

THE KANSAS ANTHROPOLOGIST

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ERRATA

Volume 13, Nos. 1 and 2

The following corrections should be noted for Volume 13, Nos. 1 and 2 (1992) of *The Kansas Anthropologist*. This is the special volume devoted to "Archeology of the University of Kansas" and edited by Marlin F. Hawley.

- P. 7, Figure 1: Department of Sociology, not anthropology.
- P. 10: Frazier's nickname was Poco, not Pogo.
- P. 12, Figure 4: Harold Theodore Uhr Smith.
- P. 16, paragraph 1: There was not a single black or Jew enrolled in the University of Kansas Medical School. Entry to minorities, except for Japanese Americans during WWII, was not overtly barred at the University.
- P. 41, Figure 5: The man identified as Carlos H. Aguilar is Albert C. Spaulding.
- P. 60: Coufal, not Koufal.
- P. 60: Citation for Figure 3 belongs at the end of paragraph 5.
- P. 61: Smith's wife's maiden name was Pogany, not Pogamy.
- P. 68, paragraph 6: "...he did not know that the Solomon River did not flow..."

A FEW NOTES ON KNIFE RIVER FLINT IN NORTHEAST KANSAS

Milton Reichart
Valley Falls, Kansas

The Kansas Anthropologist, 14(1), 1993, pp. 1-5

Four objects of probable Knife River flint indicate the rare presence of that material in northeast Kansas. Two of those objects are artifacts; two are not. It can by no means be resolved at this time whether the agency responsible for their presence here was human or glacial, or both.

The primary source area for Knife River flint (KRF) is in Dunn and Mercer counties of western North Dakota. The area of intensive use of this material by Native Americans covers about 14 percent of the total area of the continental United States, making it one of the most widely distributed of lithic raw materials, with the possible exception of Yellowstone Park obsidian (Ahler 1986:4). This area of intensive use includes southeastern Alberta, the southern one-fourth of Saskatchewan, the southwestern corner of Manitoba, all of North Dakota, South Dakota except the extreme southeastern corner, the panhandle of Nebraska, the northeastern corners of Colorado and Wyoming, and about the northeastern half of Montana.

The area of less intensive use spreads much farther to include more of Alberta, Saskatchewan, Manitoba, and the southern part of Ontario bordering the Great Lakes except Lake Ontario. In addition are included all of the state of Minnesota, Wisconsin, Michigan, Ohio, Indiana, Illinois, Iowa, and Nebraska. Parts of other states are within this area: the extreme southwestern corner of New York, the northwestern corner of Pennsylvania, the northern half of Missouri, the northeastern corner of New Mexico, more than half of Colorado and Wyoming, nearly all of Montana, and that part of Kansas north of a line drawn from Kansas City westward to Junction City then on to the southwest corner of the state (Ahler 1986).

KRF is silicified peat (or lignite, a mineral between peat and coal). The bedding planes in

which it was formed are all gone, and it now "occurs in secondary deposits as sub-angular pebbles, cobbles and boulders as large as two feet in diameter" (Clayton et al. 1970:284).

Cobbles of KRF are frequently flattened and tabular with 90 degree margins (Ahler 1986:107). KRF cobbles were alluvially transported eastward from western North Dakota by preglacial rivers, after which Pleistocene glaciers further dispersed these river valley deposits (Gregg 1987:374). "Naturally occurring KRF pebbles have been reported from as far to the southeast as northwestern Iowa (Anderson 1980:200) and central Iowa" (Billeck et al. 1986:56 in Gregg 1987:370).

In general, the size of KRF pebbles becomes smaller as the distance from the source area increases (Ahler 1986:12). The physical appearance of the pebbles also changes in the same fashion. The cortex on most pieces of KRF in the primary source area is often rough with corners and edges subangular, and there is a low density of pronounced cone fractures. Those pebbles carried far away by alluvial and glacial processes exhibit a water worn and smoothed cortex with rounded corners and edges, and there is a high density of cone fractures (Gregg 1987:372).

Gregg describes KRF as:

...translucent flint [which] is typically root beer or coffee colored, but occurs in a range of colors from blond to nearly black. The internal

sedimentary structure is often visible to the unaided eye as irregular parallel layers and lenses of darker and/or lighter flint about a millimeter thick. KRF is thought to be silicified lignite and distinctive bedding planes, marked by impressions of flattened detrital plant debris, are often observable in poorly silicified pieces. The flaking qualities of KRF range from poor to excellent [Gregg 1987:367-368].

On the Munsell color chart the color is 10YR 2/2 or 3/2 or less commonly 2/3, 3/1, 2/1, or 1/1 (Clayton et al. 1970:287).

There are other materials which are similar in appearance to, and perhaps indistinguishable from, KRF. Indeed, Nowak and Hannus reported at the 39th Plains Conference that "Scenic Chalcedony," from the west Horse Creek aboriginal quarry site 39SH37 near Scenic, South Dakota:

offers an alternative source for much of the artifact and flake material found along the Missouri trench in South Dakota which has been identified in previous archeological literature as Knife River Flint [Nowak and Hannus 1981:37]

Scenic chalcedony is very common in the White River Badlands of South Dakota and has all the same empirical characteristics of KRF. Its translucent color ranges from 5YR 2.5/2 (dark reddish brown) to 5YR 2/3 at its darkest to 10YR 4/3 (brown) at its lightest. It has an observable sedimentary structure consisting of irregular parallel layers of milky opaque lenses, probably opal formed by hydrated silica rather than detrital plant fragments as suggested for KRF. Some fragments are virtually indistinguishable from KRF, but Scenic chalcedony has a distinctly white marley cortex while that of KRF is golden-brown or tan (Nowak et al. 1984:88).

Only four objects of KRF (or a reasonable facsimile) were discovered by the writer in many

years of collecting artifacts in the Valley Falls area of northeastern Kansas (figure 1). Jim Feagins (personal communication) reports seeing an occasional artifact of KRF in private collections in the Kansas City area. But in twenty years of an ongoing intensive survey in the Little Osage River valley of Bourbon County, Kansas, he reports seeing fewer than half a dozen KRF flakes. David Taylor, an exuberant collector of Atchison, Kansas, has one projectile of probable KRF.

THE FOUR OBJECTS

Object A (figure 1a) was found where the edge of the gravel bar borders a cut bank of the Delaware River of northeastern Kansas in which site 14JF336 is deeply buried. This is an Archaic site with a Munkers Creek component. This biface could have eroded from the cut bank or it could have come from farther upstream. However, sand polish is not in evidence, and the flake scars are sharp.

It is 9 mm thick with large flaking scars and an overall neat appearance. There are small straw-colored (golden-brown) inclusions, and on one side some cortex exhibiting fossil plant material parallel to the apparent bedding planes. The color and degree of translucency is approximately that of horehound candy and registers 5YR 3/2 (dark reddish brown) on the Munsell color chart. This artifact does not show use-wear and in all probability is a preform (John Reynolds, personal communication).

Object B (figure 1b) is 11 mm thick and was a surface find at 14JF303, the Keen site. Its banded colors are dark grayish brown (10YR 4/2 and 10YR 5/3). If this is KRF it certainly is an inferior grade of material. It has the form of a plano-convex end scraper, but the process of manufacture appears to be reversed. Ordinarily a lump or pebble of chert is split and the plane of cleavage becomes the unaltered plano surface, while only the former exterior is flaked to form the familiar convex surface.

This object appears to be fashioned from a tabular piece of material with the flat outside becoming the plano part and the inside becoming the convex part. The object is rough

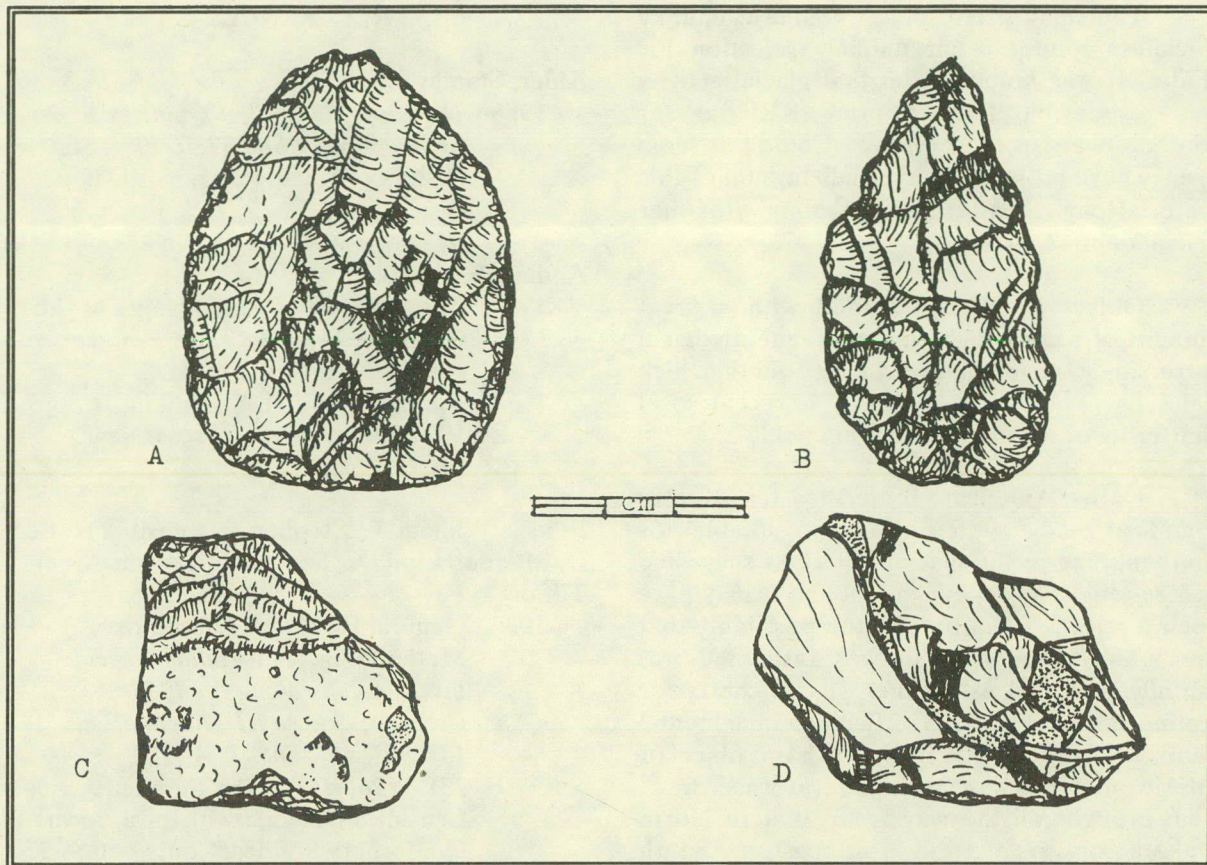


Figure 1. Objects of Knife River flint from northeastern Kansas.

