CADDOAN

ARCHEOLOGY

NEWSLETTER

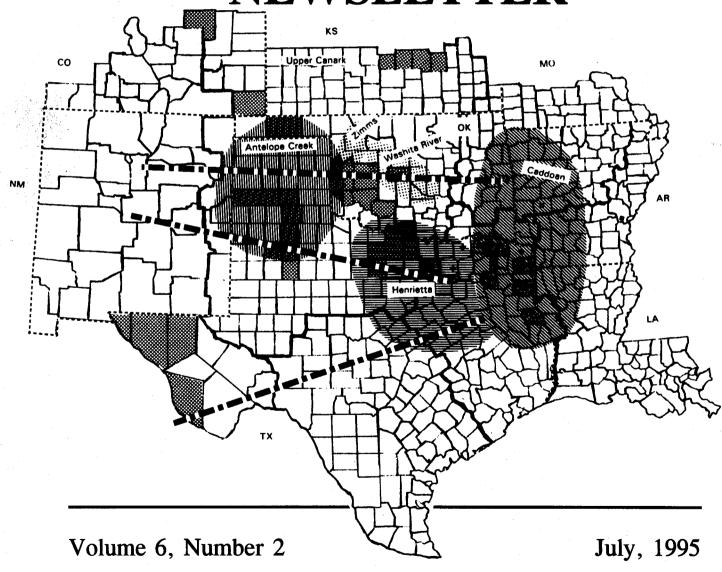


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SUBSCRIPTION RENEWALS RECEIVED SINCE VOLUME 6 (1)

Caddo Tribe
Coastal Environments
Armin T. Dressel
Meeks Etchieson
Melissa M. Green
Daniel A. Hickerson
Robert W. Jobson, Jr.
Bill Johnson

Dennis Jones
Aubra (Butch) Lee
Larry Neal
George H. Odell
J. Daniel Rogers
Marie Steed
Mike Turner

UPCOMING MEETINGS AND EVENTS

MEETINGS AND EVENTS

Continuing into 1995 State Museum of History, Oklahoma City: Saturday Film Series continues at Wiley Post Historical Building (Lincoln Boulevard near the Oklahoma Capitol; Free). For scheduling information, call (405) 522-5241.

August

The Russian Academy of Sciences, International Symposium on Alternative Pathways to the Early State. Vladivostok, Russia. Symposium objectives include analyses of transition from pre-state politics to early state; differences between various forms of proto-states; and why some transformations to state have occurred whereas others have not. Application deadline December 31, 1994. Contact: Dr. Nikolay N. Kradin, Institute of History, Archaeology, and Ethnology, Far Eastern Division, Russian Academy of Sciences, 89 Pushkinskaya St., Vladivostok, 690600, Russia.

September

7-10 Trappers/Traders Encampment. Sequoyah's Home Site, northeast of Sallisaw OK on State Hwy 101. Early 1800s living history. For more information call (918) 775-2413.

September-October

9/30, 10/1-2 Arkansas Archeological Society Annual Meeting, DeGray Lodge, DeGray State Park. For more information, contact Program Chair Don Ross, 210 Unity Road, Arkadelphia AR 71923; telephone (501) 246-9174.

October

7 Fall Encampment. Fort Gibson Military Park, Fort Gibson OK. 1830-1840s living history. For more information call (918) 478-3355.

21 Annual Quilt Show. Peter Conser Home, near Hodgen OK. For more information call (918) 653-2493.

11-15 49th National Preservation Conference. Fort Worth, Texas. The theme will be "Strategies and Partnerships for a New Era". For more information call (800) 944-6847.

28 Halloween Night Walk. Spiro Mounds Archeological Park, northeast of Spiro OK. Presentation of natural environment and the "Curse of the Spiro Mounds". For information call (918) 962-2062.

November

Southeastern Archeological Conference Annual Meeting, Hilton Hotel, Knoxville TN. Abstract deadline August 1. Dr. Jefferson Chapman (Local Arrangements), Dr. Gerald Schroedl (Program Chair). For more information, contact SEAC Conference, Department of Anthropology, University of Tennessee, Knoxville TN 37996-0720; telephone (615) 974-4408; FAX (614) 974-2686.

3-4 Candlelight Tour. Fort Washita Military Park near Lake Texoma on state hwy 199. For more information call (405) 924-6502.

6-10 Making High Quality Replicas of Museum Objects. A course offered by The Texas Memorial Museum, in conjunction with International Academic Projects, London. It will be taught by E. Brenner Larsen, international expert on mold making and toolmarks on ancient objects. Participants in this highly developed practical laboratory course will learn the techniques of making high-quality resin replicas for research, exhibition, and conservation purposes. For more information contact Course Coordinator, Materials Conservation Laboratory, Texas Memorial Museum, University of Texas at Austin, PRC#122, 10100 Burnet Road, Austin TX 78758. Telephone (512) 471-7090; fax (512) 471-6092; e-mail jsjohnson@mail.utexas.edu.

11 Ladies Camp of Instruction. Fort Gibson Military Park. 19th century clothing, camping, cooking, social skills. For more information call (918) 478-3355.

December

TBA First Americans, First Oklahomans: Indian Peoples. Spiro Mounds Archeological Park. TRACKS exhibit. For more information call (918) 962-2062.

8-9 Candlelight Tour. Fort Gibson Military Park. Christmas 1848 living history. For more information call (918) 478-3355.

9-10 19th Texas Infantry CSA Military Reenactment. Fort Washita Military Park. For more information call (405) 924-6502.

1996

January

2-7 Society for Historical Archaeology, Conference on Historical and Underwater Archaeology, Omni Netherland Plaza, Cincinnati OH. Themes: Bridging Distance: Recent Approaches to Denigration, Migration, and Ethnic Identity; and

Forging Partnerships in Outreach and Education. For more information, contact Marcy Gray (Conference Chair), Gray and Pape, Inc., 1318 Main St., Cincinnati OH 45210; telephone (513) 665-6707, Email 76554.3313Xcompuserve.com; or Kim McBride, Program Coordinator, Department of Anthropology, 211 Lafferty Hall, University of Kentucky, Lexington KY 40506-0024, telephone (606) 257-1944, Email K-AMCBR004pUKCC.UKY.EDU.

April

10-14 61st Annual Meeting of the Society for American Archaeology. Marriott Hotel, New Orleans LA. Abstracts and other submissions are due September 15! More information will be given later.

May

20-24 International Symposium on Archaeometry. University of Illinois. For additional information, contact: S. Wisseman, ATAM Program, University of Illinois, 116 Observatory, 901 S. Mathews, Urbana IL 61801. Telephone: (217)-333-6629; fax: (217) 244-0466; email: wisarc@ux1.cso.uiuc.edu.

EXHIBITS

Current Oklahoma State Museum of History. Native American Gallery features a long term exhibit which gives an overview of Oklahoma prehistory, focusing on the Spiro site. New, larger exhibit on Spiro in planning, but opening may be several years away. Contact: State Museum of History, 2100 Lincoln Blvd, Oklahoma City, OK 73105. Telephone: (405) 521-2491.

Through August 1 Gold of Mycenae, Dallas Museum of Art. This exhibit presents ancient jewelry, including gold rosettes, ornaments, bead necklaces, and rings, as well as engraved seal-stones, from a Mycenaean tomb in southern

Greece. Dated to ca. 1500 B.C., the jewelry is on loan from the Society for the Preservation of the Greek Heritage.

Through September 18 Imperial Tombs of China, Memphis Cook Convention Center, Memphis TN. The exhibit features more than 250 objects dated about 500 B.C. to A.D. 1900, from the tombs of China's most famous emperors and rulers. Highlights include a Han Dynasty burial suit made of 2000 pieces of jade sewn together with more than two pounds of gold thread, and four terracotta warriors discovered in the tomb of China's first emperor Qin Shihuangdi.

CADDOAN AREA NEWS

OKLAHOMA

Frank Winchell, archeologist with the US Army Corps of Engineers, Tulsa District, sends word that a project is beginning on Kaw Lake in the southern edge of Kansas near the mouth of Grouse Creek. The work is being done by Jeff Indeck of Wichita State University. Two sites, 14CO556 and 14CO557, which are Late Woodland to Late Prehistoric occupations, are being dug during a field school scheduled for July 5-27. The occupation left dark midden deposits containing cord marked sherds, Harrell arrow points, and a larger, Kansas City Hopewell type of point similar to a Snyders.

At the Oklahoma Archeological Survey, the staff is pleased that a former student worker,

Johnnie Jacobs, was awarded one of six summer internships at the National Museum of the American Indian, Smithsonian Institution. In addition, in May the State Historic Preservation Office presented the Survey with the Shirk Memorial Award for Historic Preservation.

