



OKLAHOMA ARCHEOLOGICAL SURVEY THE UNIVERSITY OF OKLAHOMA

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THE OLD SHELL GAME IN KAY COUNTY

From December 7 through 14, Survey Archeologists Larry Neal and Lee Bement, assisted by Dave Morgan and members of the Kay County and Central Oklahoma OAS chapters, conducted test excavations at the Kubik site (34KA373). The help and cooperation of Jeff and Lisa Kubik and Mick and Marta Sullivan was pivotal to the success of this endeavor. The site was revealed in the creek bank by water undercutting and sloughing the deposits, exposing a large fireplace and mussel shell concentrations. Mussel shells and flakes were also exposed on the top of the site by flood stripping of the overburden. Charcoal collected from the exposed fireplace yielded a date of 1060 ± 70 years B.P. (A.D. 995 ± 70 , calibrated), placing at least part of the occupation of the site in the Late Woodland period. Apparent concentrations of mussel shell in the bank and exposed on the surface gave the appearance of a shell midden, a site type not typically found in this region. Because the site is likely to continue to be affected by these fluvial processes, we decided it really needed to be evaluated for its potential to provide new information about Oklahoma's past. This preliminary probing is referred to as test excavation.

The testing phase tasks included producing a contour map of the site, excavating shovel probes to determine the extent of the cultural deposits, and excavating 1x1 m squares to recover diagnostic tools and features. In all, 12 1x1 m squares were scattered across the 40 x 60 m site,

many of these expansions of initial units. Test Unit 1 (TU-1) was placed on the western margin of the site in an area of exposed mussel shell, and expanded by adding two more 1x1 m squares. This unit yielded numerous mussel shells, some burned rock, and flakes in a discrete, though thin, deposit.

TU-2 was placed over the eroding hearth adjacent to the creek edge. At least three episodes of hearth use and reconstruction were defined in this unit, and large amounts of charcoal useful in dating each episode were recovered. TU-2 was expanded one unit southward to test the area adjacent to the fireplace where tools and food debris might be expected. Three corner notched arrowpoints and two corner notched dart points were ultimately discovered, as well as numerous flakes, biface fragments, mussel shell, bones of deer and turtle, and other bone not yet identified.

TU-3 consisted of a 1x2 m unit about 12 m south of TU-2. Though cultural material was sparse in this area, evidence of an occupation in the upper levels of the unit was found. Recovered items consisted of at least one flake tool, flakes, deer bones, and one small hearth of ash and charcoal in an unlined basin. This fireplace may provide enough charcoal to date this occupation.

TU-4 was a 1x2 m unit placed near the creek edge about 15 m east of TU-2, and dug to a depth of over 2 m. The

purpose of the unit was to provide a quick look at the deeper subsurface deposits. No cultural material came from this unit.

Several units were initially laid out but never excavated. These, TU-5 through TU-8, were shovel probed in an attempt to find cultural material away from the apparent main site area. None was found in these areas.

TU-9 was a 1x2 m unit containing three hearth features at different levels, as well as associated tool manufacturing debris, and bone fragments. Diagnostic items included four Fresno arrowpoints from several levels of this unit. These triangular, unnotched points are evidence of a later occupation from this part of the site. The lower levels of TU-9 produced bison bone and teeth, but no definite cultural material was associated.

TU-10, the last unit opened, was a 1x1 m square located near the southeastern end of the site. Initial shovel probes revealed flakes and burned rock. Subsequent excavation produced a high number of flakes, a point fragment, and a limited amount of deer bone. No features were found.

Test excavations at 34KA373 revealed evidence of multiple episodes of Late Woodland through Late Prehistoric use of this location. Although shell was present, a true shell midden was not found. Charcoal obtained from discrete features can be used to date these episodes. Shell and bone remains are clues to changing subsistence through time, and lithic tools and manufacturing debris are clues about activities and duration of site use. Pottery, a characteristic of the Woodland and Late Prehistoric periods in this area, was not recovered in the tests. The single radiocarbon date and the presence of diagnostic cultural materials (and apparent lack of some) of several ages gives an impression of successive, limited duration, possibly special purpose, occupations over as much as 600 years. The combination of technological and subsistence information recovered gives us a basis for evaluating the site's potential for advancing our understanding of Late Woodland and Late Prehistoric adaptations in north central Oklahoma. At least five radiocarbon dates will be needed to help in this assessment, three from the large fireplace, and two from the smaller hearths of the later component in TU-9. Total costs are likely to run about \$2100 for these dates (three at \$300 and two at \$600 each). Contributions toward this process would be welcomed! They can be sent to the OU Foundation, designated for the Archeological Survey's radiocarbon date fund.