and crude and appears to be chunked out rather than flaked out. The bottom or cutting edge is sharp but irregularly uneven. In short, it looks more like a reject than a functional instrument.

Object C (figure 1c) is a tabular chunk of KRF 20 mm thick which is apparently unmodified by humans. The color is the same as that for object A, 5YR 3/2, dark reddish brown. A few small, flat, straw-colored, opaque inclusions parallel with the bedding planes which are characteristic of KRF are present. The left side and the bottom form 90-degree angles with the face and reverse sides. A few core fractures are visible on the obverse face. The object has sand polish with edges rounded and appears to have been tumbled about considerably.

Object D (figure 1d) is also a gravel bar find in the Delaware River. It is an unutilized chunky flake 14 mm thick of excellent quality KRF. There are a few nicks in the sharp edges

which appear to have been caused by alluvial action. It shares the same color, 5YR 3/2, with objects A and C. There is what appears to be a striking platform, but the flake was most likely produced by other than human agency (John Reynolds, personal communication).

DISCUSSION

Object A is a preform which, because of the distance involved, most likely was obtained through trade rather than through procurement at the quarry. Lithic material normally leaves the quarry area in the form of blanks (usable flakes), preforms (bifaces), and cores (Wedel 1961:272; Ahler 1986:16; Gregg 1987:373; Mallouf 1989:100). This should have been especially applicable to KRF. For in spite of its superior flaking qualities, more wastage is generated in fashioning tools from it than from other materials (Schneider 1972:99).

The small size of object C and its chunky thickness render it an unlikely selection for trade. It was noted earlier that glacial activity was responsible for scattering KRF as far southeastward as central Iowa. Could this same agency have brought a very small amount of this material to northeastern Kansas along with other glacial debris?

Object D is not clouded with a great amount of sand polish, and consequently has a surprisingly fresh look about it. Could this thick flake have been the result of a recent local shattering of a somewhat larger cobble?

Native Americans in northeastern Kansas found a ready source of chert suitable for flintknapping in the glacial drift. As suggested before, object B appears as though it may have been a reject. I will proffer the possibility that the lump from which it was fashioned was initially gathered with other glacial cherts for testing at 14JF303. It is difficult to imagine the blank, preform, or core from which this object of inferior material was fashioned if it was a trade item brought all the way from western North Dakota or even from southeastern South Dakota. Glacial stones of many sizes, shapes, and colors are abundantly present on the rising ground adjacent to 14JF303.

Objects found on a gravel bar must always elicit a strong caveat. Too many Americans employ an alluvial solution for the final disposition of their trash. Railroads cross the valley, and at times track is washed out by flood waters. Where the railroads get the ballast to put between the ties is a problem that does not lend itself to easy solution.

REFERENCES

- Ahler, Stanley A.
1986 *The Knife River Flint Quarries: Excavations at Site 32DU508*. State Historical Society of North Dakota, Bismark.
- Anderson, Duane C.
1980 The Stone Tool Assemblages at the Cherokee Site. In *The Cherokee Excavations*, edited by D.C. Anderson and H.A. Semkin, Jr., pp. 197-238. Academic Press, New York.
- Billeck, William T., Stephen C. Lensink, Rolfe D. Mandel, Linda C. Scott, and Joseph A. Tiffany
1986 General Field and Laboratory Methodology. In *Archaeological Investigations along the F-518 Corridor: Phase III Mitigation at 13WS61, 13SW65, 13WS122, 13SW126*, Edited by Stephen J. Lensink. University of Iowa, Iowa Quaternary Studies, Contribution 9. Iowa City.
- Clayton, Lee, W.B. Bickley, Jr., and W.J. Stone
1970 Knife River Flint. *Plains Anthropologist* 15:282-290.
- Gregg, Michael L.
1987 Knife River Flint in the Northeastern Plains. *Plains Anthropologist* 32:367-388.
- Mallouf, Robert J.
1989 A Clovis Quarry Workshop in the Callahan Divide: The Yellow Hawk Site, Taylor County, Texas. *Plains Anthropologist* 34:81-103.
- Nowak, Timothy R., and L. Adrian Hannus
1981 *Knife River Flint -- I Know It When I See It -- Or Do I?: An Alternate Primary Source from South Dakota*. Abstract published in 39th Annual Plains Conference Program.

Nowak, Timothy R., L. Adrian Hannus, John
M. Butterbrodt, Edward J. Lueck, and R.
Peter Winham

1984 *1981 and 1982 Survey and Testing at
West Horse Creek Quarry, Site
39SH37*. Archeology Laboratory of
the Center for Western Studies,
Augustana College, Sioux Falls,
South Dakota.

Schneider, Fred R.

1972 *An Analysis of Waste Flakes from
Sites in the Upper Knife-Heart
Region, North Dakota*. *Plains
Anthropologist* 17:91-100.

Wedel, Waldo R.

1961 *Prehistoric Man on the Great Plains*.
University of Oklahoma Press,
Norman.

NOTES ON THE LOCAL ENVIRONMENT AND A PRELIMINARY MODELED SITE CATCHMENT FOR THE BOOTH SITE, 14CM406

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The Kansas Anthropologist, 14 (1), 1993 pp. 6-12

The Booth site (14CM406) is one of two adjacent sites used to define the provisional Wilmore complex. Based on information from the Bell site, the Wilmore complex was assigned to the Middle Ceramic period. Evidence from the Booth site indicates a Late Ceramic period occupation as well. Local geology, soils, hydrology, climate, and biotic communities are reviewed. Soils and habitat are used to develop a modeled site catchment for the Booth site.

In 1984, excavations were conducted at the Bell site (14CM407) as part of the Kansas Archeology Training Program (KATP) field school (figure 1). The Bell site is situated [REDACTED] (Thies 1989). As a result of these excavations at the Bell site, the Wilmore complex was designated as a new taxonomic unit (Rowlison 1985). Later, radiocarbon dating of charcoal from the site yielded a date of A.D. 1170 ± 160 (Thies 1985). This places the Wilmore complex in the early part of the Middle Ceramic time period.

In 1989 the KATP field school was conducted at the Booth site, 14CM406, a second Wilmore complex site. This site is located on a ridgetop along Mule Creek about one mile downstream from the Bell site (Lees and Reynolds 1989). A preliminary report on the findings at this site were presented at the 1990 Flint Hills Archaeological Conference (Lees 1990). A further note on the chronological placement of the Booth site has been presented suggesting a Late Ceramic period component based on obsidian and Southwestern pottery excavated in 1989 (Lees 1991).

The references cited above give us our only view of this Middle Ceramic group summarizing the cultural material found as a result of the two excavations. This paper is an initial attempt to look at the environment of this prehistoric group.

Some understanding of the ecology of the Booth site is necessary if we are to begin to explain the Wilmore Complex and the various resources utilized by the site's inhabitants. Initial information on the natural setting of the site and a modeled catchment are presented.

LOCAL SETTING

The Booth site is located [REDACTED]

[REDACTED] Adjacent uplands are dissected by numerous intermittent drainages and small tributary streams to Mule Creek. One of these intermittent streams joins Mule Creek approximately 327 m southeast of the site.

The Booth site is located in the Dissected High Plains, south of the Arkansas River, on the southeast edge of the High Plains physiographic unit bordering the Red Hills or Cimarron Breaks physiographic unit. The High Plains are underlain by Tertiary (Ogallala) and Quaternary deposits and are characterized mostly by broad reaches of flat uplands but not without relief and some local surface expression (Schoewe 1949).

Geology

The Lower Cretaceous Cheyenne sandstone and Kiowa formation unconformably overlie the Whitehorse formation in the northeastern and central part of Comanche County, and locally overlie the Big Basin

Formation in the southern part of the county. The Cretaceous rocks are overlain by sheet-like deposits of sand and gravel of probable Early Pleistocene age (Bayne 1972).

Soils

Soils on the uplands adjacent to the Booth site are of the Abilene-Clark-Case association. These soils are deep, nearly level to strongly sloping and well drained. They have a dominantly clayey or loamy subsoil. This association is situated on ridgetops and sideslopes and dissected by intermittent streams.

The Lincoln-Waldeck association is found on the floodplain of Mule Creek and along other major streams in the area. The major soils of

this association are occasionally flooded. These soils are deep, nearly level, somewhat excessively and poorly drained, with a sandy or loamy subsoil (Hoffman et al. 1989).

