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**ARCHAEOLOGICAL SURVEY AT
THE PROPOSED TUSKAHOMA LAKE
1987**

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Dorothy J. Gaston
Project Director



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Donald O. Henry
Principal Investigator

Report to
U.S. Army Corps of Engineers
Tulsa District

Laboratory of Archaeology
University of Tulsa
1989

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Report to the U. S. Army Corps of Engineers
Tulsa District
Contract # DACW56-Q-0115

Laboratory of Archaeology
University of Tulsa
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INTRODUCTION

The study area lies in Latimer, LeFlore, and Pushmataha Counties in Southeastern Oklahoma (figure 1). The proposed Tuskahoma Lake has been under consideration since at least as early as 1965. Although extensive archaeological work has been accomplished at Wister Lake to the northeast (Galm 1978; Mayo 1975), and at Sardis, Clayton, and Hugo Lakes to the south (Altschul 1982; Vehik and Galm 1979; Vehik 1982; Bobalik 1977; Rohrbaugh 1972, 1973; Rohrbaugh et al 1971; Klinger and Cande 1987), intensive survey within the study area has been limited to the area of the Tahina sewage disposal works (Ammerman

et al 1979; Brooks 1982).

The present survey is designed to develop predictive models for the location and frequency of sites to be encountered throughout the study area, based on a ten per cent sample. It includes recording of both prehistoric and historic sites. Recommendations and suggestions apply both to the sites discovered during this survey and to the methods to be utilized should future work be undertaken in the area.

The report of the geomorphologist, Rolfe Mandel, originally intended as an appendix to this report, is to be submitted separately by him.

PHYSIOGRAPHIC SETTING

Ecology

The study area lies in the Ouachita Mountain Physiographic province, occupying a major portion of the floodplain and lower flanks of the Kiamichi River Valley, primarily in Pushmataha and LeFlore Counties, Oklahoma. The "front bay", a separate portion of the study area, occupies a high upland ravine in the Kiamichi Mountains south of the proposed lake. The study area is located in the southeastern Piney Forest Biome, with elevational variation between pine forest on the upper reaches, a mixed pine/deciduous forest mid-way on the mountain flanks, oak-hickory on the lower valley flanks, and mixed riverine and oak-hickory on the floodplain. The majority of the forested area is second or third growth following earlier timbering of the area. Where forest is cleared in the lowlands, the land is generally occupied by mixed domestic-grass pasture. A few natural meadows remain in the lowlands. The floodplain itself exhibits a large number of abandoned oxbows and swampy areas. Both the Kiamichi River and its major tributaries appear to be downcutting

through their own recent alluvial deposits. Pimple mounds abound on the first and second terraces. These appear to be remains of older terraces in some cases, and windblown deposits in others. No cultural mounds have been reported in the study area.

Timber and livestock are the major economic resources of the area. The majority of farms have only a vegetable garden under cultivation at present, although long-term residents indicate that much of the present pasture land was once plowed and planted to row crops, primarily corn. The soils are primarily sandy silts with indications of hardpan developing under former forest soils. Rocky outcrops and ledges are common, as are shallow Pleistocene gravel terraces.

The variation in elevation, vegetation, and water resources provides habitat for both large and small game: deer, bear, racoon, squirrel, turtle, mountain lion, timber wolf, and wild turkey. The somewhat sluggish river and backwaters provide habitat for a variety of large fish and for waterfowl.

Geology

The study area lies over the Stanley Shale, described by Honess (1823: 27) as "some 6,000 feet or more of sandstones, shales quartzites, slates and other rocks..."

The basal beds of the Stanley are fine-grained, blue-gray, stoney slates interbedded with a little hard, drab, slaty shale in very thin layers. The slate beds practically cease at a horizon 65 feet above the bottom where a very characteristic thin quartzite, veined with quartz and one to four feet thick, occurs. Above this quartzite ledge, lie micaceous, ripple-marked, siliceous shales and sandstones. They are greenish-gray when fresh and dingy bronze upon exposure. These are only a few feet in depth. Above the siliceous shales lie 200 feet of schistose, and well-oxidized sandstones and grits. In some areas, this is topped by as much as 90 feet of volcanic tuff. Above the tuff is a series of hard and soft thin-bedded sandstones, slates, and shales of several hundred feet thickness. The sandstones are fine and uniform-grained, dark greenish gray, and are usually cross-bedded and often ripple-marked. Above this, the sand-

stones are gradually replaced by black shales and slates. The topmost 2000 feet consists of alternating even fine-grained sandstones and sandy shales, thin-bedded, more or less ripple-marked, and cross-bedded in the lower portion, becoming heavier bedded and more coarse-grained in the uppermost member, and grading into the Jackfork sandstone formation.

Lithic Resources

The mountains to the north and south of the study area include a variety of lithic resources. Arkansas novaculite, Johns Valley Shales (bearing exotic cherts, quartzites, and quartz from gravel to boulder size), and Bigfork Chert are all well-represented. Prehistoric quarries into the Bigfork chert are evident throughout the National Forest to the northeast of the study area. The Pleistocene gravel terraces include a variety of cherts and quartzites from gravel to small boulder size. The "green chert" reported from most sites in the Kiamichi Valley derives from this gravel, as does some red jasper, as well as large quantities of fine, gray quartzite and grey to black Bigfork cherts.

CULTURAL CHRONOLOGY

Most present surfaces all of Holocene aeolian and/or alluvial origin. The aeolian deposits are thin on the T-2 surfaces, burying Pleistocene deposits only to the depth of 10-20 cm. Minor erosion, therefore, has exposed these earlier surfaces in many areas. As stable Pleistocene age surfaces are present, there is a potential for locating sites from Paleoindian to modern.

Paleoindian (12,000 to 6,000 B.C.)

Although no known Paleoindian sites have been reported in the study area, they may be present. Sites of this time period are defined by the presence of bifacially worked, fluted base points such as Clovis. The most frequently reported sites are find sites, usually a single point. Less frequently, kill sites with Pleistocene

fauna accompanied by these points are reported. Very occasionally, a residential site is located. Paleoindian sites have been reported near the Red River to the south of the study area, as well as in the Arkansas River Valley to the north.

Present knowledge suggests that the economic strategies of these people focussed on big game hunting and that their residence pattern was highly mobile. Lithic technology throughout the New World appears to have been relatively uniform, with little variation between areas.

Archaic (6,000 B.C. to A.D. 0)

The Archaic period is denoted by great variation in the style, and presumably function, of stone tools both over space and over time. This varia-

tion is suggested to be due to more restricted mobility and use of broader resource bases. Both large and small game was hunted, and the evidence suggests more emphasis on plantfood staples.

The Late Archaic of the area (Wister Phase), is evidenced by Gary points, axes, and large biface tools. Manos and metates are common, but ceramics have not been associated with this period. At Bug Hill, on Clayton Lake (Altschul 1982), evidence for cultivation of sunflower and sumpweed has been recovered. The evidence from Lake Wister suggests a seasonal round combining some horticulture with hunting and gathering. Extensive middens are present at some sites. Midden burials are common.

The majority of reported sites in the study area are Archaic.

Woodland (A.D. 0 to 700)

This period, in this area, is designated as Fourche Maline. It is marked by the introduction of fiber and grit or grog tempered ceramics (Williams or Poteau Plain). The Fourche Maline Phase appears to derive directly from the earlier Wister Phase. A somewhat greater emphasis on horticulture is suggested for this time frame. Sites of this period often overlay earlier Wister Phase sites, suggesting that the seasonal round was maintained. Gary points remain the most common point type. Smaller arrow points, such as Scallorn, have been recovered elsewhere in Oklahoma in contexts dating as early as A.D. 300.

No ceramic sites have been reported in the area, but small "arrow" points are reported from some sites.

Mississippian/Protohistoric (A.D. 700 to 1450)

This time period is marked by the introduction of shell-tempered ceramics and a variety of exotic goods. In eastern Oklahoma, this period is designated as Caddoan. Maize horticulture appears to have become a major food source, although hunting and gathering continued to be practiced. A somewhat more

settled routine is suggested by more permanent village sites and dispersed farmsteads. One of the more dramatic sites of this period lies to the northeast at Spiro Mounds in LeFlore County.

Only two Caddoan sites have been reported in the study area (Brooks 1982). No explanation as to the general absence of sites of this period has been established.

Historic Caddo (A.D. 1450 to 1700)

Caddoan speaking peoples occupied the majority of southeastern Oklahoma, southwestern Arkansas, northwestern Louisiana, and northeastern Texas during this time period. Some contact with Spanish explorers is indicated by the explorer's routes. Sites of this time period feature finely made shell-tempered ceramics and small arrow points such as Reed, Scallorn, and others. Large village sites, as well as small homesteads, dating to this period are located in the Red River Valley to the south of the study area, as well as to the north at Wister Lake and throughout the Arkansas Valley, but no sites have been reported within the study area.

Historic Choctaw (A.D. 1700 to 1905)

The Choctaw were making use of this areas as hunting grounds as early as about A.D. 1700. It officially became the Choctaw Reservation under the Indian Removal Act of A.D. 1830. The Choctaw Removal to Oklahoma was carried out by A.D. 1833 (Foreman 1934:22). At that time, three blacksmiths, a mill-wright, and a school teacher were engaged (Foreman 1932:25). A number of farming tools were also provided under the treaty terms, although they arrived too late for the first planting (Foreman 1934:28). This pattern of late arrival of tools continued over the several years of relocation, but eventually a large number of implements were received.

A tribal council house was constructed near the Vaughn Brashears residence, "on the upper part of the Kiamichi River, about midway between

the Arkansas and Red Rivers" (Foreman 1934:30). Three residences for chiefs were also constructed.

The Choctaw families were accompanied to Oklahoma by their black slaves. A small number of Europeans, primarily missionaries and school teachers, also accompanied the Choctaw. The Chickasaw arrived in Choctaw Nation in 1838, and removed westward in A.D. 1857.

Early Choctaw sites are likely to present mixed assemblages of European and native goods. Metal gun parts, European ceramics and glass, together with stone scrapers probably indicate sites prior to A.D. 1860. Later sites may not be easily differentiated from European sites. Indian merchants carried large stocks of European goods by ca. A.D. 1845 (Foreman 1942:58-60).

Although blacks were not initially granted citizenship in the Choctaw Nation following the Civil War, problems of legal jurisdiction over the resident black population eventually led to the granting of citizenship (Garrick Bailey, personal communication, 1987). Segregated schools,

churches, and cemeteries appear to have been founded following this.