This fall, Lois Albert of the Oklahoma Archeological Survey and Russ Townsend of Tulsa (Anthropology BA from OU, MA from Tulsa University) will be conducting a survey in Adair, Delaware, and Cherokee counties in northeastern Oklahoma. The emphasis will be on early historic Cherokee sites (ca. 1830s to 1860s). If anyone has information about unrecorded (especially) sites from this area, we would appreciate hearing from you.

TEXAS

Reported by Tim Perttula

There are several interesting Caddoan archeology projects currently underway, or nearing completion in northeastern Texas. By far the most significant is the excavation at the Oak Hill Village (41RK214), being directed by J. Brett Cruse of Espey, Huston & Associates, Inc. This Middle Caddoan village has been completely exposed through a combination of gradall stripping and block excavations. It contains some 42 circular and rectangular structures (including several small structures thought to be granaries), several hundred features, two midden deposits, and a large, open plaza area. Feature investigations will be completed soon. This site promises

to provide a unique view of the character and intrasite spatial pattering of a 13th to 14th century Caddo village, as well as an incomparable opportunity to better understand prehistoric Caddoan lifeways in the region.

Horizon Environmental Services, Inc., is conducting archeological investigations at the proposed Lake Gilmer in Upshur County, Texas. Recent work includes the testing of 41UR109, a multicomponent Caddoan site along Kelsey Creek, and data recovery at 41UR118, a Late Caddoan Titus phase habitation site along the dam axis. The work concentrated on a well-

preserved midden deposit. Further excavations are planned in 1995-1996 at several other Caddoan sites before the lake is completed and filled. Local pothunters, unfortunately, have now moved into the Lake Gilmer area looking for prehistoric grave sites to loot Controlling these activities will be a continuing problem for the City of Gilmer, who is building the lake, the Corps of Engineers-Fort Worth District (the federal permitting agency), and the Texas Historical Commission (the state permitting agency). The lack of an unmarked burial bill in Texas only exacerbates the looting and vandalism problem.

The Corps of Engineers-Fort Work District, Operations Branch has authorized a number of small archeological surveys (ca. 1000 acres) recently at Lake O' the Pines and Lake Wright Patman. Although the reports have not been completed, a few possibly important Archaic and Caddoan sites have been identified in these surveys. The Operations Branch is also supporting the inventory and analysis of human remains and grave goods from Caddoan sites on Corps of Engineers land; these projects by Prewitt and Associates, Inc., Geo-Marine, Inc., D. Gentry Steele (Texas A&M University), and Jerome C. Rose (University of Arkansas) will be completed soon.

Prewitt and Associates, Inc., is completing an important synthetic report on the many years of prehistoric and historic archeological investigations conducted at Cooper Lake on the South Sulphur River, a Corps of Engineers reservoir. Since the early 1970s, many significant Caddoan archeological sites have been excavated at Cooper Lake. Thus, this synthesis should help to thoroughly illuminate the Caddoan settlement and use of this river basin.

The Texas Historical Commission, Department of Antiquities Protection (THC), completed test excavations at the Horace Cabe Mounds site (41BW14) at the request of The Archaeological Conservancy, who holds a conservation easement on this well-preserved Late Caddo mound group on the Red River. The test excavations were in areas well away from the mounds that were proposed by the landowner for the construction of houses and a corral. Two investigated areas contained intact Late Caddo archeological deposits that have good potential to contain house structures and features, and these areas appear to be habitation or village remains associated with the Late Caddo mound group. The final report will be available from the THC in July 1995.

ARKANSAS

June 1995 Fieldwork in the Ouachita Mountains Ann M. Early

The 1995 Arkansas Archeological Survey-Society Training Program investigated four sites in the Winding Stair area of the upper Little Missouri River Valley, in the Novaculite Uplift region of the Ouachita Mountains. This project was a cooperative venture with the Ouachita National Forest, and was staffed in part by Ouachita and Ozark-St. Francis National Forest archeologists. At the Winding Stair site, tested

previously in 1992 and 1993, nearly all of a late prehistoric building on a narrow terrace surrounded by novaculite ridges was excavated. The structure, which had been cleaned and deliberately burned, was a rectangular, single post structure with two internal roof support posts, and was oriented NE/SW, probably facing the nearby creek. A large sample of burned timbers, smaller charred plant remains such as nuts and corn

cobs, and daub was recovered along with a small sample of artifacts. All of the interior floor area of the building was recovered for flotation, and it will be several months before a full inventory of remains is compiled. The estimated age of the building is ca. A.D. 1400.

A second site, the Bugspot site, on a terrace adjoining the Winding Stair location, turned out to be multiple component, with a major late prehistoric habitation that was marked by numerous post molds, pit features, and a substantial midden. The test at this site confirmed that the Winding Stair structure is not an isolated phenomenon, and that significant residential occupa-

tion of the rugged interior valleys of the Ouachitas took place during the late prehistoric period. Evidence of Dalton and Fourche Maline occupations was also recovered.

The other two sites tested were historic period occupations, one that appears to be a pre-1860 habitation site, and another that is a late 19th and early 20th century site. The latter appears to have served both as a residential site, and a locations of a local ironworks that may have been related to the local early twentieth century shortleaf pine timber boom. A technical report and accompanying interpretive material on the excavations is due in December, 1996.

LOUISIANA

In May of this year, Jeff Girard of Northwestern State University and Louis Baker of the Louisiana Archaeological Society excavated as series of test pits on the periphery of the mound at the Swan Lake site (16BO11) located in the Red River floodplain north of Bossier City, Louisiana. As reported earlier in the Newsletter, radiocarbon ages on charcoal recovered from a pit feature at this site indicate the presence of a component dating somewhere in the 1700 to 2000 BP range. Sherds recovered from the site surface indicated an Early to Middle Caddoan component as well. The test excavations conducted during May strongly suggest that the mound is related to the Caddoan component as sherds belonging to the Sinner Linear Punctated were recovered from the natural levee deposit underlying the lowest stratum of moundfill. The Swan Lake mound therefore appears to be roughly contemporaneous with the nearby Wermer (16BO8; now destroyed) and Vanceville (16BO7) mounds.

ABSTRACTS OF PAPERS FROM THE THIRD EAST TEXAS ARCHEOLOGICAL CONFERENCE February 11, 1995

Cliff, Maynard B. Results of National Register Testing Conducted at Three Prehistoric Sites in Cass County, Texas. Archeological test excavations were conducted at three prehistoric sites (41CS150, 41CS151, and 41CS155/156) along Tuck and Caney creeks in northwestern Cass County, south of the Sulphur River. This research was supported by the U.S. Army Corps of Engineers, Fort Worth District, as part of an ongoing program of cultural resource investigations at the White Oak Creek Mitigation Area. Site 41CS150 was found to contain a midden datable to the Middle Caddoan period (ca. A.D. 1200-1400, with possibly some earlier material dating to the Late Archaic (2000-200 B.C.) elsewhere on the site. At site 41CS151 three smaller subareas were identified which appear to have been occupied during the Late Archaic, the Early Ceramic (200 B.C.-A.D.800), and Early Caddoan (A.D. 1000-1200) periods. Occupation features included a buried concentration of burned rock dating to the Late Archaic, a culturally darkened zone on a paleosurface buried by colluvium dating to the Late Archaic/Early Ceramic period, and an Early Caddoan midden. Site 41CS155/156 contained materials suggesting utilization from the Late Paleoindian period (8500-7000 B.C.) to the Late Caddoan period (A.D. 1400-1680). A rich midden dating largely to the Middle Caddoan period was identified in the central site area.

Collins, Michael B.. The First 10,000 Years of Humans in Texas. In the first 10,000 years of their presence in Texas, people experienced diverse and often changing habitats. Their responses to these conditions are seen in the archeological manifestations we know as Paleoindian and Archaic. This rich and puzzling record is reviewed.

Cruse, Brett. Archeological Investigations at

the Oak Hill Village Site (41RK214): A Middle Caddoan Settlement in Rusk County, Texas. Archeological investigations at the Oak Hill Village site in Rusk County, Texas have yielded the remains of a Middle Caddoan village dating from ca. A.D. 1350-1450. To date, the remains of 16 circular structures have been identified. Of these, 13 appear to have functioned as habitations and three are probable storage facilities. The structures are arranged in a circular fashion around a plaza area. Other features at the site include two middens, one burial, and several pits containing charred corn cobs. Subsistence activities included the cultivation of corn supplemented by hunting, gathering, and fishing.