Hydrology

The site is within the lower drainage basin of the Arkansas River. Mule Creek is a principal tributary of the Salt Fork of the Arkansas River.

Climate

The climate is defined as continental, characterized by wide daily and annual variations in temperature. Warm summer temperatures prevail about six months of the year and provide

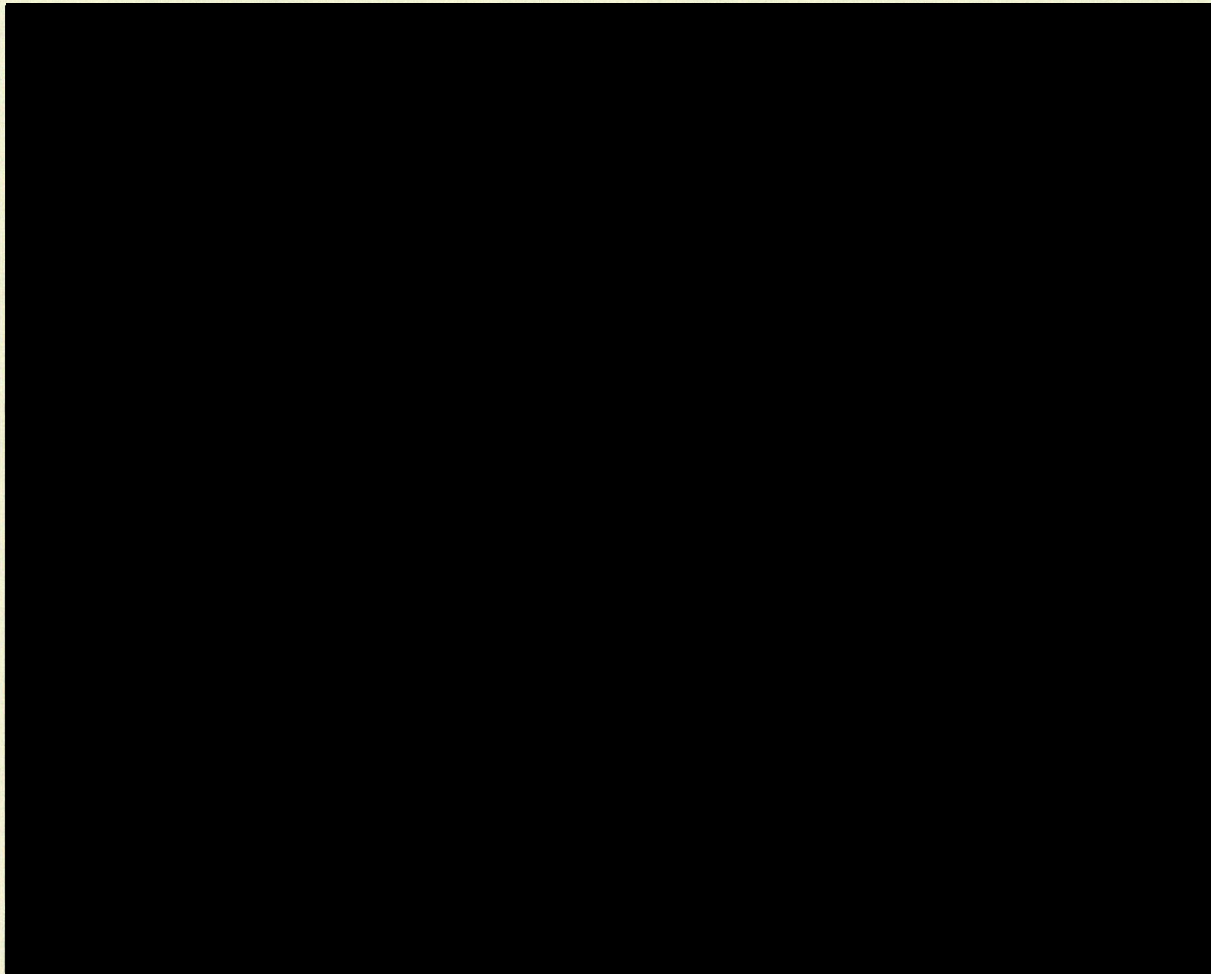


Figure 1. Topographic setting of the Bell and Booth sites. Map is detail of U.S.G.S. Wilmore, Kansas, 1980.

Table 1. Soils found in model catchment for the Booth Site
(Derived from Hoffman et al. 1989)

Soil Series	Texture	Slopes (%)	Flood Frequency	Range Site
<u>Alluvial Soils</u>				
Canadian	fine sandy loam	-	rare	sandy terrace
Elandco	siltloam	-	frequent	loamy terrace
Kaski	loam	-	rare	loamy terrace
Lesho	clay loam	-	rare	loamy terrace
Lincoln	loamy sand	-	occasional	subirrigated
Lincoln	sandy loam	-	occasional	sandy lowland
Waldeck	fine sandy loam	-	occasional	subirrigated
Zenda	clay loam	-	occasional	subirrigated
<u>Upland Soils</u>				
Abiline	silt loam	0-1	none	loamy upland
Abiline	silt loam	1-3	none	loamy upland
Albion	sandy loam	1-4	none	sandy
Albion-Shellabarger	sandy loams	4-15	none	sandy
Case	clay loam	3-7	none	limy upland
Case	clay loam	7-15	none	limy upland
Clark	clay loam	1-3	none	limy upland
Clark	clay loam	3-6	none	limy upland
Clark-Kingsdown Complex		5-12	none	limy upland/sandy
Kingsdown	fine sandy loam	0-2	none	sandy
Kingsdown	fine sandy loam	2-5	none	sandy
Pratt-Tivoli	loamy fine sands	rolling	none	sands
Shellabarger	sandy loam	1-3	none	sandy
Shellabarger	sandy loam	3-6	none	sandy

a long growing season. Winters are cold but relatively brief.

Comanche County is generally west of the flow of moisture laden air from the Gulf of Mexico and east of the rain shadow effect of the Rocky Mountains. This results in total annual rainfall of approximately 61 cm inches which is marginal for cropping year after year. Of this total annual amount, 73 percent falls from April through September (Hoffman et al. 1989).

Biotic Communities

The Booth site lies just in the southern bluestem-grama prairie near its border with the Cedar Hills prairie. Dominant species are big bluestem (*Andropogon gerardi*), little bluestem (*Andropogon scoparius*), sideoats grama

(*Bouteloua curtipendula*), and blue grama (*Bouteloua gracilis*). Many other grasses and forbs are present, often in two distinct layers: one low growing grasses, the other medium tall grasses and forbs (Küchler 1974). Animals commonly found on the prairies include bison (*Bison bison*), prong-horned antelope (*Antilocapra americana*), coyote (*Canis latrans*), black-tailed jackrabbit (*Lepus californicus*), greater prairie chicken (*Tympanuchus cupido*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaidura macroura*), bobwhite quail (*Colinus virginianus*), and ornate box turtle (*Terrepenne ornata*).

Narrow strips of riparian woodland exist along major drainages consisting mostly of cottonwood (*Populus*) and willow (*Salix*). Fauna frequenting this area includes eastern cottontail

(*Sylvilagus floridanus*), raccoon (*Procyon lotor*), mink (*Mustela vison*), bobcat (*Lynx rufus*), white-tailed deer (*Odocoileus virginianus*), and wild turkey (*Meleagris gallopavo*).

The riverine habitat includes many species of fish, shellfish, turtles, and other aquatic life including channel catfish (*Ictalurus punctatus*), black bullhead (*Ictalurus melas*), green sunfish (*Lepomis cyanellus*), common snapping turtle (*Chelydra serpentina*), pond-horn mussel (*Unio tetrasmus*), and floater mussel (*Anodonta grandis*).

This is a general inventory of contemporary plant and animal resources of the area derived from Hall (1955); Murray and Leonard (1962); Cross (1967); Smith (1956); Thompson and Ely (1989); and Jones et al. (1985).

THE MODELED SITE CATCHMENT

Catchment analysis has been used by archeologists since about 1970 to document the use or potential use of local resources by the inhabitants of a particular site. Site catchment analysis is defined as "the study of the relationships between technology and those natural resources lying within range of individual sites" (Vita-Finzi and Higgs 1970). The basic premise is that prehistoric peoples selected optimal sites to live in order to minimize the effort required to obtain food, water, and other resources needed for day-to-day existence.

For those interested, Roper (1979) is recommended for further discussion on the methods and theory of site catchment and Dunnell (1980) provides a critical discussion on the use and potential of site catchment analysis. In southern Kansas, site catchment has been utilized in analyzing the Roth site, a Pomona focus habitation site (Brogan 1982) and the Cuesta phase of the Early Ceramic period (Brogan 1981).

I chose a five km radius for the site catchment constructed for the Booth site. The resources chosen, soils and habitat, are basic in an initial study of the ecology of the area.

Soils Frame

The soils frame of reference (figure 2) for the Booth site is based on data found in the newly published soil survey of Comanche County, Kansas (Hoffman et al. 1989). Twenty-two different soil types occur within five km of the Booth site. Information on these soils is presented in Table 1.

The acreages of alluvial and upland soils were not measured, but the catchment for the soils frame suggests sufficient acreages of alluvial or floodplain soils were present for suitable horticultural activity. Upland soils are more prevalent and would have provided good habitat for numerous species of upland game animals.

Biotic Frame

Three habitat types have been arbitrarily designated within the Booth site catchment (figure 2). They are upland, lowland, and riverine. The designations are based on what is known from the historic record of plant and animal species that inhabit these areas.

