee. Payne provided information about the station and archeology for the Chamber's new web site.

SPONSORED RESEARCH PROGRAM

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

Developed in the 1970s as a statewide response to federal, state, and private agency requirements for the management of cultural resources in Arkansas, the Sponsored Research Program (SRP) conducts externally funded research based on grants, contracts, and cost-share agreements. Projects range in scope from documenting cultural resources within small areas to resource overviews of large regions of the United States. To date, SRP has completed nearly 1000 studies within Arkansas and in adjacent states. Service to the university community is provided through teaching, graduate committee membership and advising, and providing employment to qualified students as field and laboratory technicians.

CURRENT RESEARCH

Old Davidsonville State Historic Park

Under the direction of Kathleen Cande and Jami Lockhart, SRP conducted three weeks of geophysical and archeological fieldwork at Old Davidsonville State Historic Park, near Pocahontas in Randolph County. Old Davidsonville is the site of a town platted in 1815 that was a county seat and commercial center until it was abandoned around 1830. The town had been bypassed by a key transportation route, and the county seat moved elsewhere. No buildings survive above ground. Most of the town site was included within Old Davidsonville State Historic Park, created in 1957 under the jurisdiction of the Arkansas Department of Parks and Tourism.

State Parks funded the 2004 research to expand and enrich public interpretation at Old Davidsonville. Geophysical remote sensing imagery revealed features below the ground surface thought to represent the locations of the old courthouse, post office, and two streets bounding the public square. The crew then excavated several units to test these ideas, with exciting results.

Three corners of the courthouse were exposed in the excavations. One corner was remarkably intact, with a portion of brick flooring still in place. The building most likely measured 24 by 32 feet and was constructed of locally made brick. Most of the whole bricks and some of the dolomite foundation blocks apparently were salvaged and reused elsewhere. Some prehistoric artifacts, probably dating to around A.D. 1300, were also found.

The "post office" probably was a desk in the home of the town's first postmaster, Adam Ritchie. Two corners

of Ritchie's house were located. Like the courthouse, the foundation of this house was dolomite blocks, but no brick was used in its construction, except for the chimney. It may have been a log structure. Thousands of artifacts were recovered from around the house foundation, including quantities of window glass fragments, a wide variety of ceramic sherds, dozens of nails and other hardware, lots of pork bones, a musket ball, a gilt button, a Jew's harp, and a kitchen knife.

Becky Wright and Eddy Cemeteries

Robert Mainfort and James Davidson, a University of Texas-Austin Ph.D. candidate, completed description and analysis of the Becky Wright and Eddy cemeteries, located in Crawford County. Expansion of Lake Fort Smith will inundate these two late 19th century Euroamerican cemeteries. In the fall of 2001, SRP conducted archeological excavations at the cemeteries to remove the human remains and associated coffin hardware and personal items. Davidson, who earned his M.A. in anthropology at UAF, is an authority on 19th century mortuary artifacts, especially coffin hardware and related items.

Using period catalogs as a reference, the clothing worn by the deceased at burial was reconstructed based on preserved artifacts such as button forms and collar studs, and their locations with respect to the bones. Analysis of coffin hardware included an exhaustive study of utility patents and contemporary mortuary hardware catalogs.

Documentary sources, especially catalog prices for artifacts associated with mortuary display (primarily



SRP's Michael Evans and Jared Pebworth excavating in the area of the courthouse foundations at Old Davidsonville.



A tombstone from the nineteenth century Becky Wright Cemetery at Lake Fort Smith.

coffin hardware), allowed the team to calculate the cost of each individual burial. A number of striking contrasts between the two cemeteries—only a mile apart and contemporary with each other—were revealed. A monograph on the cemeteries, exploring these contrasts from a socioeconomic perspective, likely will be published by the Survey during 2004-2005.

Otter Creek Development Project

One of Randy Guendling's projects this year had useful results even though significant archeological deposits were not found within the project area. The Otter Creek Development is located in western Pulaski County, where over 138 survey and site testing projects have been completed, most of them during the last 25 years. As a result of all this work, over 560 archeological sites are recorded in the county. This represents a significant body of data about site location that can be used to predict the likelihood of finding new sites in specific environmental situations.

The Otter Creek Development encompasses 176 acres of land in both creek bottoms and upland zones. A records and literature search prior to fieldwork indicated that early historic sites were unlikely to be found in the immediate vicinity of the development—the earliest maps of the area show nothing, and previous cultural resource surveys near the project have not recorded historic remains. The records also indicate that prehistoric sites of all periods were possible; however, the known prehistoric sites are closer to the main stem creeks.

Results of the SRP field survey accorded with these predictions. There were no indications of historic structures in the development area. The only prehistoric find was a single arrow point, suggesting an ephemeral use of the area by hunters. A clearly recognizable impact fracture on the tip indicates this arrow was shot at some unknown quarry and probably damaged, as well as lost, when it missed.

The Otter Creek project not only confirms what could be predicted from the extant literature and site

files, it also underscores the fact that archeology is a cumulative process. Without the large body of site data on record, we could not expect our predictions to be very reliable. Moreover, we need studies such as this one to demonstrate that reliability. Even what seem to be negative results can be an important addition to the archeological record.

Old Washington Historic State Park

Beginning in the early 1980s, the Survey has conducted several excavations, including joint Training Programs with the Arkansas Archeological Society, at Old Washington Historic State Park. A number of technical reports and professional journal articles have been published, but so far there has been no synthesis of

the work for the general public. The Survey recognizes a clear need for affordable and accessible books on this and other archeological research in the state.

With funding generously provided by a grant from the Arkansas Natural and Cultural Resources Council, Mary Kwas began work on a general audience book about the Survey's research at Old Washington Historic State Park. Using the available published material on the history of the town and the existing technical reports as background, Kwas conducted detailed research on the Block family, a large merchant family associated with one of the primary houses interpreted in the park. Several draft chapters are now completed. Work on the project, including photography and discussion of key artifacts, will continue into the next fiscal year.

New Grants and Contracts in 2003-2004

Project Name	Firm or Agency	Budget
Old Davidsonville	Arkansas Natural & Cultural Resources Council	75,000.00
Menard Geophysical	National Park Service	15,000.30
Little Rock Wastewater	LR Wastewater Utility	1,796.22
Springdale North Side Sewer	McGoodwin Williams & Yates	3,386.45
Old Davidsonville	Dept. of Parks & Tourism	61,180.14
NWARA Access	Barnard Dunkleburg & Co.	9,964.47
Powhatan Courthouse	Dept. of Parks & Tourism	2,546.52
HAM Geophysics	Historic Arkansas Museum	6,834.25
		175,708.35

SRP Personnel

Robert C. Mainfort, Jr. received his Ph.D. in anthropology in 1977 from Michigan State University. He joined the Survey in 1994 as SRP administrator. His interests include mortuary studies, archeological systematics, historical archeology, and archeology and public education.

Kathleen Cande received her M.A. in anthropology at UAF in 1984 and is pursuing a Ph.D. in History. She joined the Survey in 1987. Her research interests include archeological textile analysis, archival research, the colonial Southeast, and historical archeology.

Randall Guendling received his M.A. in anthropology at UAF in 1993. He has been employed by the Survey since 1981. His research interests include historical archeology, Arkansas history, and prehistoric lithic analysis.

Michael Evans and Jared Pebworth contribute varied skills to SRP and station research projects, including all phases of archeological fieldwork, survey and mapping, flotation, production of CAD and other graphics, and conservation of metal artifacts.

Lindi Holmes is SRP 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 title of Professor in the UAF Department of Anthropology. He teaches one donated course per year. In spring 2004 Archeology of the Mid-South (ANTH 4243) had an enrollment of eight graduate students. He also taught three Independent Study courses, chaired two graduate committees and served on six others, including one doctoral committee at the University of Texas-Austin.

Cande led laboratory tours for two University of Arkansas archeology classes.

Professional Service and Activities

Cande served as Gulf States current research editor for the *Newsletter of the Society for Historical Archaeology*, and as Arkansas current research editor for the *Southeastern Archaeological Conference Newsletter*.

Cande assisted Dr. Walter Manger (UAF Department of Geosciences), and Blake Smotherwell of Burns & McDonnell with information on stone artifacts for various projects.

Cande reviewed a book manuscript for the journal *Southeastern Archaeology*.

Cande coordinated a visit by Brian Olson, an engineer with the National Park Service, who conducted a "Security and Fire Protection Survey" of the University Collection Facility.

Mainfort served on the Editorial Board of *Midcontinental Journal of Archaeology*, and on the National Historic Landmarks Committee of the Society for American Archaeology.

Mainfort reviewed two papers for the journal *Southeastern Archaeology* and a book manuscript for a university press.

Mainfort wrote book reviews for *Southeastern Archaeology* and *Illinois Archaeology*.

Mainfort served as Series Editor of the Survey Publications Program.

Mainfort served as a consultant to the University of Arkansas Museum, Arkansas State Parks, and Arkansas Department of Heritage, and provided assistance to the Quapaw NAGPRA representative.

Public Service and Outreach

Cande helped assemble artifacts for an exhibit at Old State House Museum.

Cande led tours of the SRP laboratory for a large group of 4-H students and their supervisors.

Mainfort served as lead judge for the Senior Behavioral Science section of the Northwest Arkansas Science Fair.

Mainfort represented the Survey at the Arkansas Teacher's Conference in Little Rock.

Mainfort agreed to serve as guest curator for Raiders of the Lost Arkansas, an upcoming exhibit on the legacy of Samuel C. Dellinger at the Old State House Museum.

Mainfort prepared an exhibit on prehistoric ceramics for Arkansas Archeology Month.

SRP Titles for 2003-2004

Guendling, Randall L.

2003 A Cultural Resources Survey of the Otter Creek Development Area, Pulaski County, Arkansas. Final Report, Project 03-13. Submitted to Otter Creek Land Company, Little Rock, AR.