Hoyt, Cathryn A. The Texas Archeological Stewardship Network: Partners in Preservation. The Texas Archeological Stewardship Network was formed in 1983 to assist the Texas Historical Commission with the preservation of Texas' rich cultural heritage. Coordinated through the Office of the State Archeologist, the 55 avocational archeologists who are members of the network give slide shows and talks, record archeological sites, monitor known sites, document private artifact collections, and assist landowners with the preservation of cultural resources on their land. Each year members of the network donate over 15,000 hours of volunteer time to preservation activities. This paper will provide a broad overview of the many significant achievements of the network.

Hubbard, Velicia. Passports in Time and the Old Alridge Mill and Township (41JP82), Jasper County, Texas. This presentation is designed to inform those who have an interest in our local history of an up-and-coming project in our area. The U.S. Forest Service, National Forests and Grasslands of Texas, Angelina District, is proud to sponsor this year a national project called

Passports in Time. The focus for the project will be at the Old Alridge Mill and Township (41JP82), in Jasper County, Texas, during Spring Break 1995. Discussed herein is a brief history and description of both the Passports in Time program and the Old Alridge Mill and Townsite. Passports in Time has spread rapidly since its conception, and we are quite honored to apply it to the most significant historic site on the Angelina National Forest.

Mallouf, Robert J. The Office of the State Archeologist: Activities and Programs. The Office of the State Archeologist (OSA) mandate specifies that the OSA is to conduct a continuing inventory of non-renewable archeological resources; evaluate known sites through testing and excavation; maintain extensive field and laboratory data; consult with state organizations and other groups concerning archeological and historical problems; and publish the results of the state archeological program through a regular series of reports. This paper will provide a brief overview of the programs and activities developed by the OSA to meet the requirements of this often overwhelming mandate.

Martin, Bill. The Department of Antiquities Protection: Protecting Archeological Sites through Regulations and Designations. Department of Antiquities Protection is made up of eight professional archeologists who have many years of experience in Texas archeology. We have expertise on the archeology in all regions of the state, and even under our rivers and off the coast. The primary duties of this department of the Texas Historical Commission are to administer state and federal laws designed to prevent the destruction of archeological sites as a result of construction projects. We also nominate sites for designation as State Archeological Landmarks or for listing in the National Register of Historic Places. This presentation will outline the procedures the department follows when reviewing construction projects from start to finish.

Nelson, Bo, Tim Perttula, and Mike Turner.

Archeological Investigations at t Middle Caddoan Site in Upshur County. Recent investigations at the Griffin Mound site (41UR142) have identified a small, but dense, 13th century Caddoan settlement near the headwaters of Caney Creek in the Little Cypress Creek basin. The site has well-preserved midden deposits with an abundance of plant and animal remains, as well as an interesting ceramic and lithic assemblage, most notably characterized by the production and use of significant numbers of stemmed arrowpoints. The focus of excavations to date has been a large (2+ meters in diameter) pit, probably a storage pit, exposed at the base of the midden.

Nichols, Peter. Archeological Investigations along Kelsey Creek, Upshur County, Texas. In 1987, Horizon Environmental Services, Inc., began archeological investigations along Kelsey Creek in Upshur County, Texas. These studies were supported by the City of Gilmer as part of the permitting process for the construction of Lake Gilmer. Pedestrian surveys in 1987, 1991, and 1993 recorded 29 sites, 17 with only prehistoric materials, five with both historic and prehistoric remains, and seven only of historic age. Most of the sites will be preserved in a hardwood mitigations area, but 10 of the remaining sites were recommended for test excavations; nine sites have been tested to date. Of the sites tested, one large Late Caddoan site has been recommended for extensive mitigation, with less mitigation at two other sites. The Texas Water Development Board has recently provided money to the City of Gilmer, with work to start on the dam by June 1, 1995, and completion of the dam by the end of October 1996. Mitigations work will start this spring, and probably continue through 1995 and 1996.

Reese-Taylor, Kathy. Ceramic Production and Consumption Patters in Early-Late Caddoan Settlements in Northeast Texas. As part of the ongoing archeological investigations in Northeast Texas by Texas Utilities Services and Espey, Huston and Associates, research on Caddoan ceramics has been conducted that focuses on variability in surface treatment, vessel form, and

paste composition through detailed attribute analysis and petrographic examination of sherds. I discuss ceramic analyses at Early-Late Caddoan sites in Rusk and Titus counties. The distribution of various pastes were compared between sites to detect changing ceramic production and consumption patterns by completing 25 ceramic thin sections from 10 sites in Rusk County, and then comparing those results with macroscopic identification of paste composition from all ceramics in the assemblages.

The paste distribution patterns indicate local production, but with spatial and temporal differences in specific clays and tempering agents. The distribution of the various pastes reflect the changing needs of the consumers, as well as occasional outside influences, and an economic model is proposed that integrates patterns of paste distribution, ceramic production and consumption, and inter-site communication.

Todd, Jesse. Freshwater Molluscs: Their Use and What They Mean to Archeologists. I discuss the various uses of freshwater molluscs by Native Americans in East Texas, such as for tools and ornamentation, and review the most common genera and species. Freshwater molluscs are important to archeologists because they tell about the modern environment as well as changes in paleoenvironments, and help determine the character of past biotic habitats.

ABSTRACTS FROM RECENT PUBLICATIONS FOR THE CADDOAN AREA

Thanks to Tim Perttula for sending copies of these abstracts as well as the ones from the ETAC for inclusion in the newsletter.

Espey, Huston & Associates, Inc. PO Box 519, Austin TX 78767. Cultural Resources Survey of the Proposed Monticello I Area Surface Mine, Titus County, Texas. Prepared for: Texas Utilities Services, Dallas TX. December 1991 (revised April 1994). A cultural resources survey of 1,100 hectares within the proposed Monticello I Area surface coal mine study area was conducted by Espey, Huston & Associates, Inc. A total of 24 archeological sites were recorded, including twelve prehistoric sites, eleven historic sites, and one dual component historic/prehistoric site. One of the historic sites, a cemetery, has been recommended for avoidance. Archival research was conducted on the other historic sites. None of the historic sites can be dated prior to the early- to mid-twentieth century. Based on the archival and archaeological data, the other historic sites or site components. including three standing structures, are, in the opinion of project archaeologists, not eligible for the National Register of Historic Places and are not recommended for further investigation. The prehistoric sites consist primarily of buried, nondiagnostic lithic scatters with no surface indications. One of the prehistoric sites, 41TT4, was excavated in the 1930s and has since been classified as Late Caddoan (Cypress Cluster, transitional Whelan/Titus Phase). Six prehistoric sites are considered potentially capable of yielding significant information on prehistoric lifeways and are recommended for further investigation if they will be impacted by mining activities.

Klinger, Timothy C., Lawrence L. Ayres, Don R. Dickson, Margaret J. Guccione, Steven M. Imhoff, and James W. Smith. Graham Farm (3WA753) and Winn Creek (3WA767): Data Recovery at Two Prehistoric Sites Along the Relocation Route of U.S. Highway 71 Within the Ozark-Arkansas-Ouachita Region, Washington County, Arkansas. Historic Preservation Associates Reports 93-3 (Appendix). Prepared for the Arkansas Highway and Transportation Department, Little Rock AR, by Historic Preservation Associates, PO Box 1064, 301 West Mountain

Street, Fayetteville AR 72702. March 1993. Graham Farm (3WA753) and Winn Creek (3WA767) are prehistoric sites located in the Ozark-Arkansas River-Ouachita Region (OAO) in northwest Arkansas. These investigations were conducted for the Arkansas Highway and Transportation Department (AHTD) by Historic Preservation Associates (HPA). Graham Farm and Winn Creek were first discovered by AHTD archeologists in 1986 during a survey of the proposed relocation route of US71. Mid-Continental Research Associates (MCRA) assessed both sites as potentially significant in 1987. HPA data recovery efforts took place at Graham Farm and Winn Creek during 1990.

Evidence was discovered at Graham Farm suggesting that this upland landform was visited briefly during the Early Archaic II Period (8000-9500 BP), frequently by hunting parties during the Middle Archaic I Period (6500-8000 BP), rarely (if at all) during the Middle Archaic II Period (5000-6500 BP), infrequently during the Late Archaic I Period (5000-2800 BP), frequently by hunting parties during the Terminal Archaic Period (2800-1800 BP), frequently during the Middle Woodland Period (1800-1400 BP) by hunting parties who processed game, dressed skins and did some woodworking, infrequently during the Late Woodland Period (1050-1350 BP), occasionally during the Early Caddoan Period (1050-700 BP), and infrequently during the Late Caddoan Period (700-500 BP).