The lowland habitat and upland habitat were mixed bluestem-grama prairie. The soils (see Table 1) show the modern range site designations. Lowland soils are generally more productive than upland soils. Both have the potential to produce large amounts of forage depending on annual precipitation. Lowland habitat has intermittent islands or riparian timber. Mule Creek today is prime habitat for both wild turkey and white-tailed deer.

The value of riverine habitat or stream habitat is very dependent on annual precipitation. Mussel populations may have been minimal because of a shifting sandy bottom in many of the stream's reaches.

DISCUSSION

The information presented on the local environment of the Booth site based on historic information suggests that a variety of resources were available to the inhabitants and that it was an optimal site for habitation. However, it is evident that further research is needed to gather

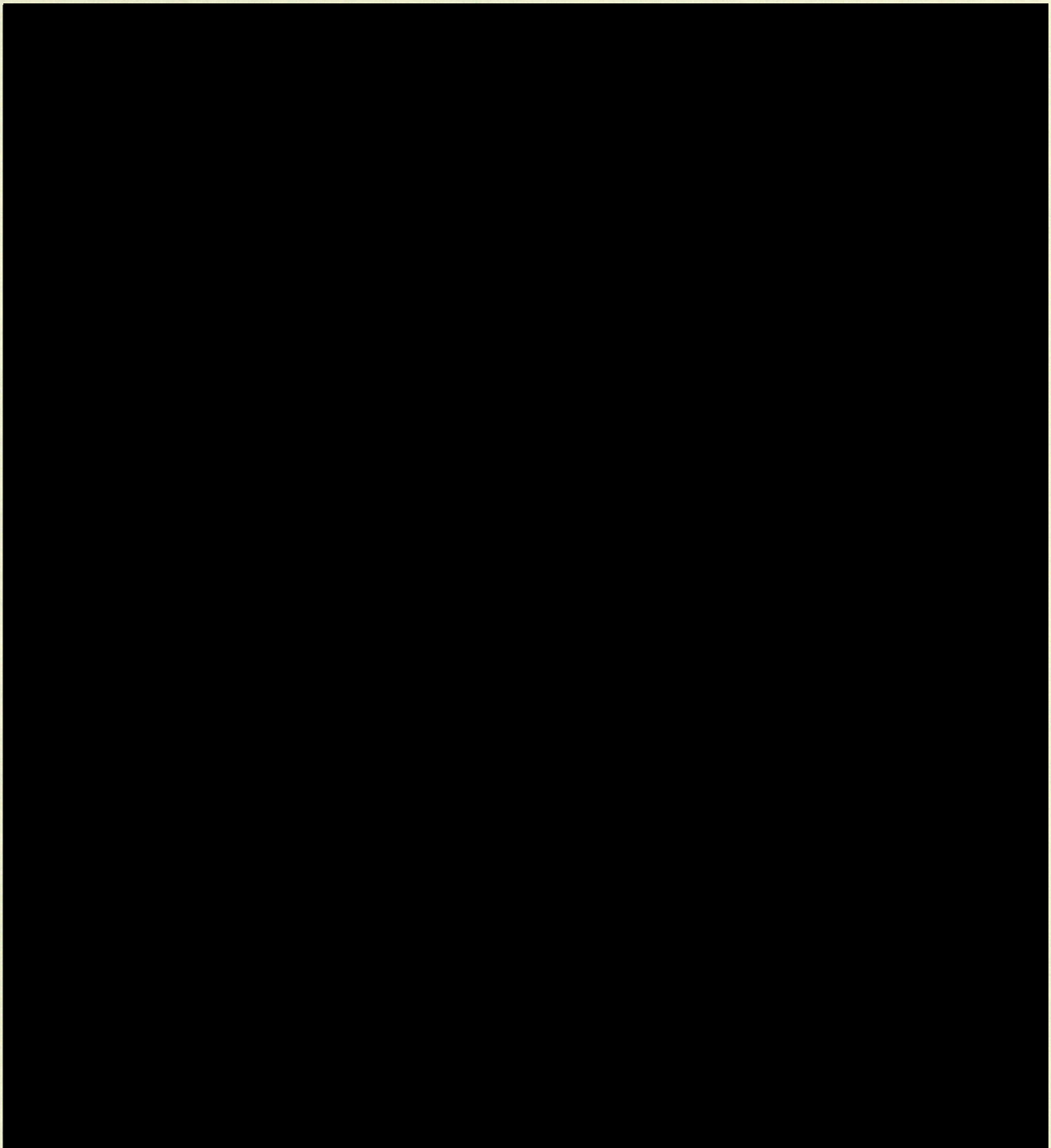


Figure 2. Model catchment area for the soils frame and the distribution of habitat types.

the additional data, both present and past, before settlement and subsistence as practiced by peoples of the Wilmore complex is understood. Many questions remain to be answered for Middle Ceramic cultures who lived in southcentral Kansas. The Bluff Creek, Wilmore, and Pratt peoples are all situated on the border

between the Central and Southern Plains cultures. Many relationships are as yet unanswered. I hope what has been presented will stimulate interest by others.

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Kansas State Historical Society for their review and advice.

REFERENCES

- Bayne, C.K.
1972 *Supplemental Areas for Storage of Radioactive Wastes in Kansas*. Special Distribution Publication 60. State Geological Survey of Kansas, University of Kansas, Lawrence.
- Brogan, W.T.
1981 *The Cuesta Phase: A Settlement Pattern Study*. Anthropological Series No. 9. Kansas State Historical Society, Topeka.
1982 *The Roth Site: An Early Pomona Focus Manifestation in Eastern Kansas*. Contract Archeology Publication No. 1. Kansas State Historical Society, Topeka.
- Cross, F.B.
1967 *Handbook of Fishes of Kansas*. Miscellaneous Publication 45. Museum of Natural History, University of Kansas, Lawrence.
- Dunnell, R.
1980 The Use, Abuse, and Potential of Site Catchment Analysis. In *Catchment Analysis: Essays on Prehistoric Resource Space*, edited by F.J. Findlow and J.E. Ericson, pp. 1-20. Anthropology UCLA, vol. 10, nos. 1 & 2.
- Hall, E.R.
1955 *Handbook of Mammals of Kansas*. Miscellaneous Publication 7. Museum of Natural History, University of Kansas, Lawrence.
- Hoffman, B.B., B.I. Tomasu, D.A. Dodge, and T.D. Grimwood
1989 Soil Survey of Comanche County, Kansas. USDA Soil Conservation Service, Salina, Kansas.
- Jones, J.K., Jr., D.M. Armstrong, and J.R. Choate
1985 *Guide to Mammals of the Plains States*. University of Nebraska Press, Lincoln.
- Küchler, A.W.,
1974 A New Vegetation Map of Kansas. *Ecology* 55(3):586-604.
- Lees, W.B.
1990 The Booth Site, 14CM406: A Middle Ceramic Site in Comanche County, Kansas. Paper presented at the 12th Annual Flint Hills Archaeological Conference. Kansas City, Missouri.
1991 Chronological Placement of the Booth Site: Implications for the Wilmore Complex and Southern Plains Culture History. *Plains Anthropologist* 36(136):255-259.
- Lees, William B. and John D. Reynolds
1989 Fifteenth Annual Training Program Held in Comanche County. *Kansas Preservation* 11(6):6-7.
- Murray, H.D. and A.B. Leonard
1962 *Handbook of Unionid Mussels in Kansas*. Miscellaneous Publication 18. Museum of Natural History, University of Kansas, Lawrence.
- Roper, D.
1979 The Method and Theory of Site Catchment Analysis: A Review. In *Advances in Archaeological Method and Theory* 2, edited by M.B. Schiffer, pp. 120-136. Academic Press, New York.
- Rowlison, D.
1985 A Preliminary Report of the Bell Site and the 1984 Kansas Archaeology Training Program. *Kansas Anthropological Association Journal* 5(3):117-129.

- Schoewe, W.H.
 1949 The Geography of Kansas (Part II).
 Physical Geography. *Transactions of
 the Kansas Academy of Science* 52(3).
- Smith, H.M.
 1956 *Handbook of Amphibians and Reptiles
 of Kansas*. Miscellaneous Publication
 9. Museum of Natural History,
 University of Kansas, Lawrence.
- Thies, R.M.
 1985 Radiocarbon Dates from the Bell
 Site, 14CM407, Kansas
Anthropological Association Journal
 6(1-2):13.
- 1989 Plans for the 1989 Kansas
 Archeology Training Program.
*Kansas Anthropological Association
 Journal* 9(8):152-162.
- Thompson, M.C. and C. Ely
 1989 *Birds in Kansas*. Vol 1. Public
 Education Series 11. University of
 Kansas Museum of Natural History,
 University Press of Kansas,
 Lawrence.
- Vita-Finzi, C. and E.S. Higgs
 1970 Prehistoric Economies in the Mount
 Carmel Area: Site Catchment
 Analysis. *Proceedings of the
 Prehistoric Society* 36:1-37.

FARMSTEADS OF THE KANSAS SHAWNEE

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Shawnee from Missouri and Ohio occupied a reserve in eastern Kansas between 1827 and 1871. Most Shawnee lived on farmsteads which are poorly known from documents and archeology. These farmsteads were occupied by both conservative and progressive factions and are described using a variety of historical sources. Speculation as to the nature of the archeological remains of these sites is also offered.

Although the Shawnee of the Ohio Valley region are historiographically best known for their fierce resistance to the encroachment of white civilization from Revolutionary War years through the War of 1812, the agricultural and horticultural means of subsistence of these people have received less attention. This paper will briefly and chronologically review the material culture and means of productivity of the Kansas Shawnee on their farmsteads. Appended to this study are three documents, abstracted or reprinted in full, precisely quantifying some aspects of the Kansas Shawnee economy.