Historic European/Early Statehood (A.D. 1872 to 1935)

Although various Europeans, including Thomas Nuttall in 1819 (Nuttall 1821:167-168), passed through the area prior to this time, white settlement did not begin in earnest until A.D. 1873, after discovery of coal east of McAllister. This did not directly affect the study area itself until the railroad was extended through it during the 1880s.

The early permanent European population was largely composed of those who were employees of the St. Louis and San Francisco Railroad, which was built through the area between A.D. 1882 and 1887 (Foreman 1942:233). The railroad line itself borders the highwater mark of the proposed floodpool. Several towns in and near the study area were founded as "railroad towns". Tali hina is Choctaw for "iron road", and the rail line was the only road serving the community until A.D. 1909.

FIELD METHODOLOGY

The study area was considered to include all areas below 680 feet asml and east of the dam and dike system (see figure 2), as well as the area between 1480 and 1800 feet asml along Long Creek in the Kiamichi Mountains. Field work consisted of three major stages. The initial stage included a general reconnaissance and relocation of earlier reported sites. The second stage was a brief geomorphological survey. The final stage was pedestrian survey of areas selected for (1) topographic location,

(2) openness of vegetation, and (3) accessibility.

Pedestrian survey was conducted using two or three crew members spaced at intervals of 30 meters and parallel to each other. Closer scrutiny was given those areas deemed most likely to have surface materials. Surface collection was 100% of chipped stone artifacts and 10% of groundstone artifacts. Additionally, several previously unreported sites were visited upon the suggestion of landowners and/or local informants.

RESULTS OF SURVEY

Thirteen areas were selected for survey, totalling 1077 acres (Table 1). In addition, a total of 18 previously reported sites were visited. A number of soil core samples were examined, with results included in the geomorph-

ology report. The pedestrian survey discovered 14 previously unreported archaeological sites and two log cabins. Area cemeteries were visited briefly. Two rock art locations were recorded but were not accessible for

Table 1. Transects Surveyed.

#	Location: 1/4 1/4 1/4	Sec	North	Twsp.	Range	Topographic Setting	Drainage	Acres	# Sites	Site Density
1	S	NW	35	2	21	Upland	Long	40	0	0.0000
1	N	SW	35	2	21	Upland	Long	40	0	0.0000
2	NW	NW	7	2	22	T-2	Kiamichi	107	1	0.0093
3	W	NE	19	3	22	T-0	Rock	40	0	0.0000
3	W	SE	19	3	22	T-0	Rock	40	1	0.0250
4	SE	SE	14	3	21	T-3	Rock	40	0	0.0000
4	E	SE	14	3	21	T-3	Rock	80	1	0.0125
5	W	NE	23	3	21	T-3	Rock	40	0	0.0000
6	E	NE	26	3	22	T-2	Frazier	80	0	0.0000
6	E	NE	26	3	22	T-2	Frazier	40	0	0.0000
7	W	NE	8	2	22	T-0/T-2	Kiamichi	80	1	0.0125
7	NE	NW	8	2	22	T-3	Kiamichi	40	1	0.0250
8	SE	SW	31	3	23	T-2/T-3	Kiamichi	40	2	0.0500
8	NE	SW	31	3	23	T-0/T-1	Kiamichi	40	0	0.0000
9	N	SW	2	2	23	T-1/T-3	Kiamichi	80	2	0.0250
9	N	SE	2	2	23	T-0	Kiamichi	40	0	0.0000
10	NW	SW	8	2	22	T-0/T-1	Kiamichi	40	0	0.0000
11	E	NE	12	2	21	T-0/T-2	Kiamichi	40	1	0.0250
12	W	NW	33	3	23	T-1/T-2	Kiamichi	80	1	0.0125
12	N	NW	33	3	23	T-0	Kiamichi	10	0	0.0000
13	E	NE	23	3	22	T-1/T-3	Birney	40	0	0.0000
TOTALS								1077	11	0.1968

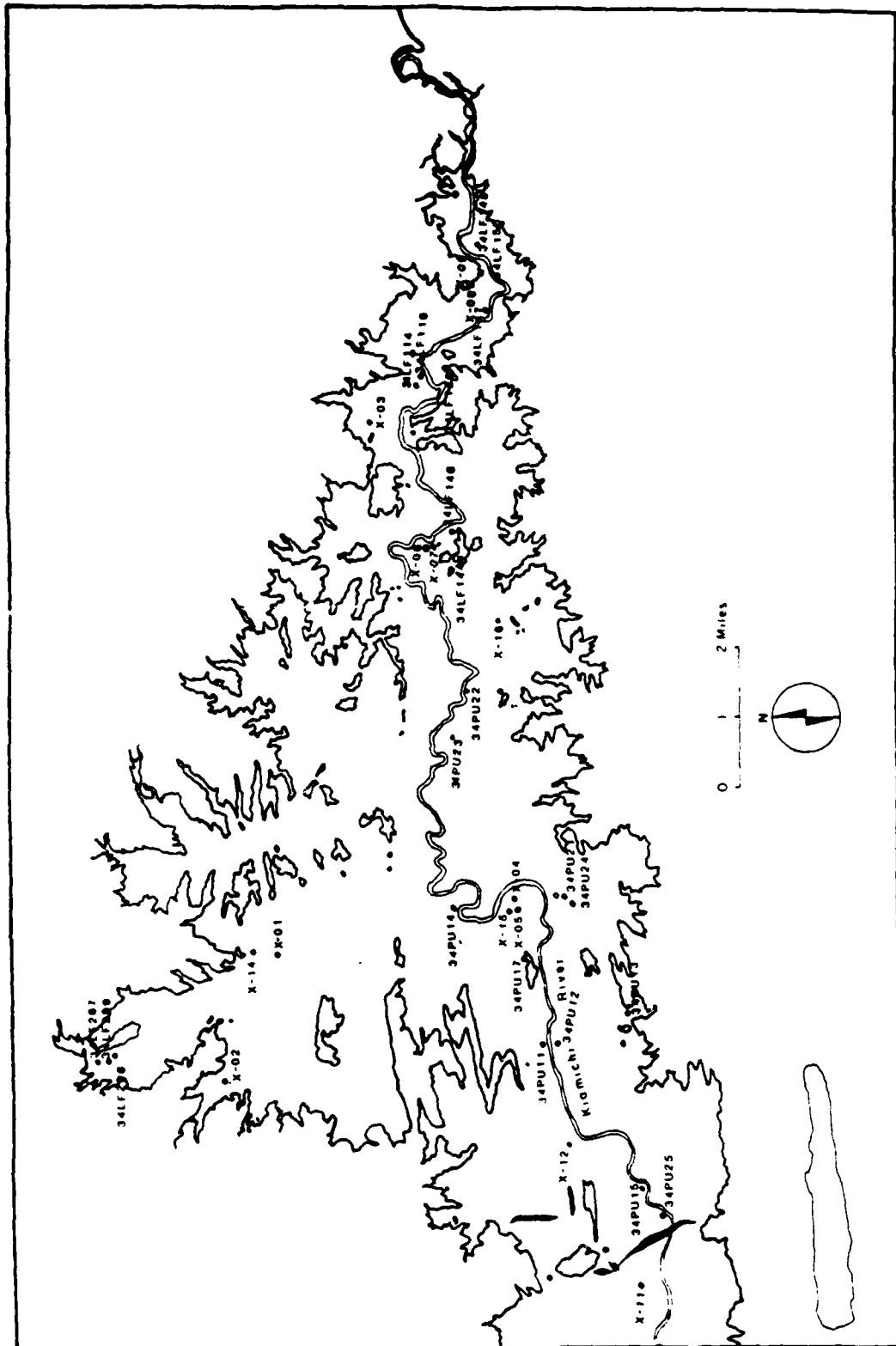


Figure 2. The Proposed Tuskahoma Lake with Sites.

confirmation during the survey. All area sites are indicated on figure 2.

Transects

Selection of transects was based on accessibility, visibility, and topography. In general, it was found that sites were located on rises above the floodplain, regardless of the geological and/or geomorphological origins of the rise. It is supposed that some sites lie buried in the floodplain itself, but the lack of visible paleosols in the creek and river banks does not allow for systematic estimates of location or depth. Transect locations are shown in Table 1.

Transect 1

This transect consists of 80 acres in the upland front bay along Long Creek. No sites were located in this transect. Rock formations, although dissected by the Creek, do not permit formation of rock shelters as the strata are in vertical position. The area has recently been subdivided for vacation housing. A variety of driveways and structures are in place. Structures vary between plastic covered hunting blinds, mobile homes, and large, permanent, year-round homes. The current USGS topographic map mistakenly labels the southern branch of the trail as "K Trail". The northern branch is actually K Trail. Additional logging roads crisscross the area, but the majority are in a very poor state of repair.

Transect 2

This transect was chosen on the basis of a large number of pimple mounds in an open field. It was quickly discovered that the major topographic feature was a rock ridge running roughly east-west and parallel to the present river channel. The ridge is intermittently covered with shallow aeolian deposits. Materials brought to the surface of the pimple mounds by burrowing animals was examined, and the mounds in this transect appear to have at least two differing origins.

One type of mound appears to be of sorted sands and small gravels and probably represent dissected terrace remnants of Holocene origin. Several mounds appeared to be composed of much finer aeolian silts. Although no sites were located on this transect, one site (34PU17) is located directly to the east along the rocky outcrop. An additional site, 34PU11, is located on the rocky ridge approximately three quarters of a mile to the west. These sites were shallowly buried to exposed. The owner of 34PU17 reported that he believed collector's had essentially removed all cultural materials from the site.

Transect 3

This transect was selected for both its low vegetation and its proximity to the meander belt of Rock Creek. The landowner directed the crew to a location (X-01) which he reported had yielded a large number of points in the past, but no cultural materials are presently visible. Examination of the creekbanks revealed a great uniformity of deposition with no obvious buried surfaces, with the exception of several lenses of stream gravels in the lower 50 cm above the present creek bed. The transect included an abandoned oxbow of the creek, now partially filled with sorted sands and small gravels.

This transect also includes the foundation of the Tushka Lousa (Black Warrior) school (X-14).