Use of the lowland terrace at Winn Creek occurred infrequently by hunting parties during the Early Archaic I (Dalton) Period (9500-10,500 BP), occasionally by hunting parties during the Early Archaic II Period (8000-9500 BP), frequently by hunting parties during the Middle Archaic I Period (6500-8000 BP), rarely by hunting parties during the Late Archaic I Period (5000-2800 BP), by as many as six hunting parties during the Terminal Archaic Period (2800-1800 BP), often by hunting parties or small family foraging groups during the Middle Woodland Period (1800-1400 BP), rarely by hunting parties during the Late Woodland Period (1050-

1400 BP), and infrequently by hunting parties during the Late Caddoan Period (700-500 BP).

Klinger, Timothy C., James W. Smith, and Kirsten L. Hoffman. Wildlife Plots: Historic Properties Survey of Wildlife Food Plots for the Oklahoma Department of Wildlife Conservation in the Kiamichi-Choctaw District in the west half of the Ouachita National Forest within the Ozark-Arkansas-Ouachita Region, LeFlore County, Oklahoma. Historic Preservation Associates Report 93-16. Prepared for the Oklahoma Department of Wildlife Conservation, Oklahoma City OK, by Historic Preservation Associates (address above). December 1993. A records check and pedestrian survey of 136 wildlife plots in the Kiamichi-Choctaw Districts of the west half of the Ouachita National Forest in LeFlore County, Oklahoma, was conducted by Historic Preservation Associates. The intensity and scope of the cultural resources investigations in connection with the plots was sufficient to determine whether historic properties were present that either were or may be eligible for inclusion in the National Register of Historic Places. 34Lf-197, 34Lf-817 and 34Lf-818 were previously recorded at the Oklahoma Archeological Survey. Nine (34Lf-197, 34LF-960 through 34LF-964, 34LF-817, 34LF-818 and 34LF-988) prehistoric sites and 12 isolated finds in LeFlore County, Oklahoma were documented or relocated during the course of the field survey. None of these resources possess characteristics that when viewed in their most favorable light would make them eligible for the National Register of Historic Places. No additional cultural resources work is warranted and none is recommended for the project areas.

Cliff, Maynard B., and Duane E. Peter, with contributions by Sharlene N. Allday, Stephen P. Austin, Sherrian K. Edwards, Steve Gaither, Dayna B. Lee, Steven M. Hunt, and Cynthia Stiles-Hanson. Miscellaneous Report of Investigations 38, Geo-Marine, Inc. Archeological Survey of Selected Portions of the Longhorn Army Ammunition Plant, Harrison County, Texas, 1989-1992. Prepared for the US Army

Corps of Engineers, Fort Worth District. Between September 1989 and March 1992, Geo-Marine, Inc., under contract to the U.S. Army Corps of Engineers, Fort Worth District, conducted cultural resources investigations within various areas of the Longhorn Army Ammunition Plant (LHAAP) in Harrison County, Texas, as part of an ongoing program to identify and evaluate all of the cultural resource properties within the facility. In accordance with and in partial fulfillment of the Army's obligation under the National Historic Preservation Act of 1966 (PL 89-665), as amended; the Archeological and Historical Preservation Act of 1974 (PL 93-291), as amended; Executive Order No. 11593, "Protection and Enhancement of the Cultural Environment"; and Army Regulation 420-40. "Historic Preservation", this work involved an intensive pedestrian survey of approximately 785 hectares (1,940 acres) of land on the LHAAP. with a systematic on-the-ground pedestrian survey and selective shovel testing of high probability site areas and areas with dense ground cover.

As a result of this intensive survey within portions of the LHAAP, 24 previously unrecorded archeological sites and 19 nonsite localities were identified. Of the 24 cultural resource properties that were identified, four presently are identified as being entirely prehistoric in date, 16 as historic period sites, and four as having both prehistoric and historic components. This small sample of prehistoric components from the LHAAP ranges in date of occupation from the Archaic to the Late Caddoan periods, although the majority of the dated components appear to be Late Caddoan. The sample of historic period sites ranges in age from as early as 1875-1880 up until the present day, although most appear to fall within the period from 1880 to 1940.

Analysis of the survey data and collections has resulted in 17 sites being recommended ineligible for inclusion in the National Register of Historic Places (NRHP). At the present time, the other seven sites are recommended to be either eligible for the NRHP (41HS407 and 41HS484) or of un-

known status in regard to their eligibility for inclusion in the NRHP (41HS404, 41HS406, 41HS409, 41HS436, and 41HS485). The two sites recommended to be eligible for inclusion in the NRHP require additional archeological investigations to determine their horizontal and vertical extent, four of the sites of unknown eligibility require additional archeological investigation in the form of more intensive subsurface testing in order to determine their NRHP eligibility status, while the fifth site of unknown eligibility is a cemetery that is already protected and requires no further work. The nonsite localities, which represent largely isolated prehistoric and historic finds, are by definition ineligible for inclusion in the NRHP and no further work is recommended for them.

Cliff, Maynard B, and Duane E. Peter. Cultural Resources Survey of 2,226 Hectares Within the Red River Army Depot and Lone Star Army Ammunition Plant, Bowie County, Texas. RRAD/LSAAP Archeological Technical Series, Report of Investigations 4. Prepared for the US Army Corps of Engineers, Fort Worth District, by Geo-Marine, Inc. In September of 1990, Geo-Marine, Inc., was contracted by the U.S. Army Corps of Engineers, Fort Worth District, to conduct cultural resources investigations within an area of approximately 2,226 hectares within the Red River Army Depot (RRAD) and Lone Star Army Ammunition Plant (LSAAP) in Bowie County, Texas, as part of an ongoing program to identify and evaluate all of the cultural resource properties within the two facilities, in accordance with and in partial fulfillment of the Army's obligation under the National Historic Preservation Act of 1966 (PL 89-665), as amended; the Archeological and Historical Preservation Act of 1974 (PL 93-291), as amended; Executive Order No. 11593, "Protection and Enhancement of the Cultural Environment"; and Army Regulation 420-40, "Historic Preservation". The intensive pedestrian survey of the 2,226 hectares of the RRAD/LSAAP was carried out in October, November, and December of 1990, with a small amount of follow up work conducted during January and February of the

subsequent year. The intensive archeological survey involved a systematic on-the-ground pedestrian survey and selective shovel testing of high probability site areas and areas with dense ground cover.

As a result of this intensive survey within portions of the RRAD/LSAAP, 58 archeological sites (57 of which were unrecorded previously) and 48 nonsite localities were identified. Of the 58 cultural resource properties that were identified, 45 were located on the RRAD and the remaining 13 were found on the LSAAP. Twenty-nine of these properties presently are identified as being prehistoric sites, 26 as historic sites, and three as multicomponent prehistoric and historic sites. This sample of prehistoric sites from the RRAD/LSAAP area ranges in date of occupation from the Archaic to the Caddoan periods, although the majority of them cannot be accurately dated. The sample of historic sites ranges in age from as early as 1840-1850 up until the time the government acquired the bases in the 1940s. Most, however, appear to fall within the period from 1880-1920, which has previously been identified as the time of greatest occupation in the area.

Analysis of the survey data and collections has resulted in 31 sites being deemed ineligible for inclusion on the National Register of Historic Places (NRHP). At the present time, the other 27 sites are considered to be of unknown status in regard to their eligibility for inclusion on the NRHP. Three of these sites (two on the RRAD -41BW423 and 41BW451, and one on the LSAAP - 41BW427) require an evaluation of the degree of hazardous waste contamination present before continuing with the NRHP-evaluation process; while one (41BW443) is a cemetery on the LSAAP which requires archival research to evaluate its potential for yielding "important information not available in extant documentary evidence" (USDI, NPS 1992). The remaining 23 sites, including 18 on the RRAD (i.e., 41BW184, 41BW425, 41BW428, 41BW429, 41BW434, 41BW450, 41BW457, 41BW459, 41BW460, 41BW464, 41BW465, 41BW466,

41BW467, 41BW471, 41BW474, 41BW476, 41BW479, and 41BW480) and five on the LSAAP (i.e., 41BW430, 41BW437, 41BW438, 41BW442, and 41BW445) require additional archeological investigation in the form of more intensive subsurface testing in order to determine their NRHP-eligibility status. The nonsite localities, which represent largely isolated prehistoric or historic finds, are by definition ineligible for inclusion on the NRHP and no further work is recommended for them.