Lee Bement and Larry Neal

Washita River Survey in the Arbuckle Mountains

The survey of the Washita River in the Arbuckle Mountains is almost completed. Richard Drass, Valli Powell, and Christina Yaworski have surveyed about four square miles along the river from near Davis to south of Gene Autry. Several volunteers have helped us with the fieldwork, and landowners have told us about a number of sites in the area. We have also contacted several collectors and have obtained good information on sites and artifacts that are found in the Arbuckle Mountains. A variety of settings have been examined, but most sites identified are on the higher terraces or ridge toes above the river. We have noted several deeply buried soils that indicate old surfaces. The presence of these buried soils may reflect that sites on lower terraces are buried. However, we also documented buried soils and cultural deposits on the higher terraces. For example, a small hearth found in a cut bank of a high terrace was buried beneath about 15 cm of sterile overburden. Movement of the river has removed some terraces, and landowners report extensive flooding that has deposited large amounts of silt on the lower terraces that remain.

We have documented 43 new sites and revisited 11 previously known ones. The majority of sites recorded during the survey are prehistoric, but we also found 14 with historic components. Many of these are homesteads and small cemeteries dating from about 1860 to the early 1900s. Most of the historic sites are Chickasaw or Choctaw, although some include later materials that may relate to early EuroAmerican settlers. The prehistoric sites appear to be large base camps that were repeatedly occupied by various groups. The oldest materials documented in collections include Early Archaic or Late Paleoindian items, but most collections are dominated by Late Archaic points and tools. During our field work, few diagnostic tools have been found. Thus, the local collections provide important insights about when this area was occupied. We have very little evidence for Late Prehistoric groups, and we have not found the extensive villages that occur just to the north of the study area.

Surveying was completed around the end of January. We will spend additional time photographing collections and obtaining as much information as possible on the prehistoric and early historic materials from the Arbuckle Mountain sites. We also hope to identify some lithic material sources in the area. Thus far, we have only identified small stream cobbles that were used for tool manufacture. Geological maps of the area note several formations that include chert nodules, but we need to

identify outcrops of knappable lithics.

Richard Drass

An Early Archaic Period Radiocarbon Date From Central Oklahoma

Last July, Lance Lamb reported an apparent rock hearth deeply buried (2 meters below surface) in the bank of an unnamed tributary of Shawnee Twin Lakes, Pottawatomie County. Flakes and a core of Ogallala chert were recovered from the slope and stream below the hearth. The fireplace seems associated with a slightly darker band of dirt, possibly an old land surface. After securing permission from City of Shawnee officials, Lance and Larry Neal profiled the steeply sloping bank above the hearth and exposed enough of it to map and profile the rocks and central pit. We also secured wood and grass charcoal from the central pit and the rock scatter south of it. A few pieces of the charcoal were recognizable as oak, but were too small to identify as to species. Other charred material was recovered from flotation samples from the hearth. Richard Drass will check these samples for identifiable seeds, which could yield environmental and subsistence information. In December, a date of 8080 ± 60 radiocarbon years B.P. (7005 B.C., calibrated; Beta-99072) was obtained from the wood charcoal from the hearth.

The age of the hearth was a bit of a surprise to us. The 7005 B.C. date is one of the oldest for a definable feature from central Oklahoma, and the hearth is one of the oldest manmade features ever found in Oklahoma. At this time, we don't know with what archeological culture this hearth is associated, as no projectile points or tools were found in the limited profile. Additional work to sample the paleosol around the hearth might recover these much needed diagnostic items, but this is problematical due to its location as a protected part of the lake.

Larry Neal

Preliminary Excavation at the Yourman Site (34Lt-287)

Several volunteers included "good weather" on their Christmas lists last year, but Santa apparently doesn't work *pro bono*. Fortunately, the cold front that hit eastern Oklahoma in early January did not deter the crew from recovering an impressive amount of material from the Yourman site (34Lt-287). The workers were comprised of professional archeologists led by Christopher Cojeen, Jesse Ballenger, and Jim Briscoe, as well as graduate and undergraduate students from OU. During the January 8-12, 1997, excavation, the site was visited by Robert Brooks,

State Archeologist; Frank Winchell, US COE, Tulsa District; and Jack Waymire, Department of Wildlife Conservation.

Located approximately eight miles south of Wilburton, Oklahoma, this site is a large, mostly intact, black earth midden mound on a first terrace on the south side of Gaines Creek. The stream is actively cutting into the northern edge of the site along a 4 meter high stream bank. In profile, the approximately 100 meter long mound has black midden to 1 meter in depth, and is rich in artifacts, including flakes and fire cracked rock (FCR). Pot hunting is evident for approximately 40 meters along the creek bank, with about 100 flakes, FCR, and two dart points discarded near the mound. At least 50% of the mound remains undisturbed, and probably includes intact Wister (ca. 3500-2300 B.P.) and Fourche Maline (ca. 2300-1100 B.P.) period deposits to 1.2 meters deep.

During the fall of 1996, the previously recorded 34Lt-287 was revisited, and an additional diagnostic artifact was found approximately 200 feet from the primary exposure area of the site, on the nearest gravel bar downstream. This item is a lanceolate projectile point, similar to the Dalton/Meserve forms.

Five 1x1 m units were opened, and each was excavated to a depth of between 70 and 110 cm with artifact recovery in all levels. Cold weather and the lack of ability to water screen clay slowed the progress, and all units still need to be excavated deeper to reach sterile soil.