Transect 4

This section was walked following the report by the leaseholder that unauthorized person(s) had been excavating and screening materials in that location. The field included a number of pimple mounds that appear to be dissected remnants of Pleistocene terrace. They contain large cobbles of cherts, quartzites, and sandstone. A single site was located (X-02) on a portion of this terrace, shallowly buried in aeolian deposits. This site gives some clue as to the recent acquisition of aeolian deposits in the area, as it

included items manufactured in the early nineteenth century.

Transect 5

This transect is located directly south of transect 4. It features much larger mounds than are seen in most of the project area. It was found that the majority of the mounds had test pits in their upper extremities, none of which had been backfilled. A soil core in a relatively undisturbed portion of the mound revealed that the mound consists of sorted sands and gravels, covered with a relatively deep (30 cm) aeolian deposit. No cultural materials were located in this transect.

Transect 6

This transect, located along Frazier Creek, was selected because it had been very recently cleared with maximum surface visibility. Despite the high visibility, no cultural materials were found. The several pimple mounds appeared to be sandy aeolian deposits. The landowner reported that the only place he had ever seen arrow points was in the creek bed itself.

Transect 7

This transect was selected both for visibility and because the intermittent stream appeared, from the topographic map, to be an abandoned oxbow. It has been nearly filled. Sites were located on low terraces along the intermittent stream (X-04A, B, C), as well as on the valley flank (X-05). Additionally, a log barn (H-01) sets along a farm road to the west of the archaeological sites.

The landowner indicated that the pimple mounds near the farmhouse had been systematically tested by an archaeologist in the past with no recovery of cultural materials. Additionally, he indicated that an early cattle trail crosses the land to the west of the transect.

Transect 8

This transect was selected for the presence of at least three terraces above the present floodplain (T-0) sur-

face. Two sites (X-06 and X-07) were located in aeolian deposits over the T-3 surface. The T-3 surface is a truncated red clay B horizon of possibly Pleistocene origin. The topography seem to indicate at least two abandoned river channels.

Transect 9

This transect was selected for its location in a large meander bend in the river. Two sites were located in this transect (X-08 and X-09). Both are located on the hilltop and slope and in proximity to an intermittent creek, now dammed. No cultural materials were found on the floodplain.

Transect 10

This transect was chosen for examination in relation to the several large "mounds" apparent on the topographic map. These were less apparent in the field, but appear to be simply highly dissected holocene terrace remnants. The riverbank was examined near the confluence with the unnamed creek entering from the south, and is discussed in the geomorphologist's report (see also plate 23). No cultural materials were located.

Transect 11

This transect was selected primarily as an ideal location for soil cores from the visible terraces, together with the existence of a previously reported site (34PU12). The site could not be relocated on the surface, and the present leaseholder was unaware of the presence of a site. Soil cores indicated hardpan formations that effectively prevented subsurface search for buried surfaces.

Transect 12

This transect was selected for its openness and proximity to the river. An abandoned and badly eroded roadbed intersects the river and is not apparent on the topographic map. Other topographic features have been largely remodeled by farm terrace. A relict outlier of the valley flank, however, contains a site (X-03). The site

contains both surface and buried deposits.

Transect 13

This transect is located along the

east side of Birney Creek and includes the Prairie Grove cemetery. No other cultural materials were located. The creek bank did not show any indication of buried surfaces at this point.

SITE DESCRIPTIONS

Tables 2 and 3 present the locations of sites. Tables 4 through 9 give physical data and artifact counts. As can be noted from the topographic locations, surface sites were present on most rises above the floodplain, regardless of the geological origin of the rise. As the cutbanks did not exhibit paleosols, no systematic method of locating potential buried sites on the floodplain was available. It is, however, assumed that such exist, and further soils studies are suggested by the geomorphologist to determine possible locations, should the lake be built. Sites located during this survey are surface to shallowly buried in aeolian deposits over levees, rocky outcrops, terraces, and natural mounds. In one instance, the site was located within an eroding aeolian soil about 10-15 cm in thickness which lay over a truncated, sterile, red clay third terrace.

A single early historic (likely Choctaw) site was located similarly within aeolian deposits on a third terrace adjoining Jackson Creek.

The majority of the sites located were Late Archaic (Wister Phase) sites lacking any evidence of ceramics.

Landowners were generally cooperative, with several taking the time to point out the locations where they had found artifacts in the past. In one instance, a leaseholder reported that an unknown trespasser had been excavating and screening. Upon investigation it appears that holes are being put down in the center of natural mounds. A soil core of one such disturbed mound showed it to be a Pleistocene gravel terrace remnant which may or may not have had cultural materials on the surface.

Archaeological Sites

X-01

This site was reported by the landowner as the location where "arrow points" had been found after plowing in the past. It is currently in pasture with cattle disturbance of the surface. It is in a Neff alluvial soil on the floodplain of Rock Creek. No artifacts were located during this survey. The creek bed had relocated westward from its earlier location (marked by a small abandoned oxbow) and may erode this site away in the future.

X-02

This site is located on a remnant Pleistocene gravel terrace along Jackson Creek (Plate 1). The materials were eroding out of a shallow aeolian A horizon (depth < 10 cm). They included both early historic European and chert artifacts. These artifacts included a percussion cap from a muzzle-loading long gun manufactured ca. A.D. 1830, European dinnerware sherds, and formal chert scrapers. The gun type was in use for hunting in the area until the late 1860s. Further investigation of this site is suggested.

X-03

This site is located on a natural mound (relict outlier of the valley flank) near the head of a very minor drainage (Plate 2). The south flank of the mound showed indications of dark organic (midden?) soil. The northern part of the mound was cut by the roadway and did not show any indication of organics. An animal burrow into the mound is bringing sterile sand to the surface. A light scatter of flaking debris and debitage was located on

Table 2. Cemeteries and Historic Structures

Site #	Site Name	CULTURAL Period	ASSOCIATION: Affiliation	LOCATION:		Twsp. Range Elev.:	
				1/4 1/4 1/4	Sec. North East	Min. Max.	Max.
CEMETERIES:							
C-01	Albion Cemetery	Historic	Choctaw?	SW SE SW	2	21	620 640
C-02	McIntosh Cemetery	Historic	Black	SE SE SE	18	22	660 680
C-03	Myers Cemetery	Historic	Modern	NE NE NE	17	22	660 700
C-04*	Noah Cemetery	Historic	Modern	SW SE SW	9	21	700 720
C-05	Heath Cemetery	Historic	Modern	NE SE SE	9	21	660 680
C-06	Bohannon Cemetery	Historic	Modern	NE SE SE	30	23	660 680
C-07	Christ's Church Cemetery	Historic	Modern	SW SW SW	6	23	660 680
STRUCTURES:							
X-15		Historic	Unknown	NE NE NW	8	22	620 650
X-16		Historic	Unknown	SW SE SW	1	23	640 660

*Not endangered.

Table 3. Archaeological Sites

Site #	Cultural Assn.:		Location:				Twp.	Range	Elev.:		U.T.M.:		7.5 Min. Quad	
	Period	Affiliation	1/4	1/4	1/4	Sec			North	East	Min	Max		Zone
34LP114	Prehistoric	Archaic/Woodland	NE	SE	SE	33	3	23	660	680	15			Whitesboro
34LP118	Prehistoric	Unknown		SE	SE	33	3	23	660	680	15			Whitesboro
34LP144*	Prehistoric	Woodland		SE	NW	6	2	23	680	700	15			Whitesboro
34LP146	Prehistoric		N	SW	NE	6	2	23	640	680	15			Whitesboro
34LP147	Prehistoric		NE	SE	SE	3	2	23	640	680	15			Muse
34LP148	Prehistoric		N	N	SE	2	2	23	660	680	15			Muse
34LP149*	Prehistoric		NE	SE	NE	4	2	23	680	720	15			Whitesboro
34LP150	Prehistoric		SW	NE	SW	2	2	23	660	700	15			Muse
34LP179*	Prehistoric		SE	SW	NW	5	3	22	760	800	15	315220	3848200	Talihina
34LP180*	Prehistoric		SE	SE	NW	5	3	22	740	780	15	315200	3848280	Talihina
34LP181*	Prehistoric		NE	NE	NE	6	3	22	740	780	15	314610	3848900	Talihina
34LP287	Prehistoric	Woodland	SW	NW	NW	12	3	21	660	680	15			Albion
34LP298	Prehistoric	Woodland/Caddoan?	NW	SW	NW	12	3	21	660	680	15			Albion
34LP299	Prehistoric	Caddoan	SE	SW	NW	12	3	21	660	680	15			Albion
34LP512*	Prehistoric	Unknown	SE	NW	SW	23	3	23	1100	1200	15			Muse
34LP513*	Prehistoric	Unknown	SE	SW	NE	23	3	23	980	1000	15			Muse
34LP514*	Prehistoric	Unknown	NW	NE	SE	23	3	23	980	1000	15			Muse
34LP515*	Prehistoric	Unknown	SE	NE	NE	26	3	23	780	800	15			Muse
34LP516*	Prehistoric	Unknown	SE	NW	NW	25	3	23	760	780	15			Muse
34LP517*	Prehistoric	Unknown	NW	NW	NW	25	3	23	700	720	15			Muse
34LP518*	Prehistoric	Unknown	NW	NW	SW	26	3	23	740	760	15			Muse
34LT06*	Prehistoric	Unknown	NW	SE	SW	15	3	21	700	720	15			Albion
34LT07*	Prehistoric	Unknown	NE	SW	SE	15	3	21	720	740	15			Albion
34LT08*	Prehistoric	Unknown	NW	NE	NE	15	3	21	680	720	15			Albion
34LT09*	Prehistoric	Unknown	SE	NW	NW	14	3	21	680	700	15			Albion
34LT10*	Prehistoric	Unknown	NW	SW	NE	15	3	21	720	740	15			Albion
34PU11	Prehistoric	Late Archaic	NE	NE	SW	12	2	21	600	640	15			Albion
34PU12	Prehistoric	Woodland	N	NE	SW	12	2	21	600	620	15			Albion
34PU13	Prehistoric	Unknown	NW	NW	SE	23	2	21	620	640	15			Albion
34PU14	Prehistoric	Unknown	SE	NE	NW	5	2	22	620	640	15			Albion
34PU15	Prehistoric	Woodland	SW	NE	SE	15	2	21	600	620	15			Albion
34PU17	Prehistoric	Woodland	S	NW	NE	7	2	22	640	680	15			Albion
34PU21	Prehistoric	Woodland	NW	NW	NE	17	2	22	620	640	15			Albion
34PU22	Prehistoric	Archaic/Woodland	SW	SE	NW	2	2	22	620	640	15			Whitesboro
34PU23	Prehistoric	Unknown	NE	SW	NE	3	2	22	640	660	15			Whitesboro
34PU24	Prehistoric	Unknown		SE	NW	17	2	22	620	640	15			Albion
34PU25	Prehistoric	Woodland		S	NE	21	2	21	600	620	15			Albion
34PU25a	Prehistoric	Unknown	E	SE	SE	16	2	21	na	na	15			Albion
X-01	Prehistoric	Unknown	SE	NW	SE	19	3	22	640	660	15	314200	3843120	Albion
X-02	Historic	Choctaw	NW	SE	SE	14	3	21	660	680	15			Albion
X-03	Prehistoric	Unknown	SE	NW	NW	33	3	23	640	670	15	326000	3840450	Whitesboro
X-04A/B	Prehistoric	Woodland?	SE	NW	NE	8	2	22	600	620	15	315480	3837300	Albion
X-04C	Prehistoric	Woodland?	SW	NW	NE	8	2	22	620	640	15	315380	3837320	Albion
X-05	Prehistoric	Unknown	SE	NE	NW	8	2	22	620	640	15	315280	3837340	Albion
X-06	Prehistoric	Archaic	SE	SE	SW	31	3	23	660	680	15	323220	3839200	Whitesboro
X-07	Prehistoric	Unknown	SE	SE	SW	31	3	23	660	680	15	323260	3839140	Whitesboro
X-08	Prehistoric	Archaic	SE	NW	SW	2	2	23	660	700	15	329100	3838350	Muse
X-09*	Prehistoric	Unknown	SE	NW	SW	2	2	23	680	700	15	329120	3838280	Muse
X-10	Prehistoric	Unknown	NW	SW	SE	8	2	22	640	680	15	315380	3836275	Albion
X-11*	Prehistoric	Unknown	NW	SE	SE	17	2	21	600	620	15	306040	3834920	Albion
X-12	Unknown	Unknown	SW	NW	SE	15	2	21	600	620	15	389040	3835100	Albion
X-13	Unknown	Unknown	NW	SW	SW	11	2	21	600	620	15			Albion
X-14	Historic	Choctaw/Black	NE	SE	NE	19	3	22	660	680	15			Albion