In prehistory the Shawnee most likely inhabited the upper Ohio Valley and relied upon corn, beans, and squash for food, as well as wild game and foraged nuts, seeds, and berries (Callendar 1978; Griffin 1978). By the early 1820s in Ohio, the Shawnee, immediately prior to their forced removal to "Kansas," relied upon horses, neat and milch cattle, apple and peach trees, extensive corn fields, and every tool manufactured by blacksmiths (hoes, froes, adzes, axes, etc.) for their farms (Clark 1829).

Of the four treaties enacting the removal to Kansas, the one concluded at Waghpakonetta, Ohio, on August 8, 1831, specifically granted to the use of the Kansas Shawnee the following: Article IV, a saw mill, a grist mill, "a blacksmith shop (to contain all the necessary tools)... and a blacksmith;" Article IX, "two hundred blankets, forty ploughs, forty sets of horse gears, one hundred and fifty hoes, fifty axes, and Russia sheeting sufficient for fifty tents;" Article XIV, two cross-cut saws, "four grindstones annually, .

. . . ten hand saws, ten drawing knives, twenty files, fifty gimblets, twenty augurs of different sizes, ten planes of different sizes, two braces and bits, four hewing axes, two dozen scythes, five froes and five grubbing hoes." An earlier, 1825 treaty had only granted the support of a blacksmith for five years, along with "the tools necessary for the blacksmith's shop, and (300) three hundred pounds of iron annually." Cash reimbursements for property lost or necessarily abandoned by terms of these removals were also made (Kappler 1902:262-264, 331-334, 370-372, 383-385; cf. Barry 1972:127-128, 222, 223-224)

An 1836 view of the Shawnee Prophet's home, written by Dr. J. Andrew Chute, is preserved in Lutz (1906). Chute wrote that the Prophet's settlement of perhaps four buildings (the primary residence plus stables and corn crib?) was built in the ordinary Native American style:

The house of the prophet was not distinguished at all from the others. A low portico covered with bark, under which we were obliged to stoop, was erected before it . . . Two or three platforms built against the wall served the purpose of bedsteads, covered with blankets & skins. A few ears of corn and a quantity of dried pumpkins (a favorite dish of the Indians) were hanging on poles overhead; a few implements [such] as wooden spoons & trays, pipes, &c., lay scattered about the floor . . . One corner of the room, [near] a fireplace, contained a platform

of split [], elevated about a foot from the floor and covered with a blanket. This was the bed of the prophet [Lutz 1906:164n].

By 1838, about eleven years after the first Ohio and Missouri Shawnee had established homes in the southern portion of the lower Kansas River valley, their agent, Riarch Cummins, noted:

The Shawnees have no town or village, each family settling where they find a site that pleases them, I believe there is no family but what has a farm. Many of them have good farms, good houses of hewn logs, stables, etc. They cultivate their farms in the same way that the whites do. They raise corn, potatoes, cabbage, beans, peas, pumpkins, mellon etc. They also raise a small quantity of wheat and oats and procure hay from the prairies.

It is impossible for me to make anything like an accurate statement of the number of acres in cultivation, or the quantity of produce raised. They generally raise a surplus of corn and potatoes which they dispose of to the white citizens.

They are supplied by Government and by treaty stipulations with two blacksmiths, who are constantly employed in making and repairing their farming utensils, ploughs, hoes, axes, iron wedges, log chains etc. They suffer very little work to be done on guns, none in the farming season ... Very few even pretend to hunt even in their immediate neighborhood [Cummins 1838].

Subsequent reports echo and amplify this 1838 report (figure 1). The 1842 report, also issued by Cummins, said much the same:

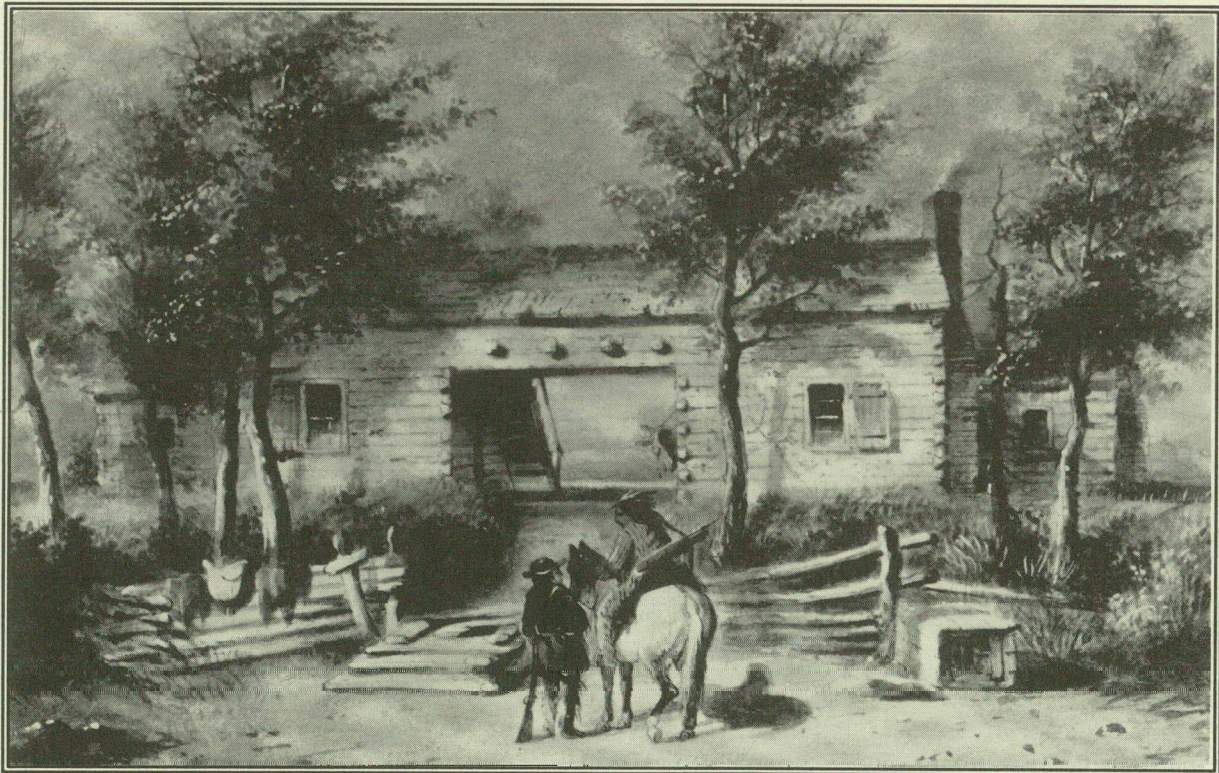


Figure 1. A Shawnee residence in 1837 as depicted by artist Alfred Jacob Miller (Endnote 1). Used with permission (see Endnote 1); Copyright©1951, 1968, by the University of Oklahoma Press.

The Shawnees have become an agricultural people; their buildings and farms are similar to those of the whites in a new-settled country; all their farms are enclosed with rail fences, and most of them in good form, each string of fence straight, and sufficiently high to secure their crops, many of them staked and ridged.

They all live in comfortable cabins, perhaps half or more of good hewn logs, neatly raised; they have outhouses, stables, barns, &c.

It is impossible for me to state the number of farms or acres cultivated, or the quantity of produce raised by them; there is no family, that I know of, but what has a farm of as much as five or more acres, and some have farms of over one hundred acres. They raise Indian corn, wheat, oats, pumpkins, beans, peas, Irish and sweet potatoes, cabbage, turnips, and many other vegetables. They raise horses, cattle, hogs, turkeys, chickens, &c. they depend on agricultural pursuits for a subsistence, and most of them raise an abundance, and many a large surplus; take the whole nation together, and they raise considerably more grain than they need for home consumption. The Shawnees have a water, grist and saw mill, and a large meeting-house, to hold public worship in; they also have a council house [Cummins 1842].

The best available description of the interior of a Shawnee log home, written in 1843, is Field (1957). Field wrote that Joe Day, a Shawnee, owned "one tolerably tight and comfortable log house, besides several large enclosed fields, doorless out-buildings, &c." One room of Day's home contained logs, benches, a table, and an old barrel for furniture, and a "huge black fireplace." Table furnishings included a large and a small bowl, a pewter mug, a tea cup, knives, forks, and a frying pan. No lamps, lanterns or candles were seen. The other room of the Day residence contained "a

sufficiency of old beds, blankets and buffalo robes" (Field 1957:11-14). A similar double log cabin was depicted by Alfred Jacob Miller in 1837 (see figure 1) (Ross 1951:17,48). By comparison, the estates of three Wyandotte women who died in 1859 included rifles, trunks, bedsteads and feather beds, chairs, tables, silverware, a "looking glass," quilts, blankets, boots, wash tubs, pillows, clothing for all ages, clocks and watches, an accordion, cupboards and cupboard ware, saddles, bridles, wagons, a martingale, and horses and cows. Of these women the estate of Sarah Coon in particular held over 100 yards of cloth, including deliane, cotton flannel, calico, muslin (green, checked, or bleached), cotton batting, broad cloth and gingham, as well as blue and red yarn, parcels of beads, silk thread, buckskin, black velvet, 39 spoons, and other items (Wyandotte County Probate Office 1859).

The circa 1847 census abstracted here in Appendix I, the more complete of two agricultural censuses of the Shawnee (Schoolcraft 1853 1:488-497, 3:621-628), is modeled on agricultural censuses Schoolcraft published in his 1847 *Notes on the Iroquois* (Bieder 1986:177-178). It cannot be presumed that the 175 Shawnee families tallied here contributed equally to the sums given. The 1866 census abstracted here as Appendix III shows that Graham Rogers harvested 150 bushels of apples, Polly Rogers 100 bushels and Fred Chouteau 78 bushels. These together represent 73 percent of the tribe's total harvest of 450 bushels of apples (Abbott 1866).