2003 A Cultural Resources Investigation of Corps of Engineers Permit Area, Clinton Presidential Center, Pulaski County, Arkansas. Final Report, Project 03-14. Submitted to Phelps Program Management, Little Rock, AR.

2004 A Cultural Resources Survey of the Johnswood House Area, Pulaski County, Arkansas. Final Report, Project 04-05. Submitted to Little Rock Wastewater Utility, Little Rock, AR.

2004 A Cultural Resources Survey of Selected Springdale Sewerline Extensions, Benton and Washington Counties, Arkansas. Final Report, Project 04-06. Submitted to McGoodwin Williams & Yates, Fayetteville, AR.

COMPUTER SERVICES AND ARCHEOGEOPHYSICAL RESEARCH

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

The Survey's Computer Services Program (CSP) is responsible for all aspects of electronic information management, including systems administration, computer operations, equipment purchasing, research, instruction, and user support throughout the organization. Our pioneering computer database for archeological site information (AMASDA) is one of the most comprehensive such applications in the country. The Survey has worked toward an approach that integrates the different data structures and digital tools being used in archeological research and cultural resource management today. Key components of this integrated approach include geographic information systems (GIS), relational database management systems, and exploratory data analysis. CSP provides online access to AMASDA for qualified subscribers and is working to provide web-enabled database access (with some information categories password-protected) for agencies involved with cultural resource management in Arkansas. Our educational web sites are maintained in response to public interest as well as agency and research needs. The newest component of the Survey's computer applications program is a full complement of remote sensing technologies for near-surface prospection on prehistoric and historic archeological sites.

CURRENT RESEARCH

Aging Computers and Outdated Systems Addressed

Much of Weddle's time during 2003-2004 was dedicated to computer systems security, end-user support, web server administration, computer repairs and upgrades, and acquisition and deployment of equipment and software. Of major concern was the necessity to upgrade the operating systems on most personal computers.

In January of 2004, Microsoft Corporation announced the discontinuation of new service packs and security fixes for the Windows 98 operating system. Since the majority of the Survey's computers ran under Windows 98, this left the organization highly vulnerable to malicious hackers and virus attacks. With options severely limited by continuing budget constraints, Weddle evaluated the condition of the Survey's aging fleet. Out of 73 computers in active use, 29 could be successfully upgraded with minimal costs per unit. Additional memory and CD-recordable drives were purchased for the eligible computers, and the outdated operating systems and application software were upgraded to the latest versions. These upgrades should allow the Survey to leverage another year or two's use from these already 5- and 6-year-old computers.

Only eight new computers could be obtained during 2003-2004. Four of these replaced nonrepairable note-

book computers, three replaced obsolete desktops, and one was purchased with grant funds. The remaining 36 Survey computers run non-Microsoft operating systems, or will be used for specific purposes that do not require regular software updates and support.

The Survey on the Web

The Survey's web site averaged 1455 visits per month for fiscal year 2003-2004, with a year-end total of 17,462. The site provides information on state laws protecting archeological resources, listings of Survey publications, news about recent and ongoing projects, and points of contact with Survey research stations throughout the state. Also available are various resource materials and activity ideas for teachers to use in the classroom and links to several other archeology-related web sites. The Survey's "Standards for Fieldwork and Report Writing" was added this year, and information about the joint Training Program for amateur archeologists, conducted annually by the Survey and the Arkansas Archeological Society, was updated. Content for Arkansas Archeology Month is also updated annually.

A complete redesign of the web site is being planned for fiscal year 2004-2005. Also being considered is the formation of a "Crossroads of the Past" web portal which would integrate the *First Encounters* CD-ROM content, other currently available educational materials,

and the new Radiocarbon and Citations databases into one cohesive and easily accessible product. This would greatly enhance the value of the web site for distributing information about the Survey and Arkansas archeology, and also for basic research purposes, including student research.

The Survey's two interactive educational web sites continued to be popular. *First Encounters: Native Americans and Europeans in the Mississippi Valley* is based on George Sabo's NEH-funded CD-ROM of the same title. It consists of an array of primary source material on early contact between Indians and Europeans in the Southeast, organized under several topical headings and at levels of difficulty for use by middle school, high school, and college students and their teachers. *Rock Art in Arkansas* is the culmination of an Arkansas Humanities Council grant which allowed a Survey research team led by George Sabo to compile and update all extant records on rock art in the state. A searchable database was created for the web site, which also has a variety of teaching resources suitable for art history, social studies, and information technology instruction. *First Encounters* received 14,979 homepage visits in 2003-2004 and *Rock Art* received 4356.

Weddle also maintains "Archeological Parks in the U.S.," which had 8525 homepage visits. Support for the South Central Historical Archaeological Conference web site was continued as a service activity.

Grant Projects: Databases & Mack-Blackwell

Under the Survey registrar's grant from Mack-Blackwell Rural Transportation Center, Weddle is currently designing a new web site that will enable users to perform customized web-based searches of the Survey's various site record databases: Radiocarbon Assays, Citations, Site and Artifact Photos, and Archeological Study Units. She also works on database development and program-

ming for this project. Arkansas Highway and Transportation Department queries the archeological site files almost on a daily basis as part of environmental review and cultural resource management needs associated with construction projects around the state.

Grant Projects: Rock Art & NEH

"Rock Art and the Southeastern Ceremonial Complex" is George Sabo's \$175,000 grant project to study the production and use of rock art as an element within Mississippian culture religion and cosmology. Under the scope of this grant is a cultural landscape analysis of rock art sites using Geographic Information Systems. The existing rock art web site will be expanded to include interactive 3D models of selected sites. New information collected during the project's fieldwork component will be available in the searchable online database, and additional online educational materials, activities, and lesson plans are under development.

New Geographic Information Systems Complete

In addition to his work in archeogeophysical applications (reported below), Lockhart this year completed a next-generation, high-resolution Geographic Information System (GIS) with statewide environmental data coverages to support research by Survey station archeologists, SRP, various state agencies, outside professionals, and students. The Survey's existing GIS was transformed using more robust data and updated technologies and methods. With these tools, Lockhart has begun developing statewide "site potential" models which allow graphical display of known site distributions according to a variety of environmental variables. Archeologists can use the models to frame new research questions about settlement patterns, subsistence, social organization, and other aspects of human lifeways expressed on the cultural landscape through time.

Archeogeophysical Applications Program

Among the Survey's newest developments is the addition of a comprehensive program of archeogeophysical remote sensing applications. Jami Lockhart manages and directs this program, in addition to his other responsibilities as manager of the Survey's database systems, GIS, and data processing operations. As a nondestructive reconnaissance technique that can save time and expense by focusing excavation efforts for the most beneficial result, archeogeophysical remote sensing will become an integral part of cultural resource management and has the potential to revolutionize archeological methodology. The Survey endeavors to remain at the forefront of this development. Some of our archeogeophysical research projects for the 2003-2004 fiscal year are summarized below.

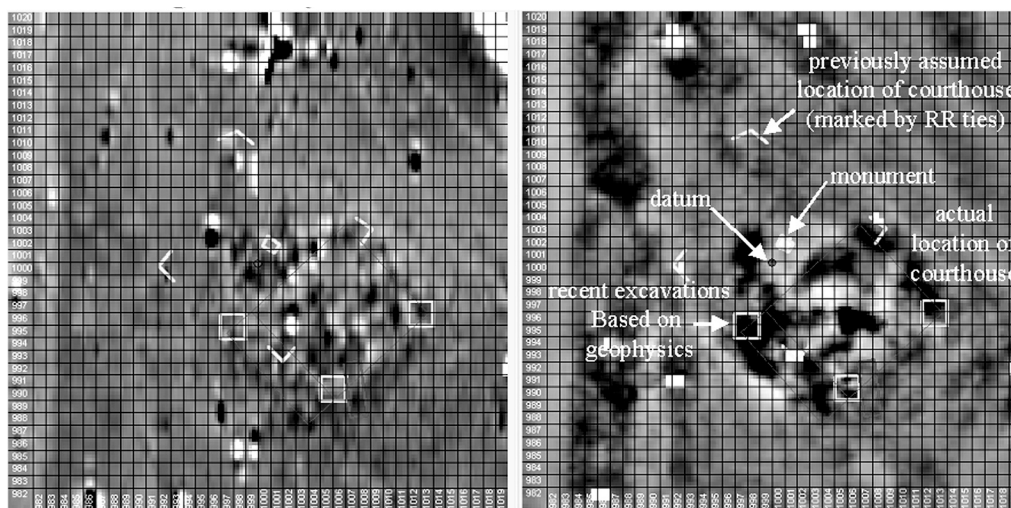
Old Davidsonville State Park

Old Davidsonville was the site of the first courthouse, post office, and land office in Arkansas. The town, platted in 1815 as the county seat, flourished only briefly and was abandoned about 1830 when it was bypassed by major transportation routes. The site is currently a state park. The Survey was contracted by Arkansas State Parks for research to support public interpretation of Old Davidsonville. Since no buildings remain above ground, little can be known of what the town was like without excavation. Lockhart performed electrical resistance and magnetometry surveys at the 1815 courthouse and post office locations. These techniques revealed that building foundations or debris were present. Combined with archeological test excavations and archival information, the geophysical results helped establish the types of buildings and their dimensions.

Arkansas Post and Related Sites

Lockhart again worked with UAPB station archeologist John House, other Survey staff, Dr. Ken Kvamme (UAF), Dr. Jay Johnson (Ole Miss), and students to plan, conduct, and interpret archeogeophysical surveys at sites related to Arkansas Post. Electrical resistance and magnetometry were used at Menard-Hodges, a late prehistoric and contact period Indian village with a large temple mound. The site is believed to be the Quapaw village Osotouy, near which French explorer-trader Henri de Tonti established the first Arkansas Post in 1687. Continuing work at Menard-Hodges is one of House's long-term research projects and aids the National Park Service's management and interpretation of the site.