Although materials from this site have thus far only been reviewed in a cursory manner, some indication of the significance of 34Lt-287 is now available. The site appears to have at least 110 cm of black midden mound deposits over brown clay subsoils. The soils do not appear to have been plowed or otherwise disturbed, other than the previously noted pot hunting activity. The stratigraphy of the site appear to have high integrity. Artifacts are extensive, with a recovery as high as 2000+ flakes per level, pottery (Williams Plain), ground and polished stone, and a large number of broken and complete diagnostic stone tools (50+). These artifacts document an occupation extending from roughly 2000 B.C. to 1000 A.D. However, it should again be noted that the bottom of the cultural deposits has not yet been reached, and a lanceolate point form was noted near the site area (see above), indicating possible earlier occupation of the site.

The lithic tool recovery appears to correlate with stratigraphic soil zones, with arrowpoints (Scallorn) and pottery noted in the upper 30 cm, followed by various forms of Gary points (shouldered and non-shouldered)

found throughout most stratigraphic zones. Late and Middle Archaic stemmed point forms (Williams-like) were found in the 40-70 cm levels. Lithic material is primarily local (John's Valley formation), and all stages of lithic tool manufacture appear within the abundant quantity of debris. A preliminary analysis of these remains is in progress, and will be reported later.

Jesse Ballenger, OMNH

39th Caddo Conference to Be Held in Oklahoma

From March 13 - 15, archeologists and others interested in the archeology and cultural history of the Caddoan area (northwestern Louisiana, northeastern Texas, eastern Oklahoma, western Arkansas, and the southwestern tip of Missouri) will meet in Oklahoma. A reception will be held in Norman the evening of Thursday, March 13, before the start of the conference. On Friday, March 14, the conference will begin in Dale Hall on the OU campus. The program will consist of papers, field reports, and a business meeting. On Saturday, March 15, the group will meet in the Warrior Auditorium, Anadarko, for another round of papers and discussions. A traditional Caddo meal and dance will be held Saturday evening at the Caddo Tribal Center at Binger. If you are interested in attending this conference, but have not received the information packet, please contact Lois Albert or Lisa Whitman at the Oklahoma Archeological Survey; telephone (405) 325-7211; fax (405) 325-7604; e-mail LEALBERT@OU.EDU.

Survey Staff and Teaching Roles

While not as well publicized as other Survey activities, staff members are significantly contributing to the teaching and training of students in the Department of Anthropology at the University of Oklahoma. Lee Bement and Kent Buehler are in the rotation to teach *Faunal Analysis* and Bob Brooks teaches *Public Archaeology* and *Oklahoma Prehistory*. In the fall, Lee taught an advanced class in faunal analysis, and Bob is teaching *Mobility/Sedentism* this spring semester. Lee and Kent have also been involved with summer field schools at the Certain and Waugh bison kill sites the past couple of years. Last spring, Lee served on a search committee for a southeastern archeologist in the department. Bob and Lee also serve on a number of thesis and dissertation committees, while Kent works at introducing undergraduates to lab processing and basic analysis. Other staff are assisting students in research projects or by serving as mentors for specific skill areas.

In addition to the OU courses, staff members again presented lectures for the *Introduction to Archeology* course at the University of Central Oklahoma taught during the fall semester 1996 by Gene Hellstern. Those who lectured included Bob Brooks (job opportunities in archeology, cultural resource management), Larry Neal (archeology of eastern Oklahoma during the Late Archaic through Caddoan periods), Lois Albert (specialized soil analyses), Marjy Duncan (Calf Creek culture of the Middle Archaic period), Kent Buehler (laboratory techniques), Richard Drass (archeology of western Oklahoma after the Early Archaic), and Lee Bement (Paleoindian and Early Archaic period cultures in Oklahoma). In addition to the lectures, Larry Neal directed a two day field exercise to introduce the students to archeological field techniques.

Bob Brooks

1996 Donations for the Archeological Survey

During calendar year 1996, several people and institutions donated money earmarked for the Archeological Survey's various project funds at the OU Foundation. These were Peter Thurmond, Terrel and Mary Nowka, the Peel Foundation, and Don Shockey. We extend our sincere thanks to them. The donations were made to support research at the Kubik site, radiocarbon dating, Support Our Students, and general funds for the Survey. These funds helped the Survey to do the field and lab work for the Kubik site, to get radiocarbon dates for sites which might otherwise have remained undated, and to provide training and financial support for OU students.

Our fund at the Oklahoma City Community Foundation also continues to grow, although we have not yet reached our goal of \$5000. Last calendar year (1996), Stephen and Kathleen Bird and James Taylor made donations for the Survey. We thank them for their help. We're only about \$600 away from being able to use the interest from these funds to help with our educational projects. These projects would include partial funding of public outreach activities such as continuing to have a state fair booth, publication of booklets about various aspects of archeology, development of educational games, and drawing OU students into educational activities for the schools and general public.

Newsletter editors: Lois Albert and Marjy Duncan