A similar disparity is seen with sheep. In 1866 Graham Rogers owned 100 sheep, Charles Bluejacket 37, and William Chouteau 30 (figure 2). These represent 93 percent of the tribal total of 179 sheep (Abbott 1866). Since the total number of sheep for circa 1847 given in Appendix I is 156, it can be inferred that a similarly minute portion of all 1847 farmsteads kept a similarly large proportion of sheep. In other words, the disparity in livestock and produce yields so evident among the 1866 farmsteads was already present in 1847.

From the 1840s into the 1860s many overland travellers purchased milk, butter, and



Figure 2. Charles Bluejacket. Courtesy Kansas State Historical Society.

garden produce from Shawnee farmers. Some of these accounts are reprised in Staab (1991a), although such accounts serve only as anecdotal corroborations of the statistics published here. Prior to the passage of the Kansas-Nebraska Act on May 30, 1854, visitors to Shawnee homes were primarily en route to the Far West; after, they tended to be residents of Kansas Territory, en route to local destinations.

Paschal Fish, half Shawnee and half white, converted his home into an inn for wayfaring whites (Barry 1972:280). The floors of the first and second stories of the Fish home, "simply boarded and loosely floored," according to an account from September, 1855, were cottonwood. First floor furnishings included a long table and a set of chairs, "clean and shining cups, saucers and plates, ... poor tallow candles in Japan candlesticks," a tin basin for washing, and a square hand-held mirror. Travelers' beds

and bedding were upstairs, reached by a staircase (Ropes 1856:39-43). Paschal Fish had a "corn-field of a hundred acres, and thirty acres of oats" (Ropes 1856:40).

Fish's inn was probably the "Shawnee Tavern" ten miles east of Lawrence, mentioned in the *St. Louis Weekly Missouri Democrat* of May 13, 1856. The *Lawrence Republican* of September 10, 1857, mentions "the Eudora Hotel, (formerly Fish's Hotel.)" Similarly, Benjamin Chouteau advertised in the *Topeka Daily Kansas Freeman* of November 5, 1855, that he had repaired and converted "the property and buildings belong to the late Henry Blue Jacket, situated at the crossing of the Wakarusa" into the Hotel Wakarusa, with good accommodations for travelers and their riding stock. The transfer of the Paschal Fish and Henry Bluejacket farmstead properties to white ownership was the beginning of a process nearly complete by 1870.

Article 2 of the May 10, 1854, treaty with the Shawnee, in brief, provided for reducing the 1.6 million acres of Shawnee land to .2 million acres, with each Shawnee thence to be allotted 200 acres. Article 5 of that treaty provided for a survey of Shawnee lands (Kappler 1902:618-626). Figure 3, a November 24, 1859, survey by John Calhoun of a tract of land now describable as that portion of Wyandotte County south of the Kansas River and between 48th and 65th Streets, was a result of this article of the 1854 treaty. It shows "improvements" (tilled fields and, in other surveyed tracts, locations of buildings) for Jim Tiblow, John Parks, Joseph Day, James Riser (i.e. Keizer, variously spelled), and Silverheels (Calhoun 1859). Day's home was described in Field (1957). The Silverheels home remains, in 1992, still occupied.

The inventory of the estate of Joseph Parks (Shawnee chief ca. 1851-1859), reprinted here as Appendix II, constitutes the last pages of a remarkable career which someday should be described in full (Johnson County Probate Office 1859). Parks evidently acted as banker, legal counsel and agribusiness resource, as well as

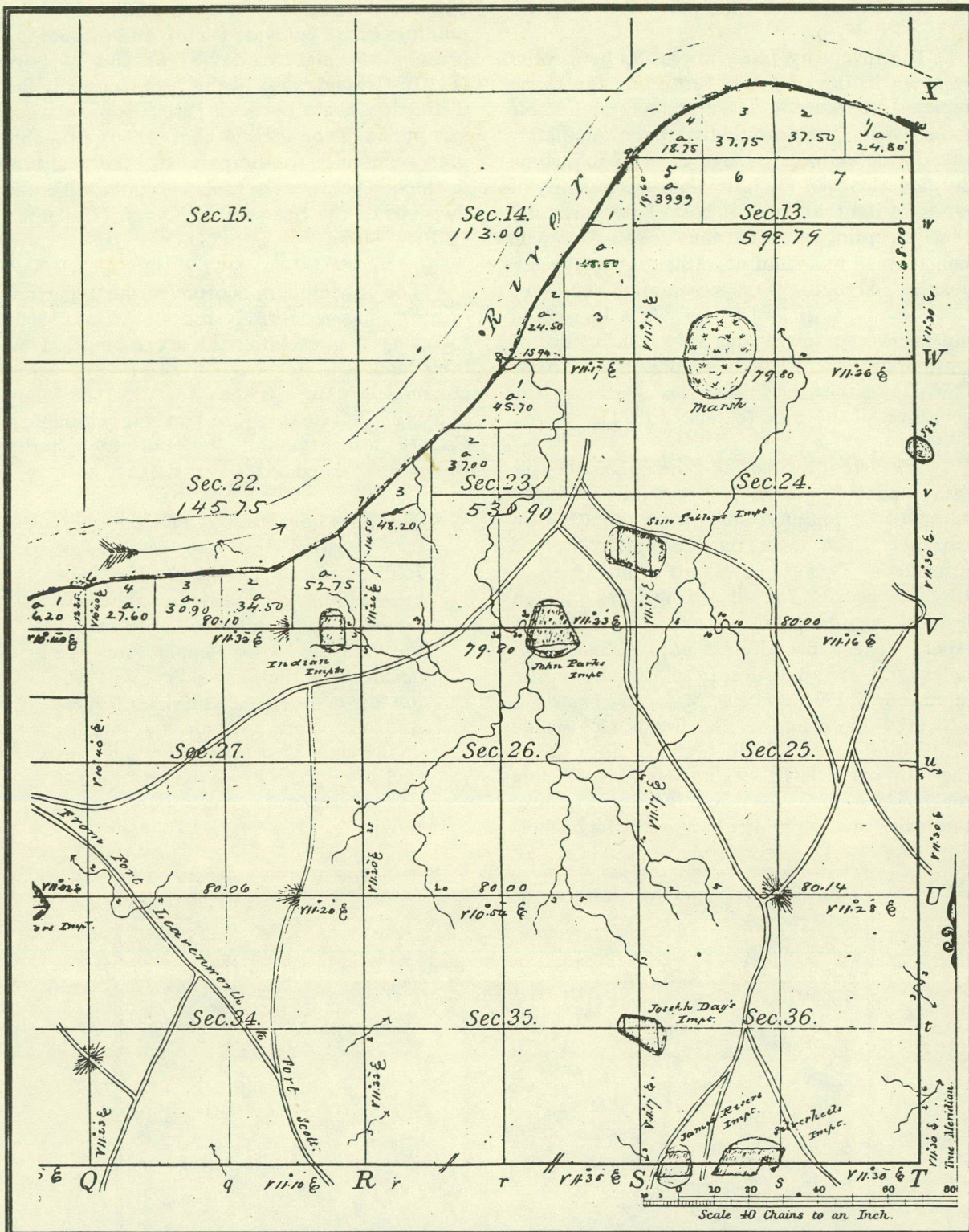


Figure 3. The 1859 government plat of Township 11 South, Range 24 East on the Shawnee Reserve showing Shawnee farmsteads, roads, creeks, and marshes. Courtesy Kansas State Historical Society.

political leader, for the Shawnee.

The inventory, likely in part to be a room by room listing of goods furnishing the home depicted in figure 4, features few purchasable goods which, singly, would have been completely outside the economic range of average income Euroamericans of the time. It is the quantity of goods, rather than the high cost of any particular item--excepting, of course, the African-American men, women and children--which reflects Parks' wealth. Arguably, a representative subset of these goods, sufficient to furnish a household and farmstead, might well have been typical of contemporary domesticity among upper-income Shawnee although Parks was certainly the wealthiest of the tribe (cf. Barry 1972).

The great value of the 1866 census abstracted in Appendix III is its family-by-family listing of agricultural statistics, permitting an extremely close focus on individual Shawnee farmsteads. Two examples only will be given. A complete reprint for all 195 families, though desirable, would take up more space than this paper. The James Keizer household of two males and five females in a frame house harvested 1,450 bushels of corn from 45 cultivated acres, and owned five horses (value \$250), nine cattle (\$180), and five hogs (\$60). The Na-nex-a (Blackhoof) household (consisting solely of the woman for whom the city of Lenexa is named), in a log house, harvested 500 bushels

of corn, 250 bushels of oats, and 100 bushels of potatoes on 18 cultivated acres, and owned one horse (\$80), eight cattle (\$160) and 14 hogs (\$110). Notable also in the 1866 census is the distinction made between Black Bob Shawnee and others of the tribe (Abbott 1866), probably the economic counterpart of the cultural distinction between the Mekoche and Chillicothe divisions of the Shawnee in Kansas (Callendar 1978).

The only modern account of the departure of most Shawnee from Kansas in the late 1860s following the resolution of a tax question on their land is Miner and Unrau (1978). More personal in nature is the May 13, 1867, diary entry of Jonathan Gore, an early Johnson County attorney and husband to Charles Bluejacket's daughter:

The Shawnees have gained the great tax question--and the county of Johnson stands indebted to the Tribe in the sum of Fourteen Thousand Dollars. There was great strife among the lawyers who should get the business for the Shawnees--and I was the fortunate man . . . Graham Rogers sold his farm and all his farming implements Last week--the sale was well attended. Property sold high--I was salesman--or Auctioneer [Gore 1867].