*Not Endangered.

Table 4. Site Physiography

Site #	Site Area	Site Type	Distance to Water	Soil Association	Topographic Setting
34LP114	na		10 Cupco		Terrace
34LP118	4000		30 Cupco		Terrace
34LP144*	na		1600 Speer		Low bluff
34LP146	8000		10 Bengal/Octavia/Tuskahoma		Low bluff
34LP147	na		10 Speer/Neff		Oxbow/Terrace
34LP148	5600		100 Speer/Neff		Oxbow/Terrace
34LP149*	4000		80 Bengal/Octavia/Tuskahoma		Terrace-3
34LP150	na		100 Wetsaw		Bluff
34LP179*	20200		300 Shermore		Terrace 2
34LP180*	40400		100 Shermore		Terrace 2
34LP181*	6000		100 Kenn-Ceda		Terrace 2
34LP287	na		100 Neff		Terrace-1
34LP298	na		50 Neff		Floodplain
34LP299	20000		100 Neff		Knoll
34LP512*	8000	quarry/workshop	100 Carnasaw		Slope
34LP513*	1600	quarry/workshop	100 Carnasaw		Slope
34LP514*	800	quarry/workshop	100 Carnasaw		Slope
34LP515*	2100	quarry/workshop	100 Tuskahoma		Slope
34LP516*	400	quarry/workshop	100 Tuskahoma		Slope
34LP517*	300	quarry/workshop	50 Carnasaw		Slope
34LP518*	900	quarry/workshop	na Bengal/Octavia/Tuskahoma		Slope
34LT06*	20000		10 Tuskahoma/Sobol		Terrace-2
34LT07*	10200		20 Tuskahoma/Sobol		Terrace-2
34LT08*	10200		10 Freestone/Bernow		Terrace-2
34LT09*	10200		10 Neff/Rexor		Terrace-2
34LT10*	11100		100 Tuskahoma/Sobol		Terrace-2
34PU11	na		20 Dela		Lowland Ridge
34PU12	na		50 Pushmataha		Floodplain
34PU13	na		10 Shermore		Terrace-1
34PU14	na		10 Pushmataha		Terrace-1
34PU15	na		10 Dela		Floodplain
34PU17	na		150 Tuskahoma/Clebit/Sobol/Shermore		Upland
34PU21	na		10 Dela		Terrace-1
34PU22	na		20 Dela		Sandbar?
34PU23	na		200 Speer		Valley Flank
34PU24	na		10 Alikchi		Knoll
34PU25	na		10 Dela		Terrace
34PU25a	na		na Dela		na
X-01	4000	camp	10 Neff		Terrace-1
X-02	500	camp	10 Wilburton		Terrace-3
X-03	300	camp	10 Neff		Relict outcrop
X-04A/B	10000	camp	10 Bengal/Octavia/Tuskahoma		Terrace-2
X-04C	2000	camp	15 Bengal/Octavia/Tuskahoma		Terrace-2
X-05	500	camp	25 Sherwood/Zafra		Terrace-3
X-06	5000	camp	10 Speer/Neff		Terrace-3
X-07	200	camp	10 Speer/Neff		Terrace-3
X-08	40500	camp	15 Bengal/Octavia/Tuskahoma		Hilltop
X-09*	2000	camp	15 Bengal/Octavia/Tuskahoma		Low ridge
X-10	2000		30 Tuskahoma/Sobol		Ridgetop
X-11*	na		150 Speer		na
X-12	na	rock art	na na		Rock outcrop
X-13	na	rock art	20 na		Rock outcrop
X-14	na	hist. foundation	na na		
SUM					
AVERAGE	4735.8		81.2		
S.D.	8813.3		220.7		

*Not Endangered.

Table 5. Chipped Stone Tools

Site #	Biface	Point	Knife	Scraper	Graver	Notch	Retouch	Util.	TOTAL
34LP114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34LP118	0.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	5.0
34LP144*	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	3.0
34LP146	0.0	8.0	4.0	1.0	0.0	0.0	0.0	0.0	13.0
34LP147	2.0	1.0	2.0	1.0	0.0	0.0	0.0	0.0	6.0
34LP148	0.0	8.0	4.0	4.0	0.0	0.0	0.0	0.0	16.0
34LP149*	0.0	5.0	6.0	6.0	0.0	0.0	0.0	0.0	17.0
34LP150	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0
34LP179*	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	4.0
34LP180*	0.0	2.0	8.0	3.0	0.0	0.0	2.0	0.0	15.0
34LP181*	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0
34LP287	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
34LP298	4.0	2.0	0.0	0.0	0.0	0.0	16.0	0.0	22.0
34LP299	8.0	4.0	0.0	0.0	0.0	0.0	16.0	0.0	28.0
34LP512*	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
34LP513*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34LP514*	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
34LP515*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34LP516*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34LP517*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34LP518*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34LT06*	0.0	3.0	0.0	8.0	0.0	0.0	0.0	0.0	11.0
34LT07*	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	3.0
34LT08*	0.0	5.0	2.0	3.0	0.0	0.0	0.0	0.0	10.0
34LT09*	0.0	9.0	6.0	8.0	0.0	0.0	0.0	0.0	23.0
34LT10*	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
34PU11	0.0	3.0	2.0	2.0	0.0	0.0	0.0	0.0	7.0
34PU12	0.0	1.0	0.0	2.0	0.0	0.0	0.0	0.0	3.0
34PU13	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
34PU14	0.0	3.0	0.0	1.0	0.0	0.0	0.0	0.0	4.0
34PU15	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
34PU17	0.0	32.0	1.0	0.0	0.0	0.0	0.0	0.0	33.0
34PU21	0.0	2.0	0.0	1.0	0.0	0.0	0.0	0.0	3.0
34PU22	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
34PU23	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	3.0
34PU24	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
34PU25	1.0	5.0	1.0	0.0	0.0	0.0	0.0	0.0	7.0
34PU25a	na	na	na	na	na	na	na	na	na
X-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X-02	0.0	0.0	0.0	5.0	0.0	0.0	0.0	1.0	6.0
X-03	0.0	1.0	0.0	3.0	2.0	0.0	0.0	0.0	6.0
X-04A/B	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0
X-04C	1.0	0.0	0.0	0.0	0.0	2.0	0.0	6.0	9.0
X-05	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0
X-06	3.0	3.0	0.0	0.0	0.0	0.0	3.0	32.0	41.0
X-07	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0
X-08	13.0	4.0	0.0	23.0	1.0	0.0	6.0	35.0	82.0
X-09*	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	3.0
X-10	na	na	na	na	na	na	na	na	na
X-11*	na	na	na	na	na	na	na	na	na
X-12	na	na	na	na	na	na	na	na	na
X-13	na	na	na	na	na	na	na	na	na
X-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUM	36.0	122.0	47.0	81.0	3.0	2.0	43.0	75.0	409.0
AVERAGE	0.7	2.3	0.9	1.5	0.1	.0	0.8	1.4	7.7
S.D.	2.2	4.7	1.7	3.5	0.3	0.3	3.2	6.4	13.6

*Not Endangered.