At Wallace Bottom, archeogeophysical work continued in cooperation with the Quapaw Tribe, the White



Magnetometry (left) and electrical resistance (right) results at the courthouse location at Old Davidsonville. Actual foundation remnants show up as dark anomalies forming a rectangular outline, slightly south and east of the previously assumed location. Excavation test units confirmed the remote sensing prediction.

River National Wildlife Refuge, the National Park Service, and the Survey's UAPB station. Kvamme's and Johnson's students gained field experience by working at this site. Electrical resistance, magnetometry, electromagnetic conductivity, magnetic susceptibility, and ground penetrating radar were used. Cumulative results guided ground-truthing excavations that revealed a French or Quapaw structure and pit feature.

All of the geophysical work in the Menard Locality contributes to archeological and historical research at sites representing the earliest European settlement in the Lower Mississippi Valley. These sites are also important to Quapaw tribal heritage.

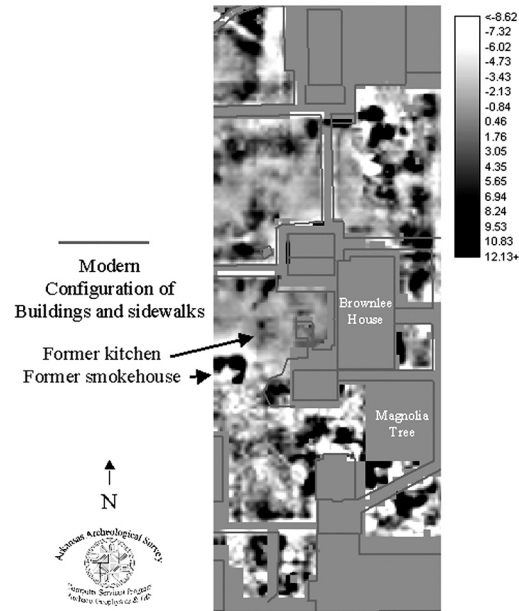
Historic Arkansas Museum

Lockhart, assisted by Michael Evans and Dorothy Neely, conducted geophysical survey at the Arkansas Historic Museum property for the Department of Arkansas Heritage. Four technologies (electrical resistance, magnetometry, electromagnetic conductivity, and magnetic susceptibility) were used to look for features of the circa 1830 Little Rock neighborhood interpreted by the Museum. Underground anomalies were identified that represent remnants of a detached kitchen and smokehouse associated with the Brownlee House. Based on the geophysical results, archeological test units were placed to recover information about the kitchen.

The Eaker Site

Major fieldwork initiated at the Eaker site, owned by the City of Blytheville, will continue for several years as a Blytheville station research project. The goals are to learn more about Mississippian cultural development and to support heritage tourism in the area. Residents hope that a national park may be developed to interpret the rich archeological heritage of the Lower Mississippi Valley. Eaker—a National Register site, National Historic Landmark, and Quapaw Sacred Site—is one of the largest intact Mississippian sites in the area, having been protected by its location on the decommissioned Eaker Air Force Base.

Lockhart directed archeogeophysical survey in preparation for the 2004 Arkansas Archeological Society/Arkansas Archeological Survey Training Program for amateur archeologists. Electrical resistance and magnetometer surveys over a 10,000 square meter area revealed



Electrical resistance imagery from the Historic Arkansas Museum Geophysics Project. A detached kitchen and smokehouse associated with the Brownlee House were located.

underground anomalies that helped guide excavations during the Training Program. Prehistoric house structures and other cultural features were explored. An earthquake "liquefaction" feature was also identified, with nearby cultural deposits which could help date the earthquakes. Research on the geological effects of past earthquakes in this seismically active zone is another ongoing project at the Blytheville station.

Cross Hollows Civil War Site

A Confederate encampment and gun emplacement features are being explored at the Cross Hollows site in Benton County. The UAF station's Jerry Hilliard conducted archeological survey, mapping, and test excavations in previous years. Lockhart carried out electrical resistance, magnetometry, electromagnetic conductivity, and magnetic susceptibility surveys to help define the site perimeters and content. This is an ongoing project of the UAF station.

CSP Personnel

Jami J. Lockhart received his M.A. degree in geography at UAF in 1988, the same year he joined the Survey. He is currently pursuing a Ph.D. in the Environmental Dynamics program at UAF. His research specializations include integrated data management, GIS, archeogeophysics, and human-environmental relationships through time.

Deborah Weddle received a B.A. degree in anthropology at UAF in 1993. She began working for the Survey as a student archeological laboratory and field technician before moving permanently to the CSP. Her specializations include web application development, GIS, and the use of multimedia technologies for education.

CSP Service Activities

Student Support

- Data sets, demonstrations, and training in digital applications and geophysical techniques for undergraduates, graduate students, and interns in the UAF Anthropology Department and the Environmental Dynamics Program
- Weddle trained and supervised UAF graduate student Terri Bruce who worked on creating a computer inventory database that allows fast and accurate information retrieval of records previously maintained only on hand-written paper forms

Campus Service

- Weddle participates in the Information Technology Support Program of the UA Computing Services division

Public and Professional Service

- Demonstrations of Survey computer facilities, resources, and current projects to visiting scholars, research professionals, and students (K-12)
- Computer hardware upgrades and repairs for Arkansas Archeological Society workstations
- Technical support, instruction, and graphics assistance for projects by several Arkansas Archeological Society members
- Lockhart taught a National Park Service Archaeogeophysical Workshop held at Spiro Mounds and attended by individuals from across the United States and several foreign countries
- Lockhart contributed to a USAID-funded report on cultural resource management and heritage tourism as part of a cooperative project between UAF and the Kingdom of Jordan
- Connectivity, training, and data access for users of the Survey's archeological databases representing numerous state and federal agencies
- Learning opportunities for amateur archeologists during many field research projects

Internet Service

- Maintenance of the South Central Historical Archeology Conference (SCHAC) web site

OFFICE OF THE REGISTRAR

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

The Survey registrar is responsible for review, processing, and curation of all archeological site data in Arkansas. The registrar manages and maintains all paper, photographic, microfilm, and electronic records of archeological sites, projects, and collections; oversees encoding of all new and updated site information in the various digital databases; and assists and regulates access to records and collections by government agencies, private firms, professional colleagues, and students engaged in archeological research in Arkansas. The office also maintains a research library and a map library, and contributes to the Survey/UA Department of Anthropology student internship program.

CURRENT ACTIVITIES

General Operations

The registrar's office spends most of its time reviewing and encoding site forms, reports, and images for the various electronic databases, reviewing paperwork to accession new archeological collections, and assisting researchers.

The AMASDA (Automated Management of Archeological Site Data in Arkansas) computerized database is a potent research tool that can be linked to various GIS programs. The staff work daily to keep this resource current. This year 1522 new sites were added, bringing the total for the state of Arkansas to 38,808. In addition, new information for 318 previously known sites was added. New archeological projects numbered 169, bringing the projects total to 4880. Finally, 14 archeological collections were accepted for curation.

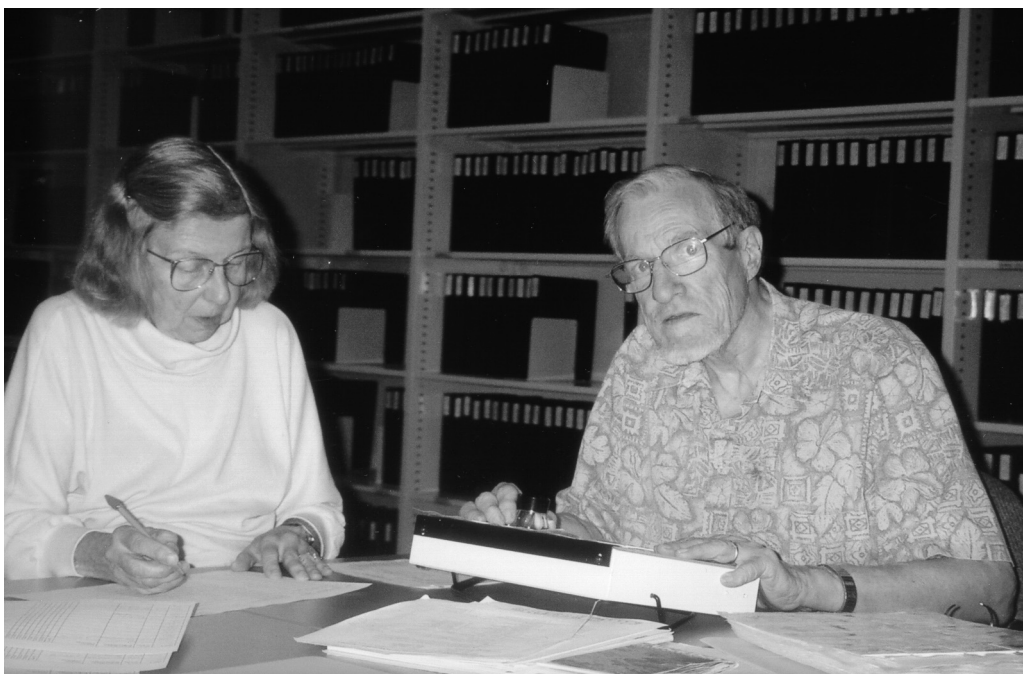
Approximately 210 researchers visited the office during 2003-2004. With growth in the Anthropology Department and Environmental Dynamics Program at UAF, the number of students using the archeological site files for various class and research projects has steadily increased. The office also handled an average of 40 calls per month from the Arkansas Highway and Transportation Department requesting information about archeological sites. Additional calls came from the State Historic Preservation Officer, the Corps of Engineers (Memphis, Little Rock, and Vicksburg districts), and the U.S. Forest Service (Ozark-St. Francis and Ouachita National Forests). Also, the National Park Service's Midwest Archeological Center requested GIS and site data for projects in the Buffalo National River.

2003-04: Arkansas Archeological Survey Site File Activity

New Sites Recorded	1522	Total no. of sites in Arkansas site files = 38,808
New Data for Known Sites	318	
Access to Site Records	210	
Collections Accessioned	14	
New Projects Entered in AMASDA	169	Total no. of projects in AMASDA = 4880

2003-04: Who Reports New Sites?