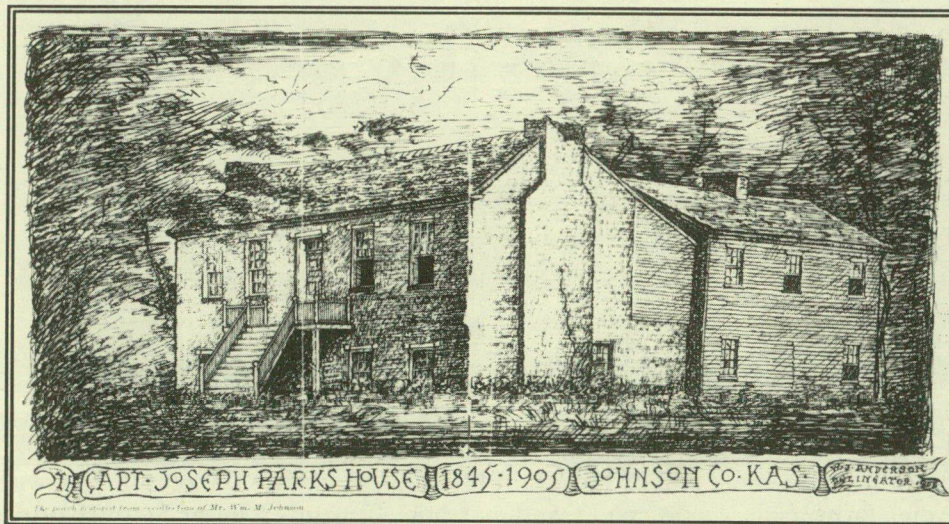


Figure 4. The Home of Joseph Parks (Endnote 2). Courtesy Kansas State Historical Society.

Numerous brief statements from early white settlers of Johnson County, uncited here but found primarily in county histories, recount comparable episodes in the acquisition of Shawnee land and property.

CONCLUSION

Genealogical inquiry (Staab 1991b), maps such as Calhoun's (1859), and the 1866 census, along with other sources, together permit investigation into the lives of the Kansas Shawnee at the level of the individual and family unit. But less clear is whether artifactual sets of traits exist that will serve to distinguish Shawnee farmstead sites from mainstream Euroamerican farmsteads of the period.

A few comments are offered here. First, the nature of Shawnee religion and Shawnee worship from the 1830s to the 1860s, apart from the four Christian (Methodist-Episcopal, Friends, and Baptist) missions to the Shawnee, is fairly well attested in a modern ethnological study (Howard 1981) and from various 1840s-1860s documents uncited there. But it is unlikely that any artifactual evidence of this worship could now be recovered.

Second, documentary evidence for the existence of a diagnostic feature of conservative Kansas Delaware cabins, a bench-bed or shelf pinned or braced onto the interior walls. Just such a bench-bed was present in the home of the Shawnee Prophet (Lutz 1906). But it is uncertain whether archaeological evidence of this feature could be recovered.

Third, the nature of and preparation for corn and meat (primarily pork) storage on Shawnee farmsteads is little known. How these processes may have differed from mainstream white methods of food preservation may possibly be determined from archeological recovery of bones and grain at a Shawnee farmstead.

If it is further suggested that Shawnee farmsteads could be plotted on a two-dimensional graph. One coordinate would be determined by period of occupation at that farmstead between the years 1827 and 1871. The second coordinate would be a somewhat

arbitrary point on a scale of acculturation, more precisely determined by the degree of acquisition of Euroamerican goods and, to a lesser degree, by the blood quantum of Native American ancestry in the Shawnee family under consideration.

It is here contended that more aboriginal Shawnee traits would be discoverable at a site (a) nearer 1827 on the first coordinate axis and (b) as far as possible from Joseph Parks on the second coordinate axis, perhaps within the Black Bob community. More nearly aboriginal Shawnee agriculture and horticulture in Kansas, i.e., resembling that of the Black Bob Shawnee, would also likely resemble the seasonal apportionment of activities described in Voegelin (1941). Mainstream Shawnee farmsteads representative of the entire period and population, of course, would be located nearer the midpoints of each axis.

ENDNOTES

1. The "Western Log Cabin" depicted by Alfred Jacob Miller, an artist accompanying the American Fur Company's 1837 expedition to the annual fur-trader's rendezvous in the Rockies, was a Shawnee residence. According to Miller:

It was inhabited by a Shawnee Indian, who for a wonder had been benefited by civilization, for he here cultivated successfully about 100 acres of arable land, and had everything in plenty around him. The main building was 50 feet in length, flanked by kitchen and offices, built of logs dovetailed at the corners, with a Hall through the centre about 15 feet wide, and was altogether a most comfortable country residence [Ross 1951].

Figure 1 is from *The West* of Alfred Jacob Miller, by Alfred Jacob Miller, with an account of the artist by Marvin C. Ross. Courtest of Walters Art Gallery, Baltimore. Copyright©1951, 1968, by the University of Oklahoma Press.

2. The Home of Joseph Parks is depicted in this

engraving, published in 1906 and probably made after Parks' death in 1859 and after the home had been abandoned. Two structures are here joined into one residence. The structure on the right, probably the earlier of the two, resembles the houses of Graham Rogers and Charles Bluejacket (both of whom had also served as chief of the Shawnee) as shown in various sketches and photographs (cf. Miner and Unrau 1978).

REFERENCES CITES

Abbott, James B.

- 1866 Census and agricultural Statistics of of the Shawnee Indians who hold their lands in Severalty, as taken by Ja^s B Abbott U.S. Agt. Sep 1 A.D. 1866. James B. Abbott collection, Kansas State Historical Society, Topeka.

Barry, Louise

- 1972 *The Beginning of the West*. Kansas State Historical Society, Topeka.

Bieder, Robert E.

- 1986 *Science Encounters the Indian, 1820-1880: The Early Years of American Ethnology*. University of Oklahoma, Norman.

Calhoun, J.

- 1859 Survey Map of Township 11 South, Range 24 East of the 6th Principal Meridian, Kansas Territory, Surveyor General's Office, Lecompton, K.T. 24 November 1859. Manuscript collection, Kansas State Historical Society, Topeka.

Callendar, Charles

- 1978 Shawnee. In *Northeast*, edited by Bruce G. Trigger, pp. 622-635. Handbook of North American Indians, vol. 15. William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Clark, William

- 1829 Shawnee claims for property left in Wapakoneta, Ohio, submitted by William Clark, Washington, January 15, 1829. *Letters Received, Fort Leavenworth Indian Agency, 1824-1836*, National Archives Microcopy 234, Roll 300, frames 50-64.

Cummin[g]s, Richard W.

- 1838 General Report of Fort Leavenworth Agency for Year Ending 30 Sept. 1838. *Letters Received, Fort Leavenworth Indian Agency, 1837-1842*, National Archives Microcopy 234, Roll 301, frame 319.

- 1842 Fort Leavenworth Agency, September 12, 1842. Report of the Secretary of War, 1842. In *Report of the Secretary of War 1842*, pp. 435-457. Washington, D.C.

Field, Matthew C.

- 1957 *Prairie and Mountain Sketches*, edited by Kate L. Gregg and John F. McDermott. University of Oklahoma, Norman.

Gore, Jonathan

- 1867 Diary, 8 January 1867 - 12 August 1869. Typescript and photocopy of original, in author's collection.

Griffin, James B.

- 1978 Late Prehistory of the Ohio Valley. In *Northeast*, edited by Bruce G. Trigger, pp. 547-559. Handbook of North American Indians, vol. 15, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Howard, James Henri

- 1981 *Shawnee! The Ceremonialism of a Native American Tribe and Its Cultural Background*. Ohio University Press, Athens.

Johnson County Probate Office [Kansas]

- 1859 A List of Property appraised by A.S. Johnson and F. Gallup belonging to

- the Estate of Joseph Paks Dec^d, John T. Swatzel, Administrator, June 29, 1859. *Johnson County Probate Office Journal* (14 Dec. 1857 - 20 Dec. 1862), pp. 34-43.
- Kappler, Charles J., comp.
1902 *Indian Affairs: Laws and Treaties*, vol 2. U.S. Government Printing Office, Washington, D.C.
- Lutz, Rev. J.J.
1906 The Methodist Missions Among the Indian Tribes of Kansas. *Kansas State Historical Collections* 9:160-230.
- Miner, H. Craig and William E. Unrau
1978 *The End of Indian Kansas: A Study of Cultural Revolution, 1854-1871*. Regents Press of Kansas, Lawrence.
- Ropes, Hannah
1856 *Six Months in Kansas*. John P. Jewett, Boston.
- Ross, Marvin C.
1951 *The West of Alfred Jacob Miller*. University of Oklahoma Press, Norman.
- Schoolcraft, Henry R.
1853 *Historical and Statistical Information Respecting the History, Condition, and Prospects of the Indian Tribes of the United States*, vols. 1 & 3. Lippincott, Grambo, Philadelphia.
- Staab, Rodney
1991a How Much Produce did the Shawnee Farmers sell to Trail Emigrants? *Trails Head Tidings* 5:3-5.
1991b Genealogy of the Kansas Shawnees: A Guide to the Sources. *Journal of American Indian Family Research* 12(1):2-5.
- Voegelin, Erminie Wheeler
1941 The Place of Agriculture in the Subsistence Economy of the Shawnee. *Papers of the Michigan Academy of Science, Arts and Letters* 24:513-520. Ann Arbor.
- Wyandotte County [Kansas] Probate Office
1859 Inventories of the Estates of Catherine Warpole, Nancy Curleyhead and Sarah Coon. *Record of Inventories Vol. A (1857-1873)*, pp. 66, 68, 96-97.