Table 6. Lithic Debitage and Debris

Site #	DEBITAGE:						DEBRIS:			
	Core	Core Trimming	Primary	Secondary	Tertiary	Biface Thinning	TOTAL	Chip	Chunk	TOTAL
34LP114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34LP118	2.0	0.0	0.0	0.0	12.0	0.0	14.0	0.0	0.0	0.0
34LP144*	0.0	0.0	0.0	0.0	5.0	0.0	5.0	0.0	0.0	0.0
34LP146	3.0	0.0	0.0	0.0	2.0	0.0	5.0	2.0	0.0	2.0
34LP147	0.0	0.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0	0.0
34LP148	2.0	0.0	0.0	0.0	2.0	0.0	4.0	0.0	0.0	0.0
34LP149*	0.0	0.0	0.0	0.0	6.0	0.0	6.0	2.0	0.0	2.0
34LP150	2.0	0.0	0.0	0.0	2.0	0.0	4.0	0.0	0.0	0.0
34LP179*	0.0	0.0	0.0	0.0	22.0	0.0	22.0	0.0	0.0	0.0
34LP180*	1.0	0.0	0.0	0.0	50.0	0.0	51.0	0.0	0.0	0.0
34LP181*	0.0	0.0	0.0	0.0	26.0	0.0	26.0	0.0	0.0	0.0
34LP287	0.0	0.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0
34LP298	4.0	10.0	14.0	21.0	47.0	84.0	180.0	162.0	85.0	247.0
34LP299	3.0	6.0	26.0	44.0	113.0	94.0	286.0	254.0	151.0	405.0
34LP512*	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0
34LP513*	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0
34LP514*	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0
34LP515*	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0
34LP516*	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0
34LP517*	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
34LP518*	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
34LT06*	0.0	0.0	0.0	0.0	41.0	0.0	41.0	0.0	0.0	0.0
34LT07*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34LT08*	2.0	0.0	0.0	0.0	85.0	0.0	87.0	0.0	0.0	0.0
34LT09*	7.0	0.0	0.0	0.0	134.0	0.0	141.0	0.0	0.0	0.0
34LT10*	0.0	0.0	0.0	0.0	9.0	0.0	9.0	0.0	0.0	0.0
34PU11	0.0	0.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0
34PU12	0.0	0.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0	0.0
34PU13	0.0	0.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0	0.0
34PU14	0.0	0.0	0.0	0.0	5.0	0.0	5.0	0.0	0.0	0.0
34PU15	0.0	0.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0
34PU17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34PU21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34PU22	0.0	0.0	0.0	0.0	5.0	0.0	5.0	0.0	0.0	0.0
34PU23	0.0	0.0	0.0	0.0	3.0	0.0	3.0	0.0	0.0	0.0
34PU24	0.0	0.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0	0.0
34PU25	3.0	0.0	0.0	0.0	10.0	0.0	13.0	0.0	0.0	0.0
34PU25a	na	na	na	na	na	na	na	na	na	na
X-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X-02	0.0	1.0	1.0	2.0	4.0	0.0	8.0	3.0	4.0	7.0
X-03	0.0	0.0	2.0	10.0	2.0	2.0	16.0	1.0	0.0	1.0
X-04A/B	1.0	0.0	7.0	4.0	24.0	3.0	39.0	10.0	6.0	16.0
X-04C	1.0	0.0	3.0	2.0	10.0	1.0	17.0	0.0	8.0	8.0
X-05	0.0	0.0	2.0	0.0	5.0	3.0	10.0	2.0	1.0	3.0
X-06	2.0	5.0	22.0	17.0	121.0	21.0	188.0	41.0	55.0	96.0
X-07	0.0	0.0	0.0	1.0	1.0	4.0	6.0	0.0	3.0	3.0
X-08	10.0	7.0	20.0	23.0	151.0	26.0	237.0	17.0	56.0	73.0
X-09*	0.0	0.0	0.0	1.0	3.0	3.0	7.0	0.0	4.0	4.0
X-10	na	na	na	na	na	na	na	na	na	na
X-11*	na	na	na	na	na	na	na	na	na	na
X-12	na	na	na	na	na	na	na	na	na	na
X-13	na	na	na	na	na	na	na	na	na	na
X-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUM	43.0	29.0	97.0	125.0	949.0	241.0	1563.0	494.0	373.0	867.0
AVERAGE	0.8	0.5	1.8	2.4	17.9	4.5	29.5	9.3	7.0	16.4
S.D.	1.8	1.9	5.6	7.6	35.7	17.4	61.0	40.8	25.2	65.3

*Not Endangered.

Table 7. Ground and Pecked Stone Tools

Site #	Axes	Nutter	Mano	Metate	Hammer	TOTAL
34LP114	0.0	0.0	0.0	0.0	0.0	0.0
34LP118	0.0	1.0	0.0	0.0	0.0	1.0
34LP144*	1.0	0.0	2.0	0.0	0.0	3.0
34LP146	1.0	0.0	1.0	0.0	0.0	2.0
34LP147	0.0	1.0	1.0	0.0	0.0	2.0
34LP148	0.0	1.0	1.0	1.0	0.0	3.0
34LP149*	0.0	0.0	4.0	0.0	0.0	4.0
34LP150	0.0	1.0	0.0	0.0	0.0	1.0
34LP179*	0.0	0.0	0.0	0.0	0.0	0.0
34LP180*	0.0	0.0	0.0	0.0	0.0	0.0
34LP181*	0.0	0.0	0.0	0.0	0.0	0.0
34LP287	0.0	1.0	1.0	0.0	0.0	2.0
34LP298	0.0	0.0	0.0	0.0	1.0	4.0
34LP299	0.0	0.0	0.0	0.0	1.0	5.0
34LP512*	0.0	0.0	0.0	0.0	0.0	0.0
34LP513*	0.0	0.0	0.0	0.0	0.0	0.0
34LP514*	0.0	0.0	0.0	0.0	0.0	0.0
34LP515*	0.0	0.0	0.0	0.0	0.0	0.0
34LP516*	0.0	0.0	0.0	0.0	0.0	0.0
34LP517*	0.0	0.0	0.0	0.0	0.0	0.0
34LP518*	0.0	0.0	0.0	0.0	0.0	0.0
34LT06*	0.0	0.0	0.0	0.0	0.0	0.0
34LT07*	0.0	0.0	0.0	0.0	0.0	0.0
34LT08*	0.0	0.0	0.0	0.0	0.0	0.0
34LT09*	0.0	0.0	0.0	0.0	0.0	0.0
34LT10*	0.0	0.0	0.0	0.0	0.0	0.0
34PU11	3.0	0.0	0.0	0.0	0.0	3.0
34PU12	3.0	0.0	0.0	1.0	1.0	5.0
34PU13	0.0	0.0	0.0	0.0	0.0	0.0
34PU14	0.0	0.0	0.0	0.0	0.0	0.0
34PU15	0.0	0.0	1.0	1.0	0.0	2.0
34PU17	0.0	0.0	0.0	0.0	0.0	0.0
34PU21	0.0	0.0	0.0	0.0	4.0	4.0
34PU22	1.0	0.0	1.0	0.0	0.0	2.0
34PU23	1.0	0.0	0.0	0.0	0.0	1.0
34PU24	2.0	0.0	0.0	0.0	0.0	2.0
34PU25	0.0	2.0	0.0	0.0	0.0	2.0
34PU25a	na	na	na	na	na	na
X-01	0.0	0.0	0.0	0.0	0.0	0.0
X-02	0.0	0.0	1.0	0.0	0.0	1.0
X-03	0.0	0.0	2.0	1.0	0.0	3.0
X-04A/B	0.0	0.0	0.0	0.0	0.0	0.0
X-04C	0.0	0.0	0.0	0.0	0.0	0.0
X-05	0.0	0.0	0.0	0.0	0.0	0.0
X-06	0.0	0.0	0.0	0.0	0.0	19.0
X-07	0.0	0.0	0.0	0.0	0.0	0.0
X-08	0.0	0.0	4.0	0.0	0.0	13.0
X-09*	0.0	0.0	0.0	0.0	0.0	0.0
X-10	na	na	na	na	na	na
X-11*	na	na	na	na	na	na
X-12	na	na	na	na	na	na
X-13	na	na	na	na	na	na
X-14	0.0	0.0	0.0	0.0	0.0	0.0
SUM	12.0	7.0	19.0	4.0	7.0	84.0
AVERAGE	0.2	0.1	0.4	0.1	0.1	1.6
S.D.	0.7	0.4	0.9	0.3	0.6	3.3

*Not Endangered.

Table 8. Miscellaneous Artifacts

Site #	# Ceramic	Burned Stone	Burned Earth	Hematite	Quartz Crystal	TOTAL
34LP114	0.0	0.0	0.0	0.0	0.0	0.0
34LP118	0.0	0.0	0.0	0.0	0.0	0.0
34LP144*	0.0	0.0	0.0	0.0	0.0	0.0
34LP146	0.0	2.0	0.0	0.0	0.0	2.0
34LP147	0.0	0.0	0.0	0.0	0.0	0.0
34LP148	0.0	0.0	0.0	0.0	0.0	0.0
34LP149*	0.0	1.0	0.0	0.0	0.0	1.0
34LP150	0.0	0.0	0.0	0.0	0.0	0.0
34LP179*	0.0	0.0	0.0	0.0	0.0	0.0
34LP180*	0.0	0.0	0.0	0.0	0.0	0.0
34LP181*	0.0	0.0	0.0	0.0	0.0	0.0
34LP287	0.0	0.0	0.0	0.0	0.0	0.0
34LP298	3.0	0.0	0.0	0.0	0.0	3.0
34LP299	17.0	0.0	2.0	1.0	2.0	22.0
34LP512*	0.0	0.0	0.0	0.0	0.0	0.0
34LP513*	0.0	0.0	0.0	0.0	0.0	0.0
34LP514*	0.0	0.0	0.0	0.0	0.0	0.0
34LP515*	0.0	0.0	0.0	0.0	0.0	0.0
34LP516*	0.0	0.0	0.0	0.0	0.0	0.0
34LP517*	0.0	0.0	0.0	0.0	0.0	0.0
34LP518*	0.0	0.0	0.0	0.0	0.0	0.0
34LT06*	0.0	0.0	0.0	0.0	0.0	0.0
34LT07*	0.0	0.0	0.0	0.0	0.0	0.0
34LT08*	0.0	0.0	0.0	0.0	0.0	0.0
34LT09*	0.0	0.0	0.0	0.0	0.0	0.0
34LT10*	0.0	0.0	0.0	0.0	0.0	0.0
34PU11	0.0	0.0	0.0	0.0	0.0	0.0
34PU12	0.0	0.0	0.0	0.0	0.0	0.0
34PU13	0.0	0.0	0.0	0.0	0.0	0.0
34PU14	0.0	0.0	0.0	0.0	0.0	0.0
34PU15	0.0	0.0	0.0	0.0	0.0	0.0
34PU17	0.0	0.0	0.0	0.0	0.0	0.0
34PU21	0.0	0.0	0.0	0.0	0.0	0.0
34PU22	0.0	0.0	0.0	0.0	0.0	0.0
34PU23	0.0	0.0	0.0	0.0	0.0	0.0
34PU24	0.0	0.0	0.0	0.0	0.0	0.0
34PU25	0.0	0.0	0.0	0.0	0.0	0.0
34PU25a	na	na	na	na	na	na
X-01	0.0	0.0	0.0	0.0	0.0	0.0
X-02	0.0	0.0	0.0	0.0	1.0	1.0
X-03	0.0	0.0	0.0	0.0	0.0	0.0
X-04A/B	0.0	0.0	0.0	0.0	1.0	1.0
X-04C	0.0	0.0	0.0	0.0	0.0	0.0
X-05	0.0	0.0	0.0	0.0	0.0	0.0
X-06	0.0	0.0	0.0	0.0	1.0	1.0
X-07	0.0	0.0	0.0	0.0	0.0	0.0
X-08	0.0	0.0	0.0	0.0	1.0	1.0
X-09*	0.0	0.0	0.0	0.0	0.0	0.0
X-10	na	na	na	na	na	na
X-11*	na	na	na	na	na	na
X-12	na	na	na	na	na	na
X-13	na	na	na	na	na	na
X-14	na	na	na	na	na	na
SUM	20.0	3.0	2.0	1.0	6.0	32.0
AVERAGE	0.4	0.1	.0	.0	0.1	0.6
S.D.	2.3	0.3	0.3	0.1	0.4	3.0

*Not Endangered.