Survey Staff Stations	209
SRP	10
Private CRM Firms	473
State & Federal Agencies	548
AR Archeological Society (amateur archeologists)	282
	1522



Dr. Charles R. McGimsey III, Director Emeritus of the Archeological Survey, and his wife Mary McGimsey, former UA Museum photographer, have volunteered their time in the registrar's office for the past several years to update and organize the photo records. They have completed records for slides dating from the 1950s through 1991, and are developing a list of subject keywords for searching the slide access database. Their help in this area, bolstered by their long experience with the Survey and the UA Museum, has been invaluable.

Teaching Service

The registrar's office participates in the UA Department of Anthropology's M.A. level Archeology Internship by providing active learning opportunities in archeological site data management. Interns learn how the Survey's computerized databases are constructed and used by working on ongoing projects.

Each semester the registrar coordinates a guided tour of its facilities for the Anthropology Department's archeological lab class. There are also usually several impromptu tours during the year for visiting students, professionals, and interested members of the public.

Grants and Contracts

The registrar's office pursues outside funding to support several projects for upgrading and improving database delivery for various agency users.

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

This grant allowed the Survey to hire three UAF work-study students to perform the work. By the end of 2003-2004, records for 64 of Arkansas' 75 counties had been scanned, copied to CD-ROMs, and transferred to the SUN server as tif files. The project will continue next year.

Fort Chaffee Project Curation. Artifact collections from surveys and test excavations on Fort Chaffee property during the 1980s and 1990s are presently curated at the University of Arkansas Collections Facility under agreements with the U.S. Army. The Survey was contracted to oversee re-boxing of the collection to meet federal curation standards. The re-boxing was completed this year. Roula Khawam worked on creating a "finding aid" for the records associated with each of the Fort Chaffee projects. This included updating information in the 1996 Summary Report. The project was scheduled for completion in fall 2004.

NAGPRA for NPS. Under a grant from the National Park Service, the registrar's office conducted a study to determine the cultural affiliation and ultimate disposition of certain items in artifact collections curated by the Survey. This activity supports compliance with the federal Native American Graves Protection and Repatriation Act. The next category of artifacts to be

documented includes 1571 pottery vessels in the control of the University of Arkansas Collections Facility. The registrar's office has determined to apply for three consecutive grants in the maximum allowable amount of \$75,000. Each of the three grants will allow treatment of about one-third of the total number of vessels. The first grant was awarded in 2004, and documentation of the first group of 525 vessels scheduled to begin in the fall. A two-day conference with representatives of the Osage Nation of Oklahoma, Quapaw Tribe of Indians, Tunica-Biloxi Tribe of Louisiana, Caddo Indian Tribe of Oklahoma, and Wichita and Affiliated Tribes is planned to determine research and repatriation parameters.

NAGPRA Repatriation

The Survey continued to fulfill its obligations under the federal Native American Graves Protection and Repatriation Act. The "Notices of Inventory Completion" for skeletal remains from the Toltec Mounds site were published in the Federal Register on November 26, 2003. This inventory comprised about 18 months of work. Plans for the coming year include working

with representatives of the various Tribes to establish boundaries for repatriation purposes. The registrar's office also finished scanning all NAGPRA records, except those from one site, 3DR214. A procedure to handle the records for this site is under development.

Database Upgrades and Updates.

Deborah Weddle, the Survey's Internet applications specialist, worked on converting the access file of the Radiocarbon database for the web.

A work-study student and a graduate assistant added records to the Citations database. This bibliographic resource will eventually include all publications as well as "grey literature" on Arkansas archeology.

Student workers scanned slides and entered records for the Image database. Slides from six Survey research stations were scanned for digital access. The Image database project benefited by the significant volunteer efforts of Dr. and Mrs. Charles R. McGimsey III, who gathered information about slides on file at the coordinating office, including images from the former University Museum.

Registrar's Office Personnel

Lela Donat became Survey registrar in 1994, after three years as assistant registrar and a previous 17-year career in nursing. She earned her M.A. degree in anthropology in 1992 at UAF with a specialization in bioanthropology. Donat is proficient in the use of several database applications and has archeological and bioanthropological field and laboratory experience in Arkansas and Chile.

Marian Kunetka joined the staff as assistant registrar in 1994 after working part-time in the office while pursuing her B.A. and M.A. degrees in anthropology as a nontraditional student at UAF. She previously was an executive secretary for a major corporation, and owned and operated a rare books and graphics store in Chicago. She completed the M.A. degree in 1999.

Roula Khawam has worked in the registrar's office since 1998, first as a student volunteer, then as a graduate assistant for two years, and finally as an hourly employee under various grant projects. Most of her duties have focused on NAGPRA-related activities such as preparing Notices of Inventory Completion in compliance with the Act and documentation of pottery vessels that are affected by the Act. She earned her M.A. in anthropology in 2003 at UAF.

EDUCATION SPECIALIST

Mary L. Kwas, Research Associate

The Arkansas Archeological Survey has been a leader in public education—in the state, nationally, and worldwide—since its inception. To make this effort more effective a position was dedicated in 1999, and Mary L. Kwas was appointed education specialist. Kwas manages the state's Archeology Month, and develops and disseminates materials about Arkansas archeology for the general public and for use by professional educators. These outreach materials include print media, the Internet, hands-on classroom activities, and exhibits and presentations at workshops and resource fairs. Kwas also acts as liaison with the Public Education Committee of the Society for American Archaeology, and works with the Arkansas Archeological Society.

CURRENT ACTIVITIES

Arkansas Archeology Month

March is Archeology Month in Arkansas, with a variety of activities, programs, and exhibits scheduled by different state agencies, museums, parks, professional archeologists, and members of the Arkansas Archeological Society. As manager of Archeology Month, Mary Kwas coordinates the planning and promotion of these events across the state. More information on Archeology Month can be found in the "Partners in Preservation" chapter of this report.

SAA Public Education Committee

Kwas is a member of the Public Education Committee (PEC) of the Society for American Archaeology, which has been the leading forum for discussion of public education issues in the profession. This activity continues the Survey's presence in the public education movement on the national scene, following the lead of retired Arkansas State Archeologist Hester Davis. Kwas has been editor of the PEC's quarterly electronic newsletter since late 1999 and contributes to two work groups.

As a member of the PEC's Heritage Tourism Work Group, Kwas (with Teresa Pinter) will co-edit a thematic issue of the *The SAA Archaeological Record* dealing with heritage tourism. Work during the year included identifying authors and topics for the special issue.

Kwas also participates in the PEC's Internet Work Group, and spent considerable time on new "Archaeology for the Public" pages for the SAA web site. Details of menu hierarchy as well as content were developed during the year. An article written by the work group was published in *The SAA Archaeological Record* to introduce the project to the SAA membership.

In spring 2003, Kwas was appointed to the SAA Excellence in Public Education Award Committee. She

reviewed four submission packages for the Award, which was given to an educator during this cycle.

SEAC Public Outreach Grant Committee

Kwas was appointed by the president of the Southeastern Archaeological Conference to head a review of the Public Outreach Grant Program. The resulting recommendations were adopted by the SEAC Executive Committee, and Kwas was appointed to serve on the Public Outreach Grant Committee. During the year, Kwas prepared new application guidelines for the grants and worked to get the grant started on a new award cycle.

Helping Arkansas Educators

Much of the Survey's outreach effort is designed to help Arkansas teachers bring information and activities relating to Arkansas history, prehistory, and archeology into the classroom. This includes preparation and distribution of a Teacher Packet, and developing new material for the Survey's educational web sites.

Kwas also attended a Teachers of Arkansas Studies Council (TASC) Resource Fair in Fort Smith and the Arkansas Conference on Teaching in Little Rock, providing free resource materials to teachers. She taught workshops on the "Trash Box Archeology" hands-on classroom activity at the Conference on Teaching and at the UA's University Day in Fayetteville.

This year, Kwas participated in a Project Archaeology workshop in Indiana to learn how that program is run. Project Archaeology is an educational program designed by the Bureau of Land Management to teach young people about cultural heritage and stewardship of cultural resources. Project Archaeology targets classroom teachers, scout leaders, and museum educators, providing training and mentoring to help bring archeology

into the classroom as a context for teaching science, math, social studies, art, language arts, and higher level thinking skills. Kwas hopes to bring the program to Arkansas.

Old Washington State Park

Mary Kwas began work on a general audience publication about historical archeology at Old Washington State Park, where the Survey has conducted several excavations over the years. A grant from Arkansas Natural and Cultural Resources Council supports the book project. (See the "Sponsored Research Program" chapter of this report for more details.)

Working with the Arkansas Archeological Society

Aside from her work on Archeology Month (see above), Kwas's skills have been tapped to help fill the role of the Survey's "Society liaison" person (a position that has not been rehired due to budget constraints). Kwas

writes regular news items for the Society's bimonthly newsletter and is editor of the northwest Arkansas Koko-ci Chapter's newsletter.

Kwas works with Survey administrative assistant Barbara Scott to coordinate the Society's fall annual meeting. She consults with the arrangements chair to prepare programs and registration materials and oversees mailing of the registration packets. Beginning in 2003, Kwas also has acted as program chair for the annual meeting, which involves enlisting presenters, gathering abstracts, and preparing the program. After the 2003 meeting in Fort Smith, Kwas updated her "Guide to Setting Up an Arkansas Archeological Society Annual Meeting."

Kwas also worked with the Society's Bulletin Editor Glen Akridge to redesign the Society web site. A new menu hierarchy was devised. Kwas wrote content for most of the new pages and compiled archival lists of past McGimsey Preservation Award recipients, annual meeting information, and Training Programs.



Work-study student Kim Rolf (standing) and education specialist Mary Kwas assembling materials about Arkansas Archeology Month for mass-mailing.