Rogers, Robert, Eugene Foster, and Kathryn Reese-Taylor, with contributions by Michael Nash, Wayne Glander, David Jurney, Mary McCready, and Gary Rutenberg. National Register Testing at Eight Archaeological Sites Within the Oak Hill 2,280-Acre Study Area, Rusk County, Texas. Document No., 930169, EH&A Job No. 11420. Prepared for T.U. Services, Dallas TX by Espey, Huston & Associates, Inc., PO Box 519, Austin TX 78767. August 1994. The following report presents the results of archaeological testing of eight sites conducted by Espey, Huston & Associates, Inc. (EH&A) within the Oak Hill 2,280-acre lignite surface mine study area for TU Services (TU). The 2,280-acre study area represents an extension of the Oak Hill Mine.

The investigations were undertaken to provide a determination of eligibility for the National Register of Historic Places (NRHP) for the cultural deposits at sites 41RK86A, 41RK108, 41RK214, 41RK215, 41RK216, 41RK218, 41RK222 and 41RK223.

As a result of the study, valuable data was retrieved regarding the prehistoric and historic development of the area. Over 1,180 prehistoric and 632 historic artifacts were recovered from the sites during the investigations. Seven radiometric assays were obtained from four of the prehistoric sites. In addition, human skeletal remains and prehistoric dietary evidence were also retrieved.

A determination of NRHP eligibility status for

the recorded cultural resources was made by the THC, in a letter dated July 1, 1993. Sites 41RK86A, 41RK216 and 41RK218 were determined not eligible for inclusion in the NRHP because they do not contained intact archaeological deposits with values important for understanding the prehistory or history of Northeast Texas. Sites 41RK214, 41RK215, 41RK222 and 41RK223 were found to be eligible for inclusion in the NRHP. Sites 41RK214, 41RK215 and 41RK222 were found to be eligible under criterion D because they contain important information to help understand research problems concerning the Early Ceramic and Middle Caddoan period archaeology of Northeast Texas. Site 41RK223 is considered eligible under Criteria A (association with events of importance in history), C (embodying distinctive characteristics of methods of construction) and D (for information important in history).

Carpenter, Stephen M., and Douglas Drake. Cultural Resources Survey of a Proposed SWEPCO Transmission Line, Titus County, Texas. Texas Archeological Research Laboratory, The University of Texas at Austin, Technical Series 39, 1994. In July and October of 1993. the Texas Archeological Research Laboratory, The University of Texas at Austin, conducted a cultural resources survey of 24 miles of the right-of-way of a proposed 345kv transmission line in Titus County, northeast Texas, for Burns and McDonnell, agent for Southwestern Electrical Power Company. Four sites, 41TT645, 41TT647, 41TT649, and 41TT657, are either largely outside the right-of-way or hold little information promise. Two prehistoric sites, 41TT646 and 41TT648, were recommended for avoidance as an alternative to testing to determine their National Register of Historic Places eligibility. Additional site definition was undertaken at 41TT646 in May of 1994. One 1-x-1-m test unit and 16 shovel probes produced evidence of an Early Ceramic buried component that was successfully preserved by redesign of tower placement and routing of heavy equipment around the site.

Schmidt, James S., and Rick Taylor. Cultural Resource Investigations for the Big Brown CVI Revision (F.M. 2570 South) Mine Area, Freestone County, Texas. Document No. 940158. EH&A Job No. 15158. Prepared for TU Services, Dallas TX, by Espey, Huston & Associates, Inc., PO Box 519, Austin TX 78767. November 1994. During January 1994, personnel from Espey, Huston & Associates, Inc., conducted assessment testing and a cultural resources survey within the Big Brown CVI Revision Mine area in Freestone County, Texas. Assessment testing was conducted at previously recorded historic sites 41FT367, 41FT368, 41FT169, and 41FT371. Additional testing is recommended for Site 41FT371, which revealed a deeply buried prehistoric component, if the site is to be impacted by mining or related activity. It is the opinion of the project archaeologists that 41FT367, 41FT368, and 41FT369 do not meet NRHP criteria, and further investigations are not recommended. Investigations also included the excavation of nine backhoe test-pits to assess buried site potential.

Investigations also documented a total of nine archaeological sites along the tributaries of Big Brown Creek. The kinds of sites include prehistoric campsites, one historic residence, and one multicomponent (prehistoric/historic) site. Four of the prehistoric sites (41FT411, 41FT414, 41FT415, and 41FT416) are recommended for additional testing if they are to be impacted by mining or mine-related activity. This testing is recommended to determine if they meet National Register of Historic Places (NRHP) criteria. Sites 41FT410, 41FT412, 41FT413, 41FT417, and 41FT418 are not recommended for testing.

Skokan, Elizabeth A.. Cultural Resources Survey of Portions of the Monticello B-2 Surface Lignite Mine, Titus County, Texas. Document No. 930719, EH&A Job No. 15207. Prepared for Texas Utilities Services, Inc., Dallas TX, by Espey, Huston & Associates, Inc., PO Box 519, Austin TX 78767. July 1994. At the request of Texas Utilities Services, Inc., Espey, Huston & Associates, Inc. (EH&A) conducted a cultural

resources survey during October, 1993 of previously unsurveyed areas of the Monticello B-2 mine for the Monticello B-2 Permit Renewal. Unsurveyed areas within the Monticello B-2 mine total approximately 507 hectares (ha), of which approximately 387 ha were surveyed. A pedestrian survey recorded two historic sites (41TT655 and 41TT656), one possible multiple component prehistoric site (41TT653), and three prehistoric sites which are essentially isolated finds (41TT651, 41TT652, and 41TT654). It is EH&A's opinion that is Site 41TT653 is to be impacted, it should be tested to determine eligibility for nomination to the National Register of Historic Places; the remaining sites are not considered eligible and no further investigation is recommended. The remaining unsurveyed tract in the mine is recommended for survey if the area is to be impacted.

Cliff, Maynard B. (editor) with contributions by Sharlene N. Allday, Stephen P. Austin, Sherrian K. Edwards, Steven M. Hunt, Gary Shaw, and Frank Winchell. Cultural Resources Survey of a Portion of the White Oak Creek Mitigation Area (WOCMA), Bowie, Cass, and Morris Counties, Texas, 1990-1992. White Oak Creek Mitigation Area, Archeological Technical Series, Report of Investigations 2. Prepared for US Army Corps of Engineers, Fort Worth District, by Geo-Marine, Inc. In April of 1990, Geo-Marine, Inc., was contracted by the U.S. Army Corps of Engineers, Fort Worth District, to conduct cultural resources investigations within the planned White Oak Creek Mitigation Area (WOCMA), in an area of 4,000 acres to be identified as it became accessible (Contract No. DACW63-90-D-0006, Delivery Order No. 0003). This work was to include an intensive pedestrian cultural resources survey of these 4,000 acres for both prehistoric and historic cultural resources, and an initial assessment of these resources in terms of their eligibility for inclusion in the National Register of Historic Places. The Delivery Order specified that pedestrian survey would be limited to landforms elevated above the floodplain. Pedestrian survey of these 4,000 acres at WOCMA was carried out in stages between May 1990 and January 1992, as survey areas became accessible.

As a result of this phase of the cultural resources investigations at WOCMA, 57 cultural resources sites (53 previously unrecorded and four already known) and 33 nonsite localities were identified within portions of Bowie, Cass, and Morris counties. Of the 47 cultural resource properties, 46 presently are identified as being entirely prehistoric in date, seven as being multicomponent prehistoric and historic, three as single component historic sites, and one as an historic cemetery site. The sample of prehistoric sites recorded by this survey contained material that ranges in age from the Middle-Late Archaic up through the Late Caddoan period, with Caddoan components being most common. Of the few historic components, about half appear to be nineteenth-twentieth century refuse deposits, while most of the rest are twentieth century domestic-related sites. One late nineteenth century cemetery was located as well.

Analysis of survey data and collections has resulted in 24 sites being deemed ineligible for inclusion in the National Register of Historic Places (NRHP). The remaining 33 cultural resources sites (i.e., 41BW399, 41BW400, 41BW-401, 41BW404, 41BW405, 41BW406, 41BW-408, 41BW411, 41BW412, 41BW413, 41BW-414, 41BW415, 41BW416, 41BW488, 41BW-489, 41BW491, 41BW510, 41CS126, 41CS129, 41CS166, 41CS174, 41MX29, 41MX30, 41MX-31, 41MX32, 41MX33, 41MX34, 41MX35, 41MX37, 41MX38, 41MX41, 41MX42, 41MX-46) have an unknown eligibility status and require further investigation in the form of archeological testing to determine their final status. However, at least two of these sites (i.e., 41CS-129 and 41CS166), and possibly several others (e.g., 41BW399, 41MX30, and 41MX41) are outside the present WOCMA boundary and for this reason do not require any further work at this time. The nonsite localities, which represent largely isolated prehistoric or historic finds, are by definition ineligible for inclusion in the NRHP and no further work is recommended.