Table 9. Historic Artifacts

Site #	ceramic	gun parts	harness/ horseshoe	Other	Describe Other	Total Historic Artifacts
34LP114	0.0	0.0	0.0	0.0		0.0
34LP118	0.0	0.0	0.0	0.0		0.0
34LP144*	0.0	0.0	0.0	0.0		0.0
34LP146	0.0	0.0	0.0	0.0		0.0
34LP147	0.0	0.0	0.0	0.0		0.0
34LP148	0.0	0.0	0.0	0.0		0.0
34LP149*	0.0	0.0	0.0	0.0		0.0
34LP150	0.0	0.0	0.0	0.0		0.0
34LP179*	0.0	0.0	0.0	0.0		0.0
34LP180*	0.0	0.0	0.0	0.0		0.0
34LP181*	0.0	0.0	0.0	0.0		0.0
34LP287	0.0	0.0	0.0	0.0		0.0
34LP298	0.0	0.0	0.0	1.0	metal	1.0
34LP299	2.0	0.0	0.0	0.0		2.0
34LP512*	0.0	0.0	0.0	0.0		0.0
34LP513*	0.0	0.0	0.0	0.0		0.0
34LP514*	0.0	0.0	0.0	0.0		0.0
34LP515*	0.0	0.0	0.0	0.0		0.0
34LP516*	0.0	0.0	0.0	0.0		0.0
34LP517*	0.0	0.0	0.0	0.0		0.0
34LP518*	0.0	0.0	0.0	0.0		0.0
34LT06*	0.0	0.0	0.0	0.0		0.0
34LT07*	0.0	0.0	0.0	0.0		0.0
34LT08*	0.0	0.0	0.0	0.0		0.0
34LT09*	0.0	0.0	0.0	0.0		0.0
34LT10*	0.0	0.0	0.0	0.0		0.0
34PU11	0.0	0.0	0.0	0.0		0.0
34PU12	0.0	0.0	0.0	0.0		0.0
34PU13	0.0	0.0	0.0	0.0		0.0
34PU14	0.0	0.0	0.0	0.0		0.0
34PU15	0.0	0.0	0.0	0.0		0.0
34PU17	0.0	0.0	0.0	0.0		0.0
34PU21	0.0	0.0	0.0	0.0		0.0
34PU22	0.0	0.0	0.0	0.0		0.0
34PU23	0.0	0.0	0.0	0.0		0.0
34PU24	0.0	0.0	0.0	0.0		0.0
34PU25	0.0	0.0	0.0	0.0		0.0
34PU25a	na	na	na	na		na
X-01	0.0	0.0	0.0	0.0		0.0
X-02	2.0	1.0	0.0	2.0	glass scrapers	6.0
X-03	0.0	0.0	0.0	0.0		0.0
X-04A/B	0.0	0.0	0.0	0.0		0.0
X-04C	0.0	0.0	0.0	0.0		0.0
X-05	0.0	0.0	0.0	0.0		0.0
X-06	0.0	0.0	0.0	0.0		1.0
X-07	0.0	0.0	0.0	0.0		0.0
X-08	9.0	0.0	1.0	2.0	glass scraper	20.0
X-09*	0.0	0.0	0.0	0.0		0.0
X-10	na	na	na	na		na
X-11*	na	na	na	na		na
X-12	na	na	na	na		na
X-13	na	na	na	na		na
X-14	na	na	na	na		na
SUM	13.0	1.0	1.0	5.0		30.0
AVERAGE	0.2	.0	.0	0.1		0.6
S.D.	1.3	0.1	0.1	0.4		2.8

*Not Endangered.



Plate 1. X-02 looking south across site.



Plate 2. X-03 looking north toward site.

the surface.

X-04A

This site is eroding from the surface of an old levee near a very old and nearly filled oxbow of the river (Plate 3). The site consisted of an extensive scatter of groundstone and chipped stone. Diagnostics included Gary points (figure 3d). The landowner reports that many points were recovered from this area in the past when it was under plow.

X-04B

This site is located across the stream to the west of X-04A (Plate 4). It may represent the same occupation. It consisted of a lithic scatter extending a short way up the valley flank in both the farm road and the surrounding field.

X-05

This site consisted of a lithic scatter in a branch of the farm road intersecting the road leading to X-04 (Plate 5). It appears to be a separate site from X-04. No diagnostics were recovered.

X-06

This site is eroding from aeolian deposits over a truncated red clay B horizon on the third terrace of the Kiamichi River (Plates 6 and 7). The scatter was extensive and probably extends onto the "hilltop" as lightly buried deposits. Diagnostic Gary points (figure 4b,c) and the absence of small points and ceramics suggest a Late Archaic assemblage.

X-07

This site is located south of X-06 about 50 m and could represent an extension of the main site (Plate 8). It is shallowly buried in the aeolian surface deposits. No diagnostics were recovered from this location.

X-08

This extensive site is located on a ridge overlooking the floodplain of the Kiamichi (Plate 9). A farm road cuts

through it. The roadcut suggests materials buried to a depth of no more than 20 cm. An historic house occupies the crest of the ridge. Materials recovered included groundstone, large bifaces and scrapers (figure 5), a Gary point base (figure 6e), and two large bases from basally notched points (figure 6c,d). The materials also include what appear to be formal scrapers made on bottle glass. The assemblage may be mixed, or the bottle glass simply evidence of the modern occupants.

X-09

This site appears to be separated from X-08 by about 50 meters. It did not yield diagnostics and was visible primarily in the road bed.

X-10

This site was reported by the landowner who indicated that large numbers of points had been recovered and are in his possession. The site lies on a ridge and is above the conservation pool, and possibly above the floodpool. Its exact location was not determined.

X-11

This site was reported by an informant and the landowner was not available at the time of the survey. It is reputed to yield both large and small points. It lies outside the study area proper, but might be endangered by dam building.

Historic Sites

X-14

This historic structure has been previously investigated by the State Historical Society and featured in local news reports (Plate 11). It is evidenced now only by the location of its foundations, which can be seen only when the grass cover has dried. It was originally constructed to house the black school provided by the Choctaw tribe for the local black population in 1892. The present landowner, however, remembers the structure as a ranch house, and that it was destroyed



Plate 3. X-04A looking north across site.



Plate 4. X-04B looking west at site from X-04A.

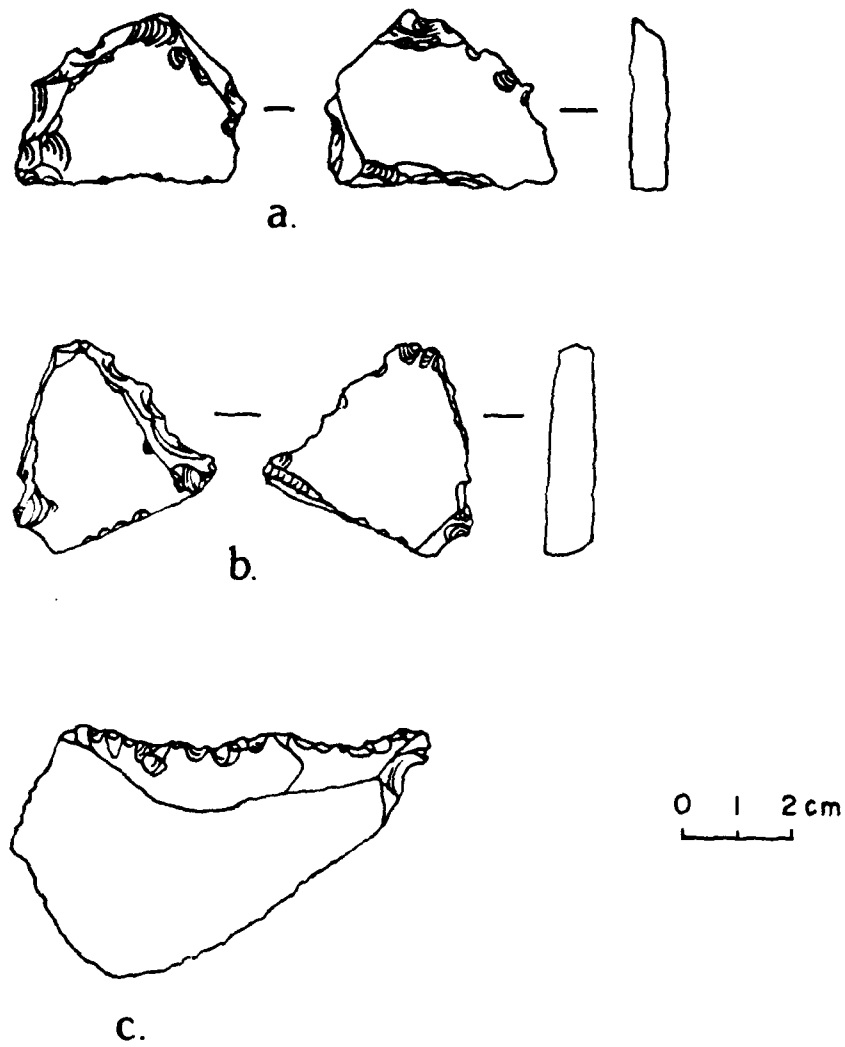


Figure 3. Artifacts from X-02. a, b) Glass scrapers, c) Bigfork chert scraper



Plate 5. X-05 looking west-south-west across site.



Plate 6. X-06 looking east across site.