EDUCATION SPECIALIST

Mary L. Kwas received her M.S. degree in anthropology in 1980 at the University of Wisconsin-Milwaukee. She has 25 years' experience in public education and archeology. Before joining the Survey in 1996, she worked as collections archeologist for the Mississippi Department of Archives and History, site manager of Pinson Mounds State Archeological Area in Tennessee, and curator of education at Chucalissa Museum, University of Memphis. Her research interests include historical archeology and archeological parks.

Service to the Arkansas Archeological Society

Kwas contributes regularly to the Society's newsletter *Field Notes*, and helps with its production. She participates in northwest Arkansas Ko-ko-ci Chapter activities and was elected editor of the Chapter newsletter.

Kwas and the Survey's administrative assistant Barbara Scott co-managed the Society's annual meeting, preparing programs and registration materials and distributing registration packets. Kwas also served as Program Chair.

Kwas worked with Society Editor Glen Akridge on a redesign of the Society's web site, and wrote content for most of the pages.

Professional Service and Activities

Kwas was appointed to the Public Outreach Grant Committee of the Southeastern Archaeological Conference. She developed new application guidelines for the grant.

Kwas is a member of the Society for American Archaeology's Public Education Committee and editor of its electronic newsletter. This year she also worked on creation of the SAA's "Archaeology for the Public" web pages. She is Arkansas' representative to the Network of State and Provincial Archaeology Education Coordinators and continues to participate in the Heritage Tourism and Internet work groups.

Kwas was appointed to the SAA Excellence in Public Education Award Committee.

Kwas will co-edit a thematic issue on heritage tourism for *The SAA Archaeological Record*.

Service to Arkansas Public Schools

Kwas served as lead judge for the Behavioral/Social Science category, junior division, in the Northwest Arkansas Science Fair at the University of Arkansas.

Kwas regularly sends information to the newsletter of the Arkansas Museums Association, the Department of Parks and Tourism's *Interpretation News*, and the TASC Newsletter, and posts information to listservs of the Arkansas Council for Social Studies (ACSS) and Science teachers.

Kwas hosted table displays of teaching resources at TASC in Fort Smith (57) and at the Arkansas Conference on Teaching in Little Rock (total attendance 1200-1300). She conducted "Trash Box Archeology" demonstrations at Arkansas Conference on Teaching in Little Rock (7) and at UA University Day in Fayetteville (38).

Other Outreach Service

Kwas is coordinating the Survey's participation with the *Arkansas Encyclopedia* project.

Kwas provided content for several of the Survey's web sites, working with the Internet applications specialist Deborah Weddle.

PUBLICATIONS AND EDITORIAL OFFICE

Robert C. Mainfort, Series Editor

Mary Lynn Kennedy, Production Editor

Lindi Holmes, Research Reports and Reprints

Deborah Sabo, Popular Series

Michelle Berg Vogel (2 mo.), Kim Rolf (9 mo.), Mary Worton (1 mo.), Sales and Distribution

The Survey's Publications Program consists of four series. The Research Series, Research Reports, Technical Papers, and Popular Series present the results of Survey research projects and submissions from other qualified authors to a wide range of audiences, from professional scholars and students to public school teachers, government officials, and the general public. A Publications Committee reviews submissions internally and mediates an external review process for the Research and Popular Series. Staff of the Publications Program are part-time employees, or full-time employees with additional responsibilities in other capacities at the Survey. The Publications Program generates its own revenue and is entirely self supporting.

New and Forthcoming Publications

One new monograph was issued, appearing as Research Series No. 60. *Mississippian Transitions at John's Lake*, by C. Andrew Buchner et al., is a major archeological mitigation report on three Mississippi period sites located in Mississippi County, Arkansas. The fieldwork was done by Panamerican Consultants, Inc., an independent archeological research firm, prior to channel widening for a flood abatement project. The sites illustrate "a localized Late Prehistoric population's adaptive response to regional cultural changes and the rise of Mississippian social complexity" (p. 176). The sites had been buried by the New Madrid earthquake of 1811-12, protecting them from damage by agriculture and development until early in the 20th century, when steam-powered drainage excavations bisected two of the sites. Archeology at the three sites provided significant information on the development of social complexity in late prehistoric times.

In preparation this year was a revised edition of Research Series 9, *Prehistoric Plies: A Structural and Comparative Analysis of Cordage, Netting, Basketry, and Fabric from Ozark Bluff Shelters*, by Sandra C. Scholtz (1975). *Prehistoric Plies* has found an expanded audience among people interested in textiles and weaving; it has remained in print as an important archeological and material culture title for 30 years.

Also in preparation was Popular Series No. 5, *Rock Art in Arkansas*, a general audience volume about the Survey's recent and ongoing research on prehistoric and historic period carved and painted images found on natural rock surfaces. Arkansas possesses one of the greatest concentrations of prehistoric rock art in the Southeast. The research, led by UAF station archeologist George Sabo, is summarized elsewhere in this Annual Report.

Reprints and Other Products

Several titles were reprinted: Research Report 17, *An Archeological Assessment of Historic Davidsonville*, by Clyde Dollar (1979); Research Series 8, *The Cache River Archeological Project*, by Michael B. Schiffer and John H. House (1975); Research Series 22, *Contributions to the Great Bend Region*, by Frank F. Schambach and Frank Rackerby (1982); Research Series 32, *Human Adaptations in the Greater Southwest*, by Alan Simmons et al. (1989); and Research Series 40, *Arkansas Before the Americans*, edited by Hester A. Davis (1991).

An editorial office project to digitize all titles in the Survey catalog for publication on demand is in progress. The following titles were prepared for reprinting: Research Series 11, *An Inquiry into the Locations and Characteristics of Jacob Bright's Trading House and William Montgomery's Tavern*, by Patrick E. Martin (1978); Research Series 12, *The Shallow Lake Site*, by Martha A. Rolingson and Frank F. Schambach (1981); and Research Series 15, *Arkansas Archeology in Review*, edited by Neal L. Trubowitz and Marvin D. Jeter (1982). Over half of all the Research Series titles are now in digital format and ready for printing on demand. In CD form, these books can now be searched electronically by keywords.

Sales and Distribution

Distribution was up slightly and profits increased dramatically with no large printing bills during the year. Survey archeologists sold books at the Southeastern Archaeological Conference, the Caddo Conference, the Plains Conference, the Arkansas Conference on Teaching, the Arkansas Archeological Survey/Society Training Program, and the Arkansas Archeological Society's Annual Meeting. Our catalog is available and books may be ordered via the Survey's web site (www.uark.edu/campus-resources/archinfo/).

Publication Sales and Distribution for 2003-2004

	Research Series	Research Reports	Popular Series	Technical Papers	Total
No. of Titles	60	30	3	11	104
Sold	1348	60	536	228	2172
Free	90	0	171	0	261
Total	1438	60	707	228	2433

Survey Books Get Good Reviews

A number of Survey titles received favorable reviews in various publications this year. Technical Paper 11, *A Handbook of Soil Description for Archeologists*, by Gregory Vogel, was reviewed in *Geoarcheology: An International Journal* (Vol. 19, No. 6, 2004). Popular Series 4, *Ghost Boats on the Mississippi*, by Leslie Stewart-Abernathy, was reviewed in the *Missouri Archaeological Society Quarterly* (January-March 2004), and in the *Arkansas Democrat-Gazette* (14 September 2003). Three titles were reviewed in *American Antiquity* (Vol. 69, No. 3, 2004): Ann Early's *Forest Farmsteads* (Research Series No. 57), Rita Fisher-Carroll's *Mortuary Behavior at Upper Nodena* (Research Series No. 59), and Martha Rolingson's *Historical Perspectives on Midsouth Archeology* (Research Series No. 58) received very high marks for their combination of erudite scholarship with accessible readability—a combination that was noted by the reviewer as sadly rare in archeological literature. *Historical Perspectives* was also reviewed in the journal *Mississippi Archaeology*, which said the book “provides a good introduction to the nearly two centuries of inquiry into the region's prehistory and offers food for thought on how the region's present intellectual landscape and state of knowledge came to be.”

Staff Activities

Series Editor, Robert Mainfort reviewed all submitted manuscripts and directed the review process. He also worked with several authors whose books are in various stages of production.

Mary Lynn Kennedy completed Research Series 60, *Mississippian Transitions at John's Lake*, by Andrew Buchner et al. She also worked with former Survey Director Charles R. McGimsey III in preparing his book *CRM on CRM*, and provided various editorial and graphics assistance on other projects.

Lindi Holmes completed the digital copies of Research Series 11, 22, 32, and 40. She also worked on the revised version of Research Series 9.

Deborah Sabo completed the *Annual Report for 2002-2003* and continued work on Popular Series 5, *Rock Art in Arkansas*. She is co-editor and coauthor of several chapters of *Rock Art*. She also contributed to several service and outreach projects, including a brochure for the Caddo Heritage Museum.

The Survey's publications committee—Claudine Payne (chair), Ann Early, Jeff Mitchem, Tim Mulvihill, and Frank Schambach—received four submissions during the fiscal year. One was accepted pending minor revisions and is now in production. One was rejected as unsuitable for publication. The remaining two were under review at the close of the fiscal year.

PHOTOGRAPHIC AND GRAPHIC ARTS SUPPORT

M. Jane Kellett, Graphic Artist

Photographic and graphic arts support at the Survey incorporates a darkroom and desktop computer graphic arts facilities. Visual documentation is an essential part of archeology, for research, publication, archives, and records management. The research stations, the registrar's office, SRP, the publications program, and the various outreach activities all benefit from the productions of this office.

Ms. Kellett develops and prints black and white film for all the stations and SRP, duplicates slides for outreach and professional meeting presentations, and maintains a digitized archive of 35 mm black and white negatives and digital camera images. She prepares maps, figures, illustrations, and photographic plates for Survey publications, SRP contract reports, and staff publications in professional journals and books. She does layout and graphics for a variety of outreach materials produced by the Survey, and has designed t-shirts and posters for the Arkansas Archeological Society summer Training Program and for past Archeology Weeks.