SOUTHWESTERN POTTERY AND TURQUOISE IN NORTHEASTERN TEXAS

David H. Jurney and William Young [Paper presented at the 37th (1995) Caddo Conference, Austin, Texas]

Abstract

Rare and often questionable occurrences of southwestern pottery and turquoise artifacts have been reported in northeastern Texas. These artifacts may mark major interaction networks. Both southwestern pottery and turquoise artifacts have been found at the Sanders site, which is located in the core distribution of these "erratics."

Introduction

Southwestern pottery types and turquoise artifacts are rare occurrences in the Caddoan area, yet northeastern Texas has several reported finds. The majority of these have been collected, reported, and curated by avocational archaeologists (Figure 1). Many such finds are thought to ultimately derive from the southwest, yet the empirical evidence associated with their discovery and, in some cases, the items themselves, are lost to posterity. To set this problem in focus, we decided to pool our knowledge of finds of exotic southwestern pottery and turquoise; from both avocational collections and the literature. Data drawn from archaeological sites across the Southern Plains and the Trans-Mississippi South are used to examine the timing and spacing of Southwestern-Caddoan interactions.

Strategic resources in this exchange are thought to be bison hides, meat, hair rope and textiles (Creel 1991:40-42) from the Plains; salt and bow wood from the Caddos (Schambach 1993; Jeter *et al.* 1994); and turquoise and cotton blankets

from the Southwestern Pueblos (Swanton 1942:37). Southwestern pottery is not mentioned in historical accounts, but it also played a role; possibly in the exchange of seed maize.

Occurrences of southwestern pottery vessels or turquoise artifacts in northeastern Texas, were discussed by Kreiger (1946). We have not progressed much farther than he in the interpretation of this important aspect of prehistoric interregional trade. However, some incidental scientific finds have been noted since then, providing additional direct associations between Southwestern and Caddoan peoples. Also, direct geophysical methods of sourcing pottery and turquoise that were developed in the interim add to the empirical evidence for the origin of materials and artifacts.

Recent discussions (Schambach 1993; Jeter *et al.* 1994; Wilson 1993, 1994) have indicated the potential existence of Spiroan trade networks between the Southwest, Plains, and Lower

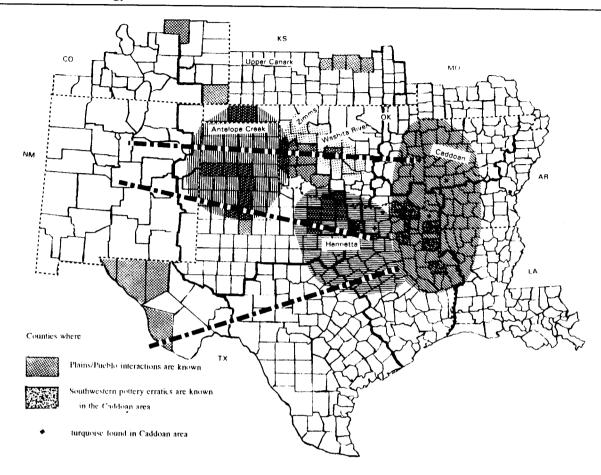


Figure 1. Locations Where Plains/Pueblo Interactions are Known, and Where Southwestern Pottery Erratics and Turquoise are Known in the Caddoan Area.

Mississippi Valley, with overland connections between the Red River and Arkansas River. Apparently overland trails extended west to the Rio Grande Pueblos. The Sanders site is the principal

candidate for such an entrepôt in northeastern Texas, and it is predicted that the distribution of known turquoise and southwestern pottery will center around the Sanders site.

Southwestern Pottery Distributions Among Archaeological Complexes

Some southern High Plains archaeological complexes (Table 1) have been reported to contain low to moderate amounts of southwestern sherds, turquoise, and obsidian (Kreiger 1946; Brooks 1989; Hofman 1989). The estimated dates begin ca. A.D. 940 with the Upper Canark

Complex. The Antelope Creek Complex of the Texas Panhandle and the Washita River Complex of Oklahoma (Figure 1) date *ca.* 1200-1450, along with the Zimms Complex *ca.* 1265-1425 of western Oklahoma. This marks the firm establishment of a native Plains-Pueblo interaction,

Table 1. Archaeological Complexes across the Southern High Plains that Possess Southwestern Pottery, Turquoise, and Occasionally Obsidian; Suggestive of a Bison Products-Maize Exchange System*.

Archaeological Complex	Inner	Dating (A.D.) Oute	Region
Upper Canark ¹	940	1500	CO,NM,TX,OK
Antelope Creek ²	1200	1500) NWTX
Washita River ³	1250	1450) OK
Zimms ⁴	1265	1425	5 WOK
Henrietta ⁵	?	1575	5 TX
Tierra Blanca ⁶	1400	1650	NM,OK,TX
Edwards ⁷	1500	1650) WOK
Wheeler ⁸	1650	1725	5 OK
Garza ⁹	1500	1650	OK,TX
Great Bend Aspect	1540	1750) KS,OK

^{* (}after Brooks 1989 and Hofman 1989)

which continued into the Henrietta Complex of Texas *ca.* 1575; the Terra Blanca Complex of New Mexico, Oklahoma, and Texas *ca.* 1400-1650; and the Garza Complex of Oklahoma and Texas *ca.* 1500-1650 (Habiche-Mauche 1987; Brooks 1989; Hofman 1989). Whole and reconstructible southwestern vessels, primarily jars and bottles, are frequently found along permanent rivers or cached at springs (Spielmann 1982:318). This movement of rare, yet appar-

ently highly curated, exotics was apparently achieved without the horse. The Wheeler (1650-1725) Complex of Oklahoma (Hofman 1978) and the Great Bend Aspect (1540-1750) of Kansas and Oklahoma also contain southwestern materials, but were influenced by the addition of the horse to the trading and exchange network.

The Rio Grande Glaze Periods, Tewa Polychromes, El Paso Polychromes and Brownwares,

¹ Lintz 1986; ² Lintz 1986; ³ Bell 1984a; ⁴ Flynn 1986; ⁵ Kreiger 1946;

⁶ Habiche-Mauche 1987; ⁷ Baugh 1982, 1986; ⁸ Bell and Bastian 1967, Hofman 1978, 1989; ⁹ Baugh 1986, Hofman 1989, Johnson *et al.* 1977; ¹⁰ Wedel 1982, 1986

Three Rivers Red-on-Terracotta, and Lincoln Brownware are commonly found in Upper Canark (940-1500) and Antelope Creek (1200-1500) contexts across the Llano Estacado, and Concepçion Focus (1583-1650) contexts of the Trans-Pecos region (Kreiger 1946:209; Brooks 1989; Hofman 1989) of western Texas (Table 2). There appears to be a gap in the distribution of these erratic exotics from Montaque County to Rockwall County in northern Texas.

Dan Prikryl, in his analysis of R. King Harris' collections in the Smithsonian, notes Southwestern sherds (untyped) at Hickory Creek (41DN49) and 41DN353, in Denton County, Texas (Prikryl 1990). "Types" which have been found as erratics in the Caddoan area include sherds identified as Chupadero (southern New Mexico), dating from the 12-15th centuries are common on Henrietta (Wichita?) sites in Clay and Montague counties. They are also noted in the Young family's collections at the Sanders Site in Lamar County on Bois d'Arc Creek and the Red River. and the Hughes collection from Shelby County on the Sabine River (Kreiger 1946:208). "Upper Gila" (Arizona), brown corrugated wares dating to the 15th C. were identified by H. P. Mera and described by Kreiger in his examination (?) of the Hughes collection from the Sanders Site on Red River (Kreiger 1946:208). The "Chupadero" identification of the specimens collected by Young as well as those in the Hughes collection need to be reexamined by current typologists. "Mogollon brownware," ascribed to the Tonto Region, Arizona was identified from Harrison County (Hayner 1955:245). A nearly whole vessel (Figure 2) was found on Aud's Creek. near Paris in Lamar County; however H. P. Mera identified it (by photographs) as Zuni dating to the mid-19th century (Wright 1943:92-95). This specimen certainly merits reexamination if it can be located. Unidentified

southwestern sherds were reported from Cass and Franklin counties by Kreiger, but the collections were unspecified (Kreiger 1946:208). The Dieckman collection (the same examined by Kreiger?) from the Hayes Farm (41FK8) in Franklin County reportedly contains Gila Polychrome, Tonto Polychrome, Maverick Mountain Redware, dating *ca*. A. D. 1250-1450 (Thurman 1990:60). The Steck site, in Wood County, Texas, yielded a neck-banded ware which appears to derive from the Southwest (Timothy K. Perttula, personal communication 1995).