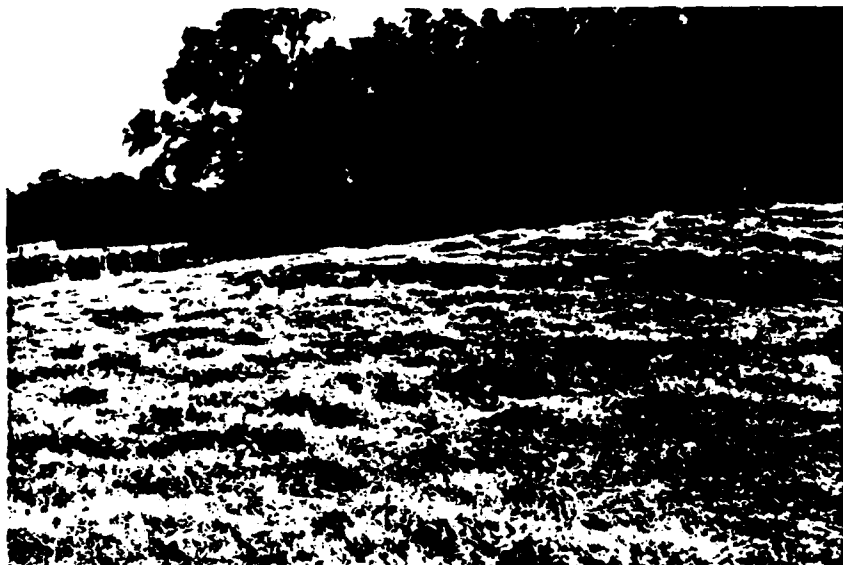


Plate 7. X-06 looking north across site.



Plate 8. X-07 looking north from X-06.

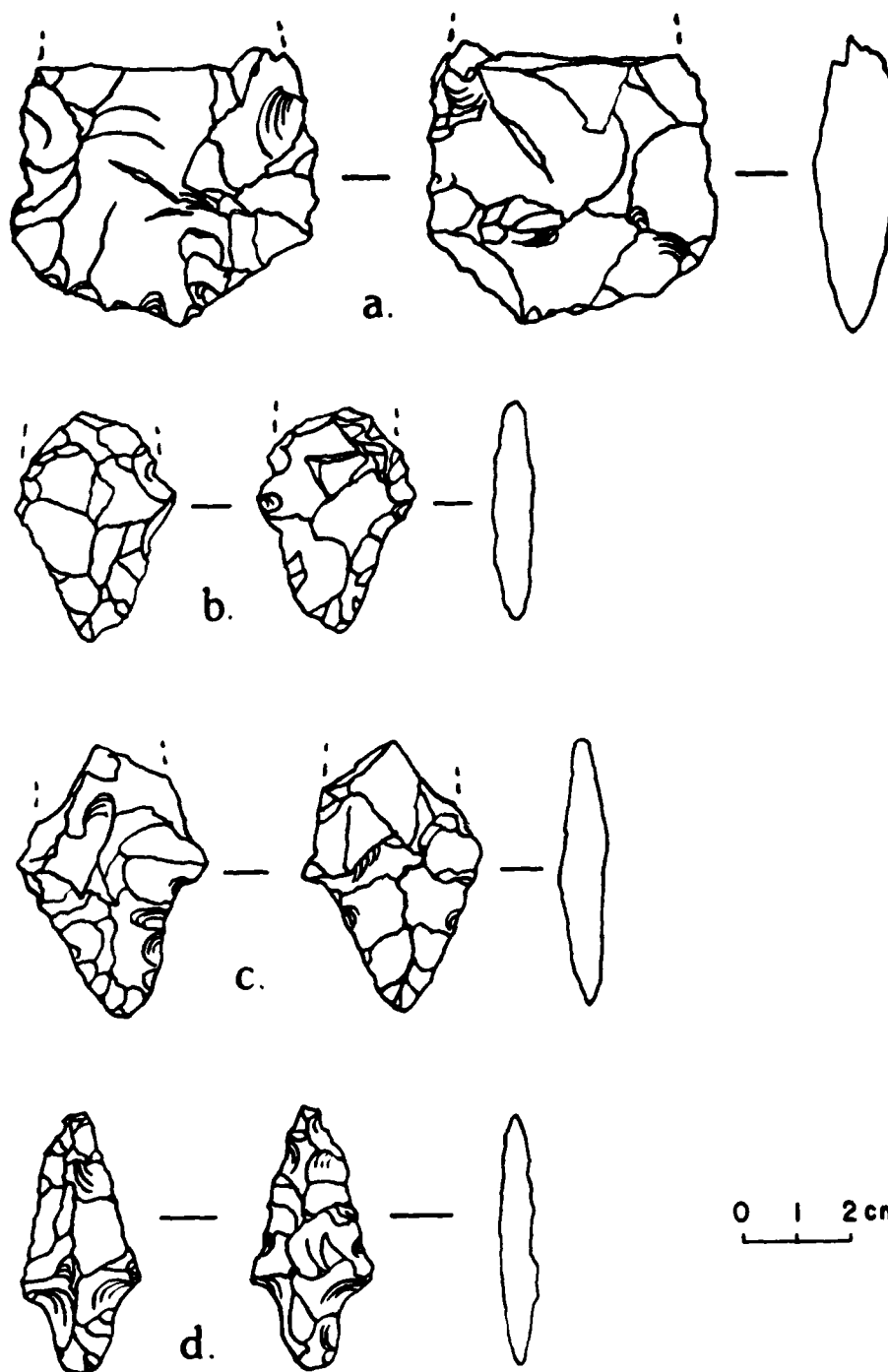


Figure 4. Lithic Artifacts. a) Large biface from X-06; b,c) Gary bases from X-06, d) Gary point from X-04A.



Plate 9. X-08 roadcut through site.



Plate 10. X-08 detail of road erosion.

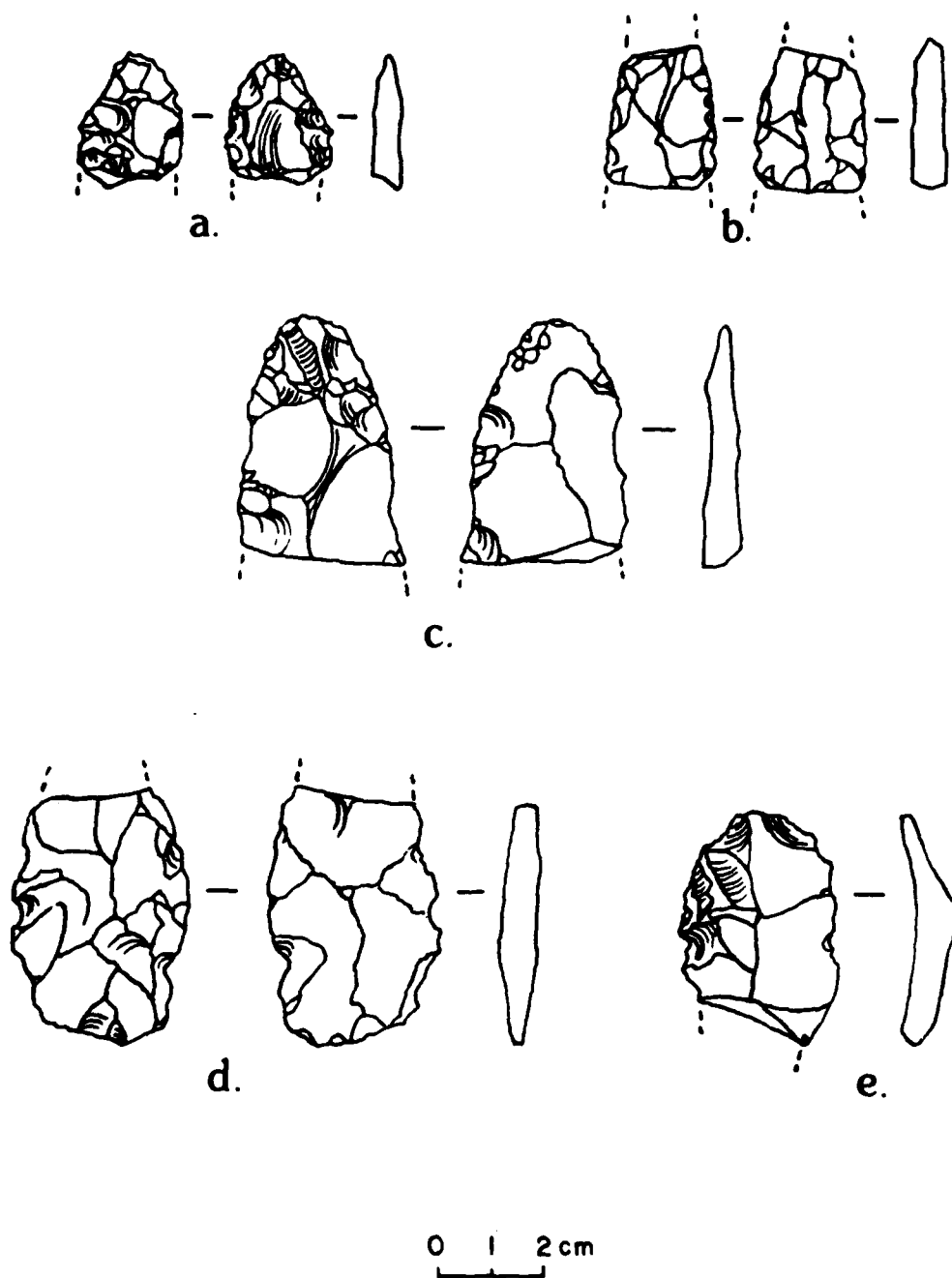


Figure 5. Lithic Artifacts from X-08. a) Biface tip; b) Biface medial fragment; c) Large biface tip; d,e) Scrapers.