2003-2004 Activities

- ◆ 133 rolls of film and 2940 black and white negatives processed and catalogued
- ◆ 400 image scans and 125 photographic prints made from negatives for slides, hard copy, or digital images for Survey publications, Arkansas Archeological Society newsletters, SRP reports, professional journal articles, books and book chapters, outreach materials, and National Register nominations
- ◆ 250 slides duplicated for use in public presentations
- ◆ 50 graphic works for slide presentations, exhibits, and maps
- ◆ 4 book cover designs
- ◆ 200 photographic plates of pottery vessels, lithic artifacts, skeletal specimens, maps, conch shells, shell masks, rock art images, the Helena mass grave Civil War buttons, the Arkadelphia wooden canoe, and other items
- ◆ Ms. Kellett attended the Amigos Library Services, Digital Imaging for Photographic Collections Seminar

M. Jane Kellett joined the Survey in 1977 while working on a graduate degree in Art at UAF. She began a full-time position in 1979, drafting maps and other graphics, and added photographic duties in 1982.

PARTNERS IN PRESERVATION

THE ARKANSAS ARCHEOLOGICAL SOCIETY

Arkansas River Valley Chapter, Russellville
Kadohadacho Chapter, Magnolia
Tunican Chapter, Monticello
Ko-ko-ci Chapter, Fayetteville
Ouachita Chapter, Hot Springs
Central Mississippi Valley Chapter, Jonesboro

REGIONAL:

The Delta Archeological Society, Blytheville

Many of the Survey's outreach activities are in cooperation with the Arkansas Archeological Society, a nonprofit educational organization for interested people of all ages. The Survey and the Society have a unique and productive relationship based upon common interests of professional and amateur archeologists to protect the archeological heritage of the state, to learn about Arkansas' past, and to present that knowledge to the public. The Society elects a Board of Advisors who conduct yearly evaluations of the Survey's goals, accomplishments, and needs. Society members provide proactive support for the Survey's mission of education, research, and service, and constitute a pool of knowledgeable volunteers without whose help this mission would be much less efficiently carried out. To make the best of this energetic volunteer support, the Survey and Society jointly manage a Training and Certification Program for amateur archeologists. It was the first such program in the country and has served as a model for archeological organizations in other states and around the world.

Developments in Survey/Society Arrangements

Budget constraints have necessitated some changes in how the Survey contributes to joint outreach projects with the Society. The Survey has not yet been able to rehire a person at the coordinating office to help run cooperative programs and activities. These duties continue to be portioned out among other Survey employees, especially administrative assistant Barbara Scott and education specialist Mary Kwas.

One cooperative venture—the State Fair booth—had to be dropped. The two organizations continue to work together on Archeology Month, the Training Program, and many other outreach, education, and research projects throughout the year.

AAS Chapters

The Arkansas Archeological Society's current membership is around 500. There are now six active chapters across the state, working closely with the Survey research archeologists in their areas. (The Delta Archeological Society, formed in 2002 in Blytheville, may eventually become a chapter of the AAS.) Chapters have monthly

meetings during the academic year. Survey archeologists serve as chapter officers, newsletter editors, and program chairpersons to arrange for guest speakers. Stations also host volunteer work sessions in the laboratories, and Society members participate in station field projects throughout the year.

Archeological Research Fund

The Society began awarding grants from its Archeological Research Fund (ARF) in 1989. The fund is composed of donations and money obtained in fund-raising raffles. Each year, interest on the account is distributed as grants to projects in which Society members have participated. Three awards were announced at the 2003 annual meeting in Forth Smith. Frank Schambach and David Jeane (SAU) received \$575 for AMS radiocarbon dates on charred cane matting from the Tom Jones site at Grandview Prairie. Martha Rolingson's \$1190 award paid for radiocarbon dates on charcoal samples from the Toltec Mounds site. John House (UAPB) received \$755 for radiocarbon dating of a sample from the Lake Dumond site.



"Containers Before Plastic" original drawing by ATU station assistant Larry Porter; donated by the artist for use on the 2004 Archeology Month poster and events brochure.

Archeology Month 2004

The theme for Archeology Month was "Containers before Plastic." Survey education specialist Mary Kwas managed planning and promotion and produced a schedule of events. Of the 46 programs at 28 venues, including nine museums and seven state parks, Society chapters sponsored four events, and Survey staff archeologists took part in at least 17 events.

In addition to lectures and exhibits, programs included an excavation at Cane Hill by the Survey, with Society member volunteers; a colonial Arkansas "living history" encampment at Arkansas Post; a woven basket workshop at Ft. Smith National Site; a pioneer cooking demonstration at Toltec Mounds State Park; and an artifact identification workshop at Shiloh Museum in Rogers.

Larry Porter, of the Survey's ATU station, provided a beautiful original drawing that was used both for the poster and the Events Brochure. Initiated this year was a joint effort by Survey and Society to raise money for an Archeology Month fund to help cover printing and mailing costs.

Overall attendance is difficult to determine, since not all programmers report head counts. At least 2000

people, including many school groups, enjoyed the various Archeology Month events in 2004.

Society Annual Meeting

The Society's 2003 annual meeting was held at the Holiday Inn City Center in Fort Smith, September 26-28. Approximately 150 people attended. The Survey's Mary Kwas was Program Chair and Survey administrative assistant Barbara Scott helped with the program and meeting registration. Society vice president Harry Hammond was Arrangements Chair.

Five of the 15 papers were authored or coauthored by Survey archeologists (Claudine Payne, Randall Guendling, Leslie Stewart-Abernathy, Jerry Hilliard, Michelle Berg Vogel, George Sabo III, Frank Schambach, Jami Lockhart, and David Jeane). Two papers were by UAF anthropology graduates (Jami Brandon and James Davidson), who worked with Survey archeologists on research projects in northwest Arkansas. Another paper was presented by UAF students Mary Brennan and Leslie Walker, working under the guidance of Survey archeologists George Sabo and Leslie Stewart-Abernathy. Dr. George Odell of the University of Tulsa delivered the keynote address.

Society Publications

Hester Davis (Emerita State Archeologist) continued as editor of the Society's newsletter *Field Notes*, which is published six times a year. In 2002, editorship of the annual Bulletin (*The Arkansas Archeologist*) was taken over by longtime Society member Glen Akridge. (Ms. Davis had served as Bulletin editor since 1986.)

Society Volunteers

Many station projects in the field and laboratory depend on volunteers, most of whom are Society members. Some of the projects around the state to which Society volunteers contributed in 2003-2004 included: excavations at two historic sites in northwest Arkansas, Fitzgerald's Station on the Butterfield Trail and Springfield Ranch at Cane Hill; excavations and remote sensing at Lake Enterprise Mound in Ashley County; test excavations, surface collecting, and remote sensing at the Wallace Bottom site in Arkansas County; salvage for reburial of a Civil War gravesite in the City of Helena; ongoing analysis of material from 1999 Training Program excavations at a novaculite quarry site in the Ouachita Mountains; follow-up excavations at the Tom Jones site at Grandview Prairie; and the Cherokee Survey Project in ATU station territory. This year several

Society members also responded to State Archeologist Ann Early's call for help in the effort to get Arkansas' historic cemeteries recorded as archeological sites in the Survey's files.

Most stations had regular work sessions in the laboratory at least once a month, when Society volunteers washed, sorted, and catalogued artifacts. The most concentrated contribution of volunteer hours by Society members comes during the annual Training Program.

The Survey logged a grand total of 8333 volunteer hours during the fiscal year, the majority contributed by Society members.

The Stewardship Program

Another major role for Society volunteers is the Site Stewardship Program, which enlists individuals to monitor important archeological sites. Stewards periodically visit their assigned site(s) and report on any changes in condition. Stewardship is conducted in cooperation with landowners. Stewards visit with interested landowners and tenants to discuss ways to protect the sites and offer advice. The Survey helps provide training for potential stewards. State Archeologist Ann Early taught a day-long workshop—the fourth so far—for interested members at the 2004 summer Training Program in Blytheville.



Lab Day at the UAPB station. Volunteers Mary Little and Chester Shaw sort and catalog artifacts.

“Society Dig”: The Training and Certification Program

This unique program is managed cooperatively by the Society and Survey. Every year in June a two-week field school for amateurs is conducted at an archeological site chosen according to various criteria, including ongoing research interests at the Survey stations, educational potential, and logistical needs. Survey staff spend weeks in preparation. Field and laboratory work are supervised by Survey staff, other professionals, and qualified Society amateurs. Survey archeologists also teach a series of five-day seminars on various archeological topics during the Training Program. Those who complete the required number of hours in the field, lab, and classroom may earn Certification in several categories. The Survey stations sometimes devote years afterward to analyzing the material collected, often with help from Society volunteers. Training Program participants must be members of the Arkansas Archeological Society. All ages are welcome, but children under 16 must be accompanied by an adult participant.

The 2004 Training Program at the Eaker Site

Fieldwork

The 2004 Training Program took place at the Eaker site, in Blytheville (Mississippi County). Dr. Claudine Payne directed the program, assisted by Marion Haynes. Other Survey archeologists and experienced Society members acted as field supervisors. About 70 Society members camped at the site or stayed in nearby motels, braving the Delta heat, mosquitoes, and sudden storms in exchange for the opportunity to do real archeology, learning from Arkansas' professionals and contributing to basic research.

The Training Program excavations marked the beginning of a long-term research project at this very significant Mississippian period site. (There are also Woodland and Historic components). Eaker is on the National Register of Historic Places, and is a National Historic Landmark as well as a Quapaw Sacred Place. Investigations by Mid-Continental Research Associates, Inc. in 1988 had already established some general facts about the site, including proton magnetometer remote sensing results that revealed 84 underground anomalies probably representing cultural features. In 2003, the Survey's remote sensing specialist Jami Lockhart and the Blytheville station staff—with help from volunteers—conducted more archeogeophysical surveys, finding many more underground features they interpreted as possible houses, ditch-and-palisade fortifications, and earthquake features. All this was in preparation for the Training Program, which began June 11, 2004.