An important, but generally overlooked, find is the stirrup-spout vessel recovered from the SMU salvage excavation of the Lower Rockwall site, typed Arboles Black-on-White (AD 950-1050), and thought at the time to be derived from the Navajo Reservation area of northwestern New Mexico (Lorrain and Hoffrichter 1968). The stirrup-spout bottle (Figure 3) was recovered from Backhoe Trench 1 at the Lower Rockwall site (essentially the only excavation in the eastern half of the site, the western half contained a "Wylie focus pit," which received greater attention), about 1 m below ground surface in the rich black waxy of the East Fork Trinity River floodplain. The vessel is nearly whole, missing only the neck of the stirrup. It is rock tempered with a black-on-white painted design on the upper half. It appeared to be coated with a fine-textured organic deposit in the field, which was scrubbed off in the laboratory. Initial analysis by Kathleen Gilmore indicated a southwestern origin, confirmed by A. E. Dittert Jr. (Lorrain and Hoffrichter 1968:53-57). Numerous eccentric vessels were produced in northwestern New Mexico and southwestern Colorado during Pueblo I, but the 950-1050 date for Arboles Black-on White places the vessel in Pueblo II times; necessitating the assumption that these eccentric vessels continued in use (Lorrain and Hoffrichter 1968:56).

Table 2. Southwestern Pottery Types Found on Caddoan Sites in Northern Texas, Based on Literature Searches and Examination of Avocational and Archaeological Collections.

Pottery Type	Source	Distribution	Dates A.D.
Arboles B/W ¹	NWNM	Lower Rockwall	950-1050
Chupadero ²	NM	Clay, Montague, Lamar, Shelby	1300-1400
Rio Grande I ³	NM	Llano Estacado/Trans Pecos	1375-1425
Rio Grande II ⁴	NM	Llano Estacado/Trans Pecos	1425-1475
Rio Grande III ⁵	NM	Llano Estacado/Trans Pecos	1475-1550
Rio Grande IV ⁶	NM	Llano Estacado/Trans Pecos	1550-1650
Rio Grande V ⁷	NM	Llano Estacado/Trans Pecos	1650-1750
Upper Gila ⁸	AZ	Lamar, Red River	1600
Mogollon Brownware ⁹	Tonto AZ	Harrison	?
Tewa Polychrome ¹⁰	TX,NM	Llano Estacado/Trans Pecos	?
El Paso Poly chrome ¹¹	TX,NM	Llano Estacado/Trans Pecos	?
El Paso Brownware ¹²	TX,NM	Llano Estacado/Trans Pecos	?
Three Rivers Red/Terracotta ¹³	TX,NM	Llano Estacado/Trans Pecos	?
Lincoln Bl./R14	TX,NM	Llano Estacado/Trans Pecos	?
"Zuni" ¹⁵	NM	Lamar	1850
Unidentified16	SW	Franklin, Cass	?

¹ Lorrain & Hoffrichter 1968; ² Kreiger 1946:162, 207-208; ³ Kreiger 1946:83, Wedel 1982, Hofman *et al.* 1989; ⁴ Wedel 1982, Hofman *et al.* 1989; ⁵ Wedel 1982, Hofman *et al.* 1989; ⁶ Wedel 1982, Hofman *et al.* 1989; ⁷ Wedel 1982, Hofman *et al.* 1989; ⁸ H.P. Mera; ⁹ Kreiger 1946:208; ¹⁰ Kreiger 1946:143; ¹¹ Kreiger 1946:143; ¹² Kreiger 1946:143; ¹³ Kreiger 1946:143; ¹⁴ Kreiger 1946:143; ¹⁵ Wright 1943; ¹⁶ Kreiger 1946:208

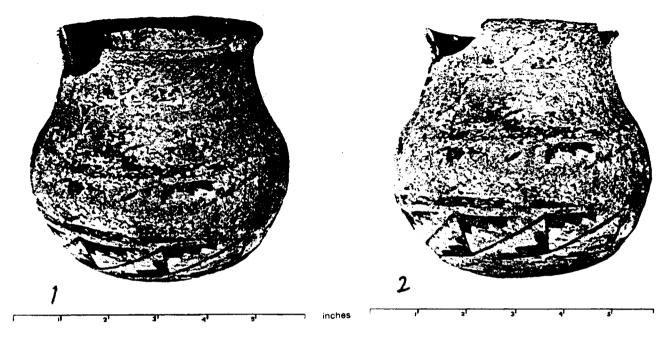


Figure 2. A Southwestern Pot from Aud's Creek, near Paris in lamar County, Typed as Mid-nineteenth Century Zuni (Wright 1943).

Southwestern Pottery Sourcing

Petrographic Analysis. The analysis of the temper in this vessel was stimulated by research on "Wylie Focus" sites in the Richland/-Chambers Reservoir project (McIntyre and McGregor 1982; Irvine, in Bruseth 1987:116). It was thin sectioned and a petrographic analysis performed by the SMU Geology Department in 1981 as a part of the regional background study for the Richland Chambers Reservoir (McIntyre and McGregor 1982; Irvine in Bruseth 1987: 116). This analysis confirmed that the basalt temper came from the upper Rio Grande of New Mexico. Because this report (McIntyre and McGregor 1982) received limited distribution,

the results will be summarized here.

The vessel sample consisted of 55-60% reddish brown clay fragments; 35% weathered basalt fragments and monocrystalline fragments of olivine, pyroxene and plagioclase derived from basalt (200-700 micron size range); 5% opagues, probably magnetite and hematite; 1-2% calcite of unknown affinity; and 1% quartz, extremely rare, always in the matrix. Single crystal size for the plagioclase, olivine, and pyroxene fragments ranges up to 600 microns. Grit used was weathered basalt. Some calcite was either added as a

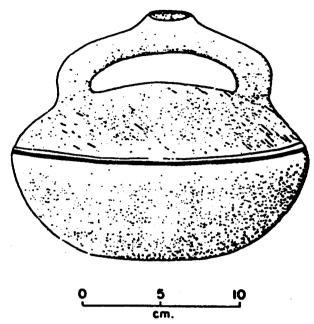


Figure 3. A Reconstructed Stirrup-spout Pot from the Lower Rockwall Site on the East Fork Trinity River, Typed as <u>Arboles Black-on-White</u> (A.D. 950-1050; Lorrain and Hoffrichter 1968).

flux (?) or is accidental inclusion of limestone and caliche. Almost no basaltic rocks in the area (northern Texas). There are a few 1-2 mile wide plugs near Austin and a few plugs in central Arkansas. It does not make sense that they would use weathered basalt if they were near any other source of grit, and in the areas around the plugs in Arkansas and near Austin there is abundant quartz sand nearby. Also there are almost no quartz crystals at all. The materials near the plugs near Austin and Arkansas would almost certainly be more contaminated. The source of the basalt fragment grit could not have been more than a few miles from the basalt outcrop. (because) olivine, pyroxene, and calcic plagioclases are extremely unstable in a stream environment. The nearest source of basalt other than the ones mentioned above is the Rio Grande valley (Big Bend) of Texas and New Mexico. These areas seem to be the logical source of the material.

Turquoise

Turquoise beads, pendants, and even semiworked raw turquoise ore fragments have been found throughout northeastern Texas (Krieger 1946:207-208). Among the most significant was a necklace with beads and pendants from a juvenile burial at the Goss Farm (41FN12) in Fannin County (Housewright 1946:10). A turquoise pendant was reportedly found by Perino at the Holdeman site in Red River County (Timothy K. Perttula, personal communication 1995). At least two burials at the Sam Kaufman site yielded turquoise artifacts similar to those at Goss Farm (Harris 1953; Skinner et al. 1969). A substance thought to be turquoise was recovered from the Hatchel site (Darrell Creel, personal communication 1995). The William Young family has collected three turquoise artifacts

from the Sanders site.

Turquoise is known from a larger area as well. It is reported from the Moore site (Fort Coffee focus) near Spiro, in the Arkansas River Valley of Oklahoma (Orr 1946; Bell 1947; Weigand et al. 1977:31); and from the Standridge site in the Ouachita Mountains of Arkansas (Early et al. 1988:130-131). It is reported from the Menard site of the Arkansas River near the Mississippi (note: This personal communication came from Richard Polhemus, and needs to be checked against Marvin Jeter and/or John House before it is entered as fact).