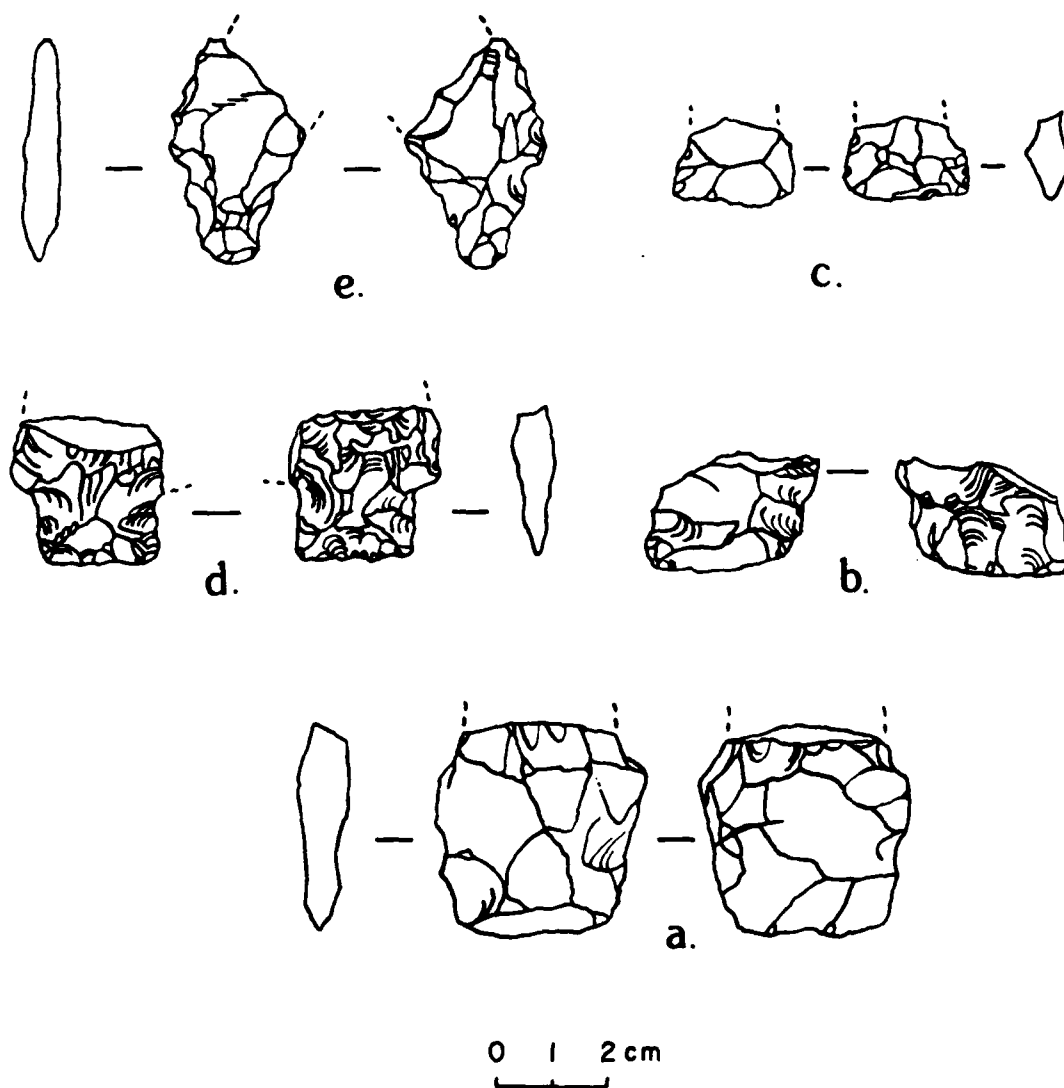


Figure 6. Lithic Artifacts from X-08. a) Large bifacial base; b,c,d) Large, flat point bases.



Plate 11. X-14 news clipping of Tushka Lousa.



Plate 12. X-16 looking north.

during his youth by fire.

X-15

This log cabin sets above the proposed lake level and is not endangered. It was not investigated.

X-16

This log outbuilding is located near X-04 (Plate 12). As the landowner reports a segment of old cattle trail running to the west of the site, the outbuilding could date to that period. It is located some distance from the farmhouse and does not appear to have been associated with it originally. The building was not investigated closely.

X-17 Christ's Church

This structure is of fairly recent construction of concrete block and sheet metal (Plate 13). Several small outbuildings may be of greater historical interest. The associated cemetery appears to have older graves in it. It seems likely, therefore that the modern structure has replaced an older one. It lies within the proposed conservation pool.

X-18 Head Church

This small country church is of clapboard construction. Its age has not been ascertained, but it appears to be of a turn of the century style. It lies within the proposed conservation pool.

McIntosh Cemetery

Only one grave marker was located in this cemetery, for "Benjamin Smith" (Plate 14). Several additional graves are present, however, and have been planted with iris beds. The entire area is heavily overgrown at present. Local informants indicate that this is a black cemetery. It would be endangered should the lake be built.

Bohannon Cemetery

This cemetery includes a number of clearly old, but illegible gravestones (Plate 15). Although in use, it is poorly maintained.

Noah Cemetery

This private cemetery is not threatened by proposed lake levels, but may be threatened during dam construction (Plate 16). It is a well-tended family plot with graves dating at least as early as A.D. 1912.

Myers Cemetery

This cemetery is probably above the proposed flood pool (Plate 17). This could not be definitely ascertained in working with the available topographic maps. The cemetery is poorly tended, but includes graves from about the turn of the century to very recent times.

Albion Cemetery

This cemetery may be of ethnographic interest. Burials are largely confined to the natural mounds located within the cemetery (Plate 18). Mound burials are, of course, traditional to many southeastern Native Americans. It is not clear, however, that tradition is the motivation for the pattern of burials within this cemetery. It falls within the proposed conservation pool.

Heath Cemetery

This small cemetery was not located during the survey, but would be within the conservation pool.

Prairie Grove Cemetery

This well-tended cemetery is undergoing replacement of headstones, many of which cannot be read, or which did not contain sufficient information (Plates 19 and 20). It was, therefore, difficult to ascertain the dates of the older burials. It is not threatened by the floodpool, although highwater wave action might reach it.

Rock Art

X-12

A single rock art site was reported by an informant to be located on the land owned by a Mr. Homer. The landowner was not available at the time of the survey, so neither the exact location nor the composition



Plate 13. Christ's Church.



Plate 14. McIntosh Cemetery.



Plate 15. Bohannon Cemetery.



Plate 16. Noah Cemetery.



Plate 17. Myers Cemetery.



Plate 18. Albion Cemetery.

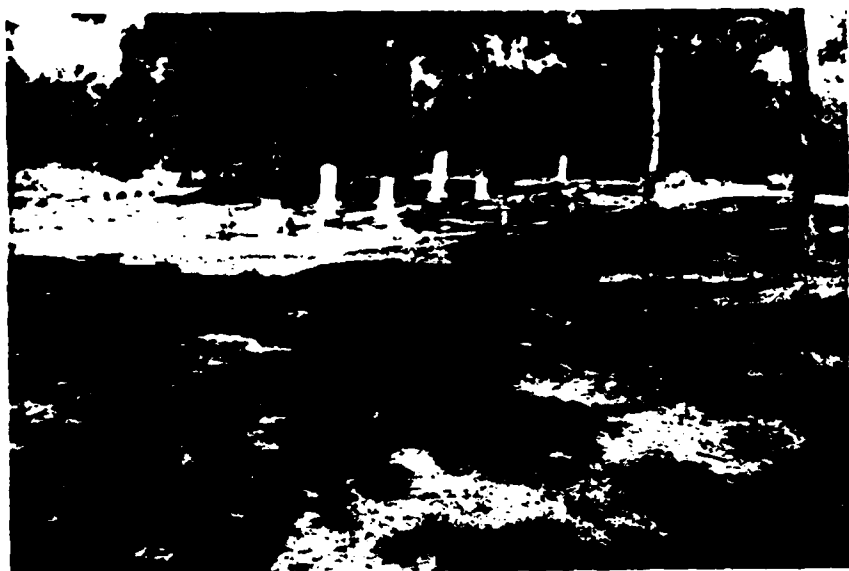


Plate 19. Prairie Grove Cemetery.



Plate 20. Old Headstones from Prairie Grove Cemetery.

could be determined.

X-13

This site was included in the pre-

liminary maps developed by the Corps of Engineers. It was not accessible at the time of the survey. No specific report was located.

PROJECTED SITE LOCATIONS AND FREQUENCIES

Table 10 indicates the number of surface sites expected to be encountered in accomplishing a 100% survey of the proposed lake area. It cannot, however, predict the number of buried sites to be encountered based on this survey or on data previously derived from the study area. Deeply buried sites might be encountered within the T-0, T-1, and T-2 terraces. They would not be expected in T-3 locations.

An attempt to estimate the number of buried sites using site density data from the surrounding lakes revealed a much higher site density in the study area than in the surrounding area, based on presently known sites. Two possible explanations come immediately to mind. The first is that there has been a lesser degree of alluviation and/or a greater degree of site degradation along the Kiamichi than along the lesser streams. The second possible explanation is that the resources of the Kiamichi River valley offered greater attraction to people than those of the lesser tributaries. If the former is true, a very low frequency of buried sites may be expected within the Tuskahoma project area. If the latter, then the higher surface density would suggest a greater density of buried sites as well. Systematic subsurface evaluation would be required to determine the likelihood of either case. In support of the latter case, there appears to be a somewhat greater site density on the higher, more eroded terraces than on the lower terraces. If true site occurrence is as high on the lower terraces, then a high frequency of buried sites could be expected.

The expected number of exposed sites for the entire project area is about 101. All recorded sites deserve further investigation, but most excavations would be shallow. Buried sites, primarily in the lower terraces, might number as many as 60, if further geomorphological studies indicated some key to locating them.

The incidence of standing structures of historical interest within the project area is low. Many of the more important structures of the Indian Territorial period have long since disappeared (Garrick Bailey, personal communication 1987). It is, however, suggested that the site of Tushka Lousa be given further study, and its relationship to Bohannon Cemetery investigated.

Many of the present farm residences appear to date to the early post-statehood era, but most have undergone extensive modification since being built. The two log structures are presently in use as outbuildings and no date has been placed on them. Two church structures would deserve investigation should the lake be built. The Head Church and Christ's Church are both apparent on the topographic maps and are readily located by existing roads. Both would be within the conservation pool.

The majority of the cemeteries (5 out of 6) would require removal. The anomalous patterns of burial within the Albion Cemetery deserve ethnographic study to determine the motivation for mound burial.

Table 10. Projected Number of Archaeological Sites

Topographic Setting	# Acres	# Sites	Acres in Project	Projected # Sites
T-0	210	2	3850	31
T-1	160	2	2750	32
T-2	367	4	2200	23
T-3	260	4	1100	16
Upland	80	0	1100	0
Total	1077	11	11000	101



Plate 21. Rig for soil cores in place in location 1.



Plate 22. Cutbank detail at location 2.



Plate 23. Mound at location 3.

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