Participants in the Program persisted through several sudden downpours and high winds that blew down some tents. Controlled surface collection started on the first day and continued until vegetation growth made it useless. Some of the artifacts collected suggest a Middle

Mississippian (A.D. 1200-1400) occupation on part of the site. A pottery type that serves as a marker for this time period is called Matthews Incised, so the crew were kept on the lookout for sherds of this style.

Excavations in Area D, placed over an underground anomaly that showed up in remote sensing, produced features indicating a house: layers of daub (mud used to plaster walls), postholes, and possible roof thatch, along with many artifacts. Earthquake cracks were also seen in this area, but whether the quake that caused them affected the people who lived in the house is not yet known.

In Area E, excavators explored what was probably a large pit dug to retrieve clay for making pottery, or silt for daub, and later filled with trash. Some of the finds were ornamental ear plugs, a ceramic medallion with a stylized face decoration, and a ceramic frog effigy.

Area B was specifically designated for excavation to explore earthquake effects, which showed up through remote sensing. A sand-filled crack was easily visible in the floor of the excavation unit, and continued to be seen, layer after layer, until the last day of the Training Program. Claudine Payne, Marion Haynes, and volunteer Jack Simers returned later to complete excavation of this unit, stopping at 160 cm below surface. At that depth, they found midden soils left over from the village occupation that had dropped down due to the earthquake. There, at last, were several large sherds of the desired Matthews Incised pottery.

Seminars

Classroom instruction at the Training Program consists of five-day seminars that meet four hours each day. The Basic Excavation seminar meets all day for five



Training Program participants in the Basic Excavation class learn to trowel down their units, level by level.

days, with four hours in the classroom and four hours in the field. Eight Survey archeologists taught seminars at the 2004 Training Program: John House and Tom Green (Basic Excavation); Ann Early (Basic Lab); Mary Beth Trubitt (Lithic Analysis); Jerry Hilliard (Mapping); Julie Morrow (Faunal Analysis); Tim Mulvihill (Site Survey); and Marvin Jeter (Arkansas Archeology). Total enrollment in the seminars was 56. There were also two sessions of Beginner's Orientation, a requirement for all new participants, and a day-long Site Stewardship Program workshop.

The Survey's Barbara Scott, administrative assistant at the coordinating office in Fayetteville, managed registration and many details of preparation during the months leading up to the Training Program, and ran the Program headquarters.

Certification Program

Jerry Hilliard, UAF Station Associate, manages the Society's database for the Training and Certification Program. There were 13 new participants in 2004, and 28 certificates awarded at various levels. Mrs. Anna Parks became the third Society member to complete all requirements of the Certification Program, which include having an article accepted for publication, in this case by *The Arkansas Archeologist*. About 75 Society members are currently active in the Certification Program.

Training Program Evaluation

In 2003 Blytheville station archeologist Claudine Payne collected data for an effectiveness evaluation of the Arkansas Training Program in Archeology, now in its 37th year of joint participation and management by both Survey and Society. Payne used observation, interviews, and a questionnaire to examine attitudes and knowledge about archeology among participants in the Training Program. She compared the results to a national survey of the general public and found, not surprisingly, that Training Program participants:

- are highly interested in archeology (more so than the general public, although the national response also indicated interest);
- are hungry for learning experiences and eager to know more about how people lived in the past;
- believe there should be laws to protect archeological sites (the general public agree), with stiff penalties for breaking them (more so than the general public); and
- think archeology is important because understanding of the past is necessary to understand the present and the future (again, the general public agree).

The evaluation also demonstrated that the Training Program is effective in educating and raising awareness about Arkansas archeology. Payne presented a summary of these results at the Society's 2003 annual meeting in Fort Smith.

Appendix 1. Reports and Publications by Survey Staff during 2003-2004

- Baugh, Timothy G., Larry Conyers, Sherry N. DeFreece, Margaret J. Guccione, Dayna Bowker Lee, Timothy K. Perttula, **Frank F. Schambach**, Scott A. Sundermeyer, and Chester B. Walker
- 2004 A Research Design for the Bowie County Levee Realignment Project, Northeast Texas and Southwest Arkansas. LOPEZGARCIA GROUP, Research Design Series, Report No. 1. Prepared for the U.S. Army Corps of Engineers, Tulsa District, Contract No. DACW56-01-D-1008.
- Cande, Kathleen H.
- 2004 Recent Fieldwork at Old Davidsonville State Park. *Field Notes, Newsletter of the Arkansas Archeological Society* 318:11.
- Hilliard, Jerry
- 2003 Springfield Ranch (3WA1233) Test. *Field Notes, Newsletter of the Arkansas Archeological Society* 315:11.
- House, John H.
- 2003 *Gifts of the Great River: Arkansas Effigy Pottery from the Edwin Curtiss Collection, 1879-1880*. Peabody Museum of Archaeology and Ethnology, Harvard University, Collections Series. Peabody Museum Press, Cambridge, MA.
- 2003 Process and Change during the Woodland-Mississippian Transition. In *Woodland-Mississippian Transition in the Mid-South: Proceedings of the 22nd Mid-South Archaeological Conference*, edited by Charles H. McNutt, Stephen Williams, and Marvin D. Jeter, pp. 29-32. University of Memphis Anthropological Research Center Occasional Paper No. 25. Memphis.
- 2003 "Cooperation Then and Now," Archeological Investigations at the Wallace Bottom Site, White River National Wildlife Refuge, Arkansas: 2003 Season. Report submitted to United States Fish and Wildlife Service, Regional Archaeologist's Office, Savannah, Georgia. Arkansas Archeological Survey, Fayetteville.
- 2004 "Cooperation Then and Now": November Fieldwork at Wallace Bottom. *Field Notes, Newsletter of the Arkansas Archeological Society* 316:3-5.
- Jeter, Marvin D.
- 2003 Review of *Great Towns and Regional Polities in the Prehistoric American Southwest and Southeast*, edited by Jill E. Neitzel. *Southeastern Archaeology* 22:112-114.
- 2003 Mid-South Discussant Remarks. In *Woodland-Mississippian Transition in the Mid-South: Proceedings of the 22nd Mid-South Archaeological Conference*, edited by Charles H. McNutt, Stephen Williams, and Marvin D. Jeter, pp. 73-76 and 182-189. University of Memphis Anthropological Research Center Occasional Paper No. 25. Memphis.
- Kwas, Mary L.
- 2004 Archeology Month Summary. *Field Notes, Newsletter of the Arkansas Archeological Society* 318:12.
- Kwas, Mary L.**, with Patrice L. Jepson, Maureen Malloy, and Carol McDavid
- 2003 Archaeology for the Public: A New Addition to the SAA Web. *The SAA Archaeological Record* 3(5):8-10.
- Lockhart, Jami J., and John H. House
- 2003 Archaeogeophysical Mapping of a Proposed Visitor Contact Facility at Arkansas Post National Memorial, Osotouy Unit. Report submitted to United States National Park Service, Arkansas Post National Memorial. Arkansas Archeological Survey, Sponsored Research Program. Fayetteville.
- Mainfort, Robert C., Jr.
- 2003 Late Period Ceramic Rim Variation in the Central Mississippi Valley. *Southeastern Archaeology* 22(1):32-45.
- 2003 An Ordination Approach to Assessing Late Period Phases in the Central Mississippi Valley. *Southeastern Archaeology* 22(2):176-184.

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

- 2004 The Nodena Phase. *Field Notes, Newsletter of the Arkansas Archeological Society* 318:3-10.
- McNutt, Charles H., Stephen Williams, and **Marvin D. Jeter** (editors)
- 2003 *Woodland-Mississippian Transition in the Mid-South: Proceedings of the 22nd Mid-South Archaeological Conference*. University of Memphis Anthropological Research Center Occasional Paper No. 25. Memphis.
- 2003 Concluding Comments. In *Woodland-Mississippian Transition in the Mid-South: Proceedings of the 22nd Mid-South Archaeological Conference*, edited by Charles H. McNutt, Stephen Williams, and Marvin D. Jeter, pp. 197-202. University of Memphis Anthropological Research Center Occasional Paper No. 25. Memphis.
- Morrow, Juliet
- 2004 The Sacred Spiro Landscape, Cahokia Connections, and Flat Top Mounds. *Central States Archaeological Journal* 51(2):112-114.
- Morrow, Juliet, and Toby Morrow
- 2004 Macroscopic Identification of Midwestern Cherts. *Missouri Archaeological Society Quarterly* 21(1):10-14.
- Payne, Claudine
- 2003 Review of *Etowah: The Political History of a Chiefdom Capitol*, by Adam King. *American Indian Culture and Research Journal* 27(3):109-112.
- 2004 Review of *The Ancient Mounds of Poverty Point: Place of Rings*, by Jon Gibson. *American Antiquity* 68(3):588-589.
- 2004 The Eaker Site, 3MS105. *Field Notes, Newsletter of the Arkansas Archeological Society* 317:7-9.
- Rolingson, Martha A.
- 2003 Activities at Toltec Mounds Research Station and State Park. *Field Notes, Newsletter of the Arkansas Archeological Society* 314:3-5.
- 2003 Origins: Where and Why. In *Woodland-Mississippian Transition in the Mid-South: Proceedings of the 22nd Mid-South Archaeological Conference*, edited by Charles H. McNutt, Stephen Williams, and Marvin D. Jeter, pp. 69-72. University of Memphis Anthropological Research Center Occasional Paper No. 25. Memphis.
- 2004 New Radiocarbon Dates for the Toltec Mounds Site. *Field Notes, Newsletter of the Arkansas Archeological Society* 318:13.
- Sabo, George III
- 2003 Dancing into the Past: Colonial Legacies in Modern Caddo Indian Ceremony. *Arkansas Historical Quarterly* 62(4):423-445.
- Sabo, George III, Jami Joe Lockhart, and Jerry E. Hilliard
- 2004 The Forest as a Resource: From Prehistory to History in the Arkansas Ozarks. In *Upland Oak Ecology Symposium: History, Current Conditions, and Sustainability*, edited by Martin A. Spetich, pp. 30-35. U.S. Department of Agriculture, Forest Service, Southern Research Station, General Technical Report SRS-73. Asheville, NC.
- Schambach, Frank F.
- 2003 Some Data (and Interpretations Thereof) from the Caddo Area, and the Arkansas Valley and Southern Ozark Plateau in Western Arkansas and Eastern Oklahoma, That May Be Pertinent to the Discussion of the Transition from Woodland to Mississippian in the Central Mississippi Valley. In *Woodland-Mississippian Transition in the Mid-South: Proceedings of the 22nd Mid-South Archaeological Conference*, edited by Charles H. McNutt, Stephen Williams, and Marvin D. Jeter, pp. 42-50. University of Memphis Anthropological Research Center Occasional Paper No. 25. Memphis.
- 2003 Tom's Brook Culture: A Middle Archaic Period Culture of Southwestern Arkansas. *Field Notes, Newsletter of the Arkansas Archeological Society* 314:9-15.
- 2003 Some Highlights of the June 7-22, 2003 Fieldwork at the Grandview Prairie Wildlife Management Area. *Field Notes, Newsletter of the Arkansas Archeological Society* 315:3-9.
- 2004 Arkansas Site Stewardship Program. *Field Notes, Newsletter of the Arkansas Archeological Society* 316:13-14.
- 2004 First Report on Spring Fieldwork at Grandview. *Field Notes, Newsletter of the Arkansas Archeological Society* 318:14.