The turquoise recovered by Housewright (with the aid of Lester Wilson and George Sandefur)

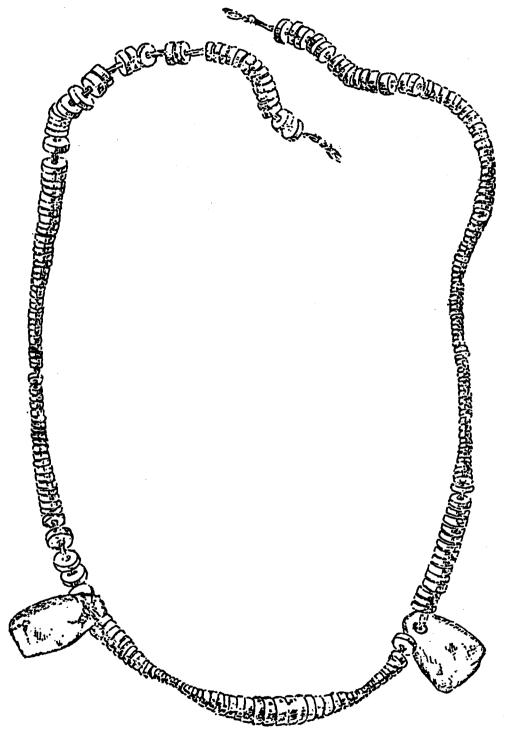


Figure 5. Turquoise Beads and Pendants from the Sam Kaufman Site on the Red River.

from Goss farm, west of the Sanders Site across Bois d'Arc Creek is undoubtedly the most spectacular find in the region and contains more turquoise than anywhere else in the study area combined (Housewright 1946:10). The burial was that of a five to six year old child, placed in a gray clay; one red-filmed pottery sherd was present "below the plow zone." The beads were found around the head and shoulders "in short groups from 0.5-3.0 inches long." The necklace consisted of 260 small disc-shaped beads (diameter 3/32-5/32 inch) and two pendants (9/16 inch long, 6/16 inch and 5/16 inch wide, and 3/32inch thick); which when joined form a string 10.25 inches long (Figure 4). They ranged in color from bright blue, to bluish green, to almost white.

At the Sam Kaufman site, Burial 8, a poorly preserved person of indeterminate sex, was placed in the village area east of the county road. Two shell-tempered vessels (not illustrated or catalogued?) were included as grave furniture, along with two small turquoise pendants and five turquoise beads "of the same type (Figure 5) as found by Rex Housewright in a burial on Goss Farm in Fannin County" (Harris 1953:59). Skeleton 17 in the shaft tomb at Sam Kaufman



Figure 5. Turquoise beads and pendants from the Sam Kaufman Site (Harris 1953).

yielded 30 disc-shaped turquoise beads (3 - 5 mm diameter, 1 mm thick). In addition, this individual was buried with shell beads, conch shell inlays, shell cameos (human heads), shell gorgets, and pearl beads, and was accompanied with earspools. A radiocarbon date (*ca.* 1400 - 1500) on this tomb has been obtained by the Texas Historical Commission, and will soon be reported (Timothy K. Perttula, personal communication 1995).

The turquoise in the Young collection was recovered from the Sanders site (Figure 6). These items include a small bead, a fragment of a pendant similar to those from Goss Farm and Sam Kaufman, and a piece of raw turquoise with incipient grinding on one surface.

Turquoise Sourcing

There have been remarkably few studies conducted on the sourcing of turquoise, with the assumption that all is derived from the Southwest. Two beads from a Caddoan burial at the Moore site near Spiro were sourced through trace element chemistry (neutron activation) to specimens from a Pueblo IV site in the Rio Grande valley of New Mexico (Weigand *et al.* 1977:31; Early *et al.* 1988:130-131).

In contradistinction, eight tiny turquoise beads found in the skull area of a burial from Feature 9 at the Standridge Site in Arkansas were sourced through trace element chemistry (neutron activation) to the Ouachita Mountains of Arkansas. Key trace elements include barium, which is apparently absent in southwestern turquoises (Early *et al.* 1988:130-131).

An excellent test of the Southwestern-Caddoan interaction would be the sourcing of the turquoise from Sanders, Sam Kaufman, and Hatchel. The Rio Grande-Northeast Texas trajectory is predicted.

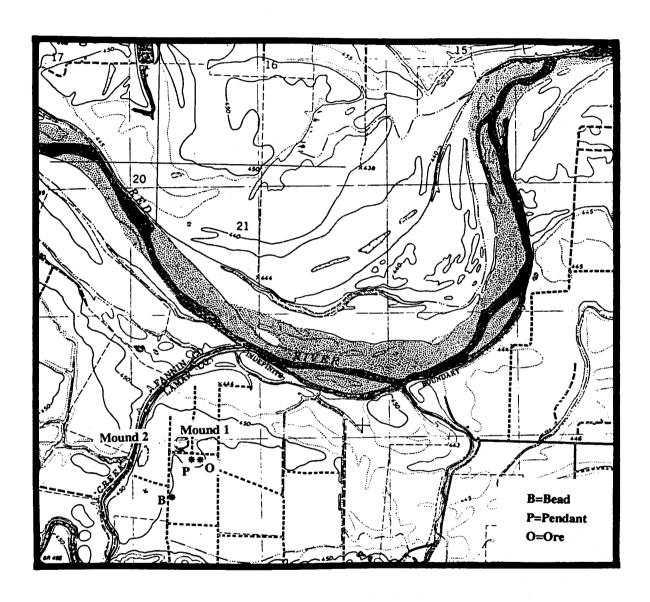


Figure 6. Location of the Turquoise Finds at the Sanders Site, Lamar County, Made by the Young Family.

Additional Evidence for Exchange

Other evidence for direct exchange between the Southwest and the Texas Caddoan area was noted by Kreiger where Patton Engraved pottery sherds were recovered from Concepçion Focus houses in Presidio County on the Rio Grande, and Concepçion Focus arrow points were recovered from the Patton Site in Anderson County on the Trinity River (Kreiger 1946:209).

Although not directly related, a distinctive type

of trade pendant, similar to the turquoise ones from sites along the Red River, was made by the Cahokia Illini ca. 1690-1750 (Walthall and Benchley 1987:30). These pendants are made from crushed blue glass beads, interlace with crushed white glass beads, which are re-melted and fused. The resulting material is polished and resembles turquoise in both color and appearance.

Discussion

The Sanders site and the Lower Rockwall site are strategically located at the frontier of the hypothesized Southwestern-Caddoan trading network that began ca. A.D. 950 (Kreiger 1946; Lorrain and Hoffrichter 1968) and apparently flourished until the 19th century. Analysis of avocational collections and the archaeological literature indicate three loci of Southwestern influences in Texas. Two of these appear to be related to 14th-century Puebloan expansions and interaction with pre-horse plains groups (extending as far as the Pratt Complex in Kansas (Hofman 1989), the third appears to be related to an earlier 10th century Caddoan interaction sphere possibly relating to trade in salt and bow wood for bison hides, fur, and meat. Caddoan ceramics have been noted in Plains (Baugh 1986) and southwestern Texas (Kelley 1939; Kelley et al. 1940) contexts dating to these periods. Both areas exhibit Southwestern trade items dating to the post-horse period (ca. 1680) when firearms apparently replace the bow wood trade, further complicating the situation.

Another distributional correlation, which appears to be related, is the location of the socalled "Wylie focus pits" in comparison to these Southwestern trade erratics. The northernmost "Wylie focus pits" cluster along the East Fork Trinity River and are located within the zone of native stands of bois d'arc (Jurney 1994). The Lower

Rockwall site and the Sanders site are strategically placed at the northern and southern end of this stand, according to the same pattern as the trade erratics (Figure 1). The Richland/Chambers "Wylie focus pits" are located intermediate between the Patton site — where Concepçion complex artifacts were recovered — and the Lower Rockwall site, suggesting some type of strategic placement.

In conclusion, this exercise has called into focus an urgent need; that of proper curation of archaeological materials for future analyses. This applies to professionals as well as avocationals. Grave goods are required to be reburied in federal repositories, thereby losing the opportunity to source the beads. (Many private collectors are reluctant to donate to such federal repositories for this reason, money is another). Also, many avocation collections, such as Housewright's may eventually be sold on the auction block removing it farther from public access. Either way, the necklace from the Goss Farm site is one of the most phenomenal items in the southern Plains, indicating Southwestern trade and great reverence for a child, and it may pass to oblivion. The high incidence of turquoise and Southwestern pottery finds at the Sanders site and related sites along the Red River confirm a major role in Southwestern-Caddoan interaction.

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