Smith, Alan L., and **Leslie C. Stewart-Abernathy**

- 2003 A Survey of Portions of the Lake Dardanelle Shoreline, Pope and Johnson Counties, Arkansas. Report submitted to the Little Rock District, USACE.

Stewart-Abernathy, Skip (Leslie C.)

- 2003 The Lakeport Plantation Project. *Field Notes, Newsletter of the Arkansas Archeological Society* 315:12-13.
2003 Current Research: Lakeport Plantation. *Society for Historical Archaeology Newsletter* 36(2):31-32.
2003 Review of *Another's Country: Archaeological and Historical Perspectives on Cultural Interactions in the Southern Colonies*, edited by J. W. Joseph and Martha Zierden, 2002. *American Antiquity* 68(3):603-604.

Trubitt, Mary Beth D.

- 2003 The Production and Exchange of Marine Shell Prestige Goods. *Journal of Archaeological Research* 11(3):243-277.
2003 Review of *Archaeological Studies of Gender in the Southeastern United States*, edited by Jane M. Eastman and Christopher B. Rodning. *American Antiquity* 68(3):606-607.

Trubitt, Mary Beth D., and S. Bailey

- 2003 Cahokia Palisade Project 2003: A Preliminary Report of Investigations. Report to the Cahokia Mounds Museum Society.

Trubitt, Mary Beth D., Thomas Green, and Ann M. Early

- 2004 A Research Design for Investigating Novaculite Quarry Sites in the Ouachita Mountains. Report to the USDA Forest Service, Ouachita National Forest, Hot Springs, Arkansas. Arkansas Archeological Survey. Fayetteville.

Appendix 2. Papers, Symposia, and Workshops by Survey Staff during 2003-2004

Early, Ann M.

- 2004 The Greatest Gathering: Arkansas and the Second Chickasaw War. Society for Historical Archaeology. St. Louis, Missouri.
2004 Arkansas's Cemetery Recording Project. Society for American Archaeology. Montreal, Canada.

Farmer, Mary V.

- 2003 From Napoleon to Ball: A Very Brief History of Fruit Jars. South-Central Historical Archeology Conference. Natchitoches, Louisiana.

Hilliard, Jerry E.

- 2004 The Archeology of the Second Mount Comfort Church (1840-1864): An Antebellum Ozark Community and the Civil War. Society for Historical Archaeology. St. Louis, Missouri.

House, John H.

- 2003 At the Bayou of the Old Fort: Searching for *Poste aux Arkansas* and Quapaw Osotouy. Colonial Arkansas Conference, Historic Arkansas Museum. Little Rock, Arkansas.
2004 Review of James A. Ford's Helena Crossing Excavations and Its Significance for Middle Woodland Archeology in the Mid-South. Mid-South Archaeological Conference. Tunica, Mississippi.

House, John H. (with James Feathers, Robert Dunnell, and Carl Lipo)

- 2004 Luminescence Dating of Ceramics in the Lower Mississippi Valley. Poster presentation. Society for American Archaeology. Montreal, Canada.

Jeter, Marvin D.

- 2003 "Y'all ain't s'posed t' be here!": Interrupted Intermittent Investigations at an Early to Mid-19th Century Choctaw Site in Southeast Arkansas. South-Central Historical Archaeology Conference. Natchitoches, Louisiana.
- 2003 The Outer Limits of Plaquemine Culture: A View from the Northerly Borderlands. Southeastern Archaeological Conference. Charlotte, North Carolina.
- 2004 Williams Points and Big Creek Points vs. Evans Points and Big Creek Culture. Mid-South Archaeological Conference. Tunica, Mississippi.

Lockhart, Jami J., and Frank F. Schambach

- 2003 Geophysics, GIS and Archaeology: Insights into a Prehistoric Cultural and Natural Landscape in Southwest Arkansas. Poster presentation. Geological Society of America. Seattle, Washington.

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

- 2003 The Effectiveness of Archaeo-Geophysical Technologies: A Case Study from a Prehistoric Caddo Ceremonial Center in Arkansas. Plains Anthropological Conference. Fayetteville, Arkansas.

Morrow, Juliet

- 2004 Time, Space, and Technological Variation in the Clovis Age. Society for American Archaeology. Montreal, Canada.
- 2004 Late Mississippian Period Social Dynamics within and beyond Northeast Arkansas. Society for American Archaeology. Montreal, Canada.

Payne, Claudine

- 2003 A New Look at the Annual Training Program in Archeology. Arkansas Archeological Society. Ft. Smith, Arkansas.
- 2003 Imagery, Architecture and the Transformation of Chiefly Authority at Lake Jackson. Southeastern Archaeological Conference. Charlotte, North Carolina.
- 2004 Rethinking Models of Mississippian Chiefdoms. Washington University Colloquia. St. Louis, Missouri.

Sabo, George III, Michelle Berg Vogel, and Jerry E. Hilliard

- 2003 Reading the Past: Current Research on Arkansas Rock Art. Plains Anthropological Conference. Fayetteville, Arkansas.
- 2003 Reading the Past: Current Research on Arkansas Rock Art. Southeastern Archaeological Conference. Charlotte, North Carolina.

Schambach, Frank F.

- 2003 Some Observations on Caddo House Types and Construction Techniques. East Texas Archeological Conference. Texarkana, Texas.

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

- 2003 Some Highlights of the 2003 Investigations by the Arkansas Archeological Survey and the Arkansas Archeological Society at the Grandview Prairie Wildlife Management Area, Hempstead County, Southwest Arkansas. Arkansas Archeological Society. Fort Smith, Arkansas.
- 2003 Some Highlights of the 2003 Investigations by the Arkansas Archeological Survey and the Arkansas Archeological Society at the Grandview Prairie Wildlife Management Area, Hempstead County, Southwest Arkansas. East Texas Archeological Conference. Texarkana, Texas.

Stewart-Abernathy, Leslie C.

- 2004 Neighbors Helping Neighbors: An Introduction to Historical Archeology in Arkansas. Society for Historical Archaeology. St. Louis, Missouri.

Stewart-Abernathy, Leslie C., and Jamie Brandon (co-chairs)

- 2004 (Symposium) Neighbors Working Together: Historical Archaeology in Arkansas. Society for Historical Archaeology. St. Louis, Missouri.

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

- 2003 Oral History: Beekeeping (Victor Johnson); Oral History: Workplace and Workers' Homes (Lakeport Quarters and Ford/Goldstein Headquarters/Quarters); Analyzing Photographs: Lakeport Plantation; Analyzing Photographs: Lakeport People (Mattie and Victor Johnson Through Time); Analyzing Photographs: Lakeport Workers (the African-Americans); and Archeology at Lakeport. Six exhibit posters (text and graphics) presented at the 2nd Lakeport Reunion, Lakeport Plantation Preservation Project. Lake Village, Arkansas.

Trubitt, Mary Beth D.

- 2003 Archeological Mapping at an Arkansas Novaculite Quarry. Poster presentation. Plains Anthropological Conference. Fayetteville, Arkansas.
- 2003 Archeological Field School: Hands-on Teaching of Research Methods. Arkansas Sociology and Anthropology Association Conference. Arkadelphia, Arkansas.

Appendix 3. SRP Titles for 2003-2004

Guendling, Randall L.

- 2003 A Cultural Resources Survey of the Otter Creek Development Area, Pulaski County, Arkansas. Final Report, Project 03-13. Submitted to Otter Creek Land Company, Little Rock, AR.
- 2003 A Cultural Resources Investigation of Corps of Engineers Permit Area, Clinton Presidential Center, Pulaski County, Arkansas. Final Report, Project 03-14. Submitted to Phelps Program Management, Little Rock, AR.
- 2004 A Cultural Resources Survey of the Johnswood House Area, Pulaski County, Arkansas. Final Report, Project 04-05. Submitted to Little Rock Wastewater Utility, Little Rock, AR.
- 2004 A Cultural Resources Survey of Selected Springdale Sewerline Extensions, Benton and Washington Counties, Arkansas. Final Report, Project 04-06. Submitted to McGoodwin Williams & Yates, Fayetteville, AR.

Lockhart, Jami J., and John H. House

- 2003 Archaeogeophysical Mapping of a Proposed Visitor Contact Facility at Arkansas Post National Memorial, Osotouy Unit. Report submitted to United States National Park Service, Arkansas Post National Memorial.

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