APPENDIX I

Abstract of Schoolcraft-Cummings 1847 agricultural census of the Kansas Shawnee (Schoolcraft 1853)

886 individuals in 175 families; 217 males under age of 18; 195 females under age 16; 205 males between ages of 18 and 60; 227 females between ages of 16 and 60; 42 people between 60 and 100; 6 white male heads of households; no white female heads of households.

15 male and 23 female mixed-blood children; 27 marriages, 17 male births, 19 female births, 18 male deaths and 13 female deaths within the year. No deaf or dumb persons, "lunatics," or "idiots."

No female Sunday school scholars; 34 males and 19 females can read and write; 1 male and 4 females have studied vocal music; 37 females can spin, knit, or weave; no flax spun or homespun woven; 108 pairs of stockings knitted; 1 seamstress; no garments made during the year.

2,965.5 acres of land cultivated; 55,591 bushels of corn; 1,805 bushels of wheat; 5,606 bushels of potatoes; 11,733 bushels of oats; 534 bushels of beans; 65 bushels of peas; 5 bushels of buckwheat; 335 bushels of turnips. No flax raised, no hemp raised, and 5 pounds of cotton picked.

3,904 fruit trees; 54,730 melons raised; no maple sugar or cheese made; 13,919 pounds of butter made; 9,196 pounds of wild or domestic honey; 296 beef-cattle killed or sold; estimated value of the agricultural or horticultural produce during the year was \$32,386.00.

1,348 horses; 7 mules; 461 oxen; 492 milch cows; 1,048 other neat cattle; 156 sheep; 156 fleeces sheared; 3,554 hogs.

334 ploughs; 84 carts; 270 log-chains; 17 crowbars; 536 hoes; 217 shovels and spades; 486 broad and narrow axes; 81 drays, harrows or drills; 6 buggies and pleasure-wagons; 830 saddles and bridles; estimated value of agricultural implements was \$4,492.06.

191 "skins" made; total estimated value of the year's hunt was \$191.00; amount of cash annuity per capita received from the government was \$3.55.

Sum of the totals for agricultural and horticultural produce, value of the year's hunt, and government annuity was \$35,645.21.

\$4,500.00 in annuities paid to the Shawnee; no annuities paid in merchandise, provisions, tobacco or salt; no money expended by government for livestock or agricultural improvements, iron, steel, coal, postage, stationery, rent or for agents.

51 males and 70 females profess the Christian religion; 2 people still adhere to their native religion; 103 members of temperance societies; 15 persons are employed in disseminating the Gospel;

3 clans; 1 recognized chief of the first class (civil); 4 recognized chiefs of the second class (civil); 4 war chiefs; 257 warriors fit to take the field.

1 Agent, no sub-agents or clerks; 1 interpreter; 4 black-smiths; no farmers or assistants; no carpenters, mechanics, teachers, or missionaries supported in part under treaty provisions or other

persons in special employment in the tribe.

1 council house; 3 mission houses; 3 schoolhouses; 2 churches; 1 sawmill; 1 gristmill; no carding machines or threshing machines; 12 fanning mills; no cotton gins or salt-works; 6 looms; 26 spinning wheels; no horse-mills; 3 public ferries; no fisheries or mines; no kettles used in making maple sugar; no printing presses; 1 licensed trader; no unlicensed traders; 2 clerks employed in trade; no boatmen or engages; no "skins" in the trade; \$5,500.00 capital invested in the trade during 1847; no hunters or warriors; 257 agriculturalists.

No one professing medical skill; no native priests or "jugglers"; 63 educated individuals; 63 persons who can read the Scriptures; 408 church members of all Christian denominations; 415 individuals of temperate habits; 50 inebriates; no Indian persons of African descent; 1 captive adopted or taken from another tribe; no persons living in a state of polygamy; "total mass of tribe, fixed or roving, to be acted upon by Civilization and Christianity" was 150.

No answers given for these questions; average number of the Indian family; number of births over deaths or deaths over births during the year; average number of children by each female between ages of 16 and 60; value of bead work; amount received for premises leased.

APPENDIX II

**Inventory of the Joseph Parks Estate
(Johnson County Probate Office 1859)**

John T. Swatsel
Administrator
Joseph Parks Dec^d

Appraisement

We the undersigned appointed by the Probate Court of Johnson County to appraise the personal Estate of Joseph Parks deceased would respectfully report pursuant to said appointment we attempted to so appraise said personal Estate and found that the Same had been heretofore appraised by order of the Shawnee Council and that afterward a portion of said property had been sold to various persons under an order of said council and therefore the undersigned were not able to properly appraise the same by a View of the property--and we would further represent that the appraisement made pursuant to the order of said Council was made by one of the undersigned A.S. Johnson and by Francis Gallup and that the accompanying document is a copy of the said appraisement.

A. S. Johnson
Johnson Co. K.T. William Roy

A List of property appraised by A.S. Johnson and F. Gallup belonging to the Estate of Joseph Parks Dec^d

1 Heating Stove & pipe	4.00	18 Pillow Slips	1.50	1 Bed Stead	3.50
3 Chaires	.75	1 Bureau	2.50	5 Chairs and Bereau	5.00
1 Matrass		1 Remnant of Gingham	.25	2 Quilts	
2 Straw ticks		4 Coverlets & Bed		2 Blankets	
4 Blankets		Curtains	3.50	1 Coverlet	
4 Comforts	8.00	1 Worsted unfinished		1 Sheet	13.00
6 Pillows		quilt	.50	1 Straw Tick	
2 Sheets		1 pr Troy scales	.50	2 Pillows	
2 Window Curtains		3 Chair	2.00	1 Bolster	
1 Candle Stick	.75	1 Carpet Sack	.50	Carpeting	3.00
3 Market Baskets	1.50	1 Umbrella	.50	6 Window Curtains	
1 Rocking Chair	.75	1 Buckskin	1.00	1 Candle Stick	3.25
3 Robes	7.00	Cotton Remnants	.50	1 Feather Bed	11.00
1 Comfort	5.00	20 Yds Carpeting	5.00	1 Lot Nails	1.00
2 Quilts	1.00	1 French Bedstead	8.00	1 Straw Tick	1.00
1 Moss Mattress		1 Cotton Mattress	3.00	1 Bedstead	2.50
1 Bushel Dried Apples	2.50	1 Fether Bed		4 Blankets	5.00
2 Bolsters	1.00	1 Sheet		6 Chairs	7.50
1 Box Flour	.50	3 Blankets		1 Rocking Chair	7.50
1 Shower Bath	5.00	1 Coverlet	15.00	1 Dining Table	
1 Lot Rag Carpet	.50	1 Coverlet		& Cover	4.00
1 Wood Saw	.25	2 Pillows		1 Secretary & Stand	6.50
1 Chest & Cover	1.00	1 Bolster		1 pr AndIrons & Tongs	1.50
12 yds Calico	1.00	1 Dining Table	3.00	1 Clock & Duster	1.75
1 Wool Counterpane	3.00	1 Sugar Box	.75	1 Candle Stick	.50
14 yds Gingham	1.25	3 Sets Window Curtains	1.50	4 Sets Window	
3 Table Cloths &		1 Carpeting	7.00	Curtains	2.00
Bed Bale	.25	1 Barlow Stove & Pipe	4.00	1 Boot Jack	.50
12 Towells	1.00	1 Part Box Candles	5.00	1 Wash Stand	1.50

1 Pitcher Bowl &c	1.50	& straw tick		4 Large Yoke Oxen	265.00
1 Looking Glass	1.00	1 Feather Bed &		15 Heifers & Cows	195.00
1 Stove & pipe	4.00	2 Blankets	9.00	20 Calves & yearlings	100.00
1 Cooking Stove	5.00	1 Quilt & 1 Pillow		91 Hogs, more or less	200.00
1 Cedar Bucket	.25	1 Cloths Basket	.50	200 Bushels Wheat	180.00
1 Oven	.50	9 Stand of Bees in		Lot Corn	100.00
10 Augurs	1.50	Pattent Hives	45.00	1 Log chain & 2 pieces	5.00
1 Market Basket	.25	3 Kelseys Pattent Hives	4.50	2 Ox Yokes	3.00
1 Iron Kettle	2.00	2500 lbs Bacon, More		100 Bush Oats	100.00
2 Cow Bells	.25	or less	200.00	235 Cords Wood	235.00
1 Oven & Hooks 3		4 Bushels Potatoes	3.00	3 Plows & Harness	15.00
Skillets & Pot	2.50	6 Milk Crocks	1.50	1 Negro Women Rhoda	
1 Brass Kettle	.25	8 Wood Buckets	1.00		100.00
1 Stone Churn	.75	3 Jars & 1 Jug	1.00	1 " Man Allen	300.00
2 Wood Buckets	.40	Lot of Sacks	1.00	1 " " John	200.00
2 Tin Buckets	.40	1 Brass Kettle	.75	1 " " Tom	1000.00
2 Bread Pans & sieves	.50	5 Cans of Lard	16.00	1 " Woman &	
1 Chair & 2 Stools	.25	1 Churn	1.00	children	1000.00
1 Cupboard	2.00	1 Wash Tub	.50	Total Amt	\$5849.70
1 Sausage Mill	2.50	2 Grain Shovels	1.50	1 Horse (Grey)	75.00
Contents of Kitchen		1 Spade	.50		\$5924.70
press	3.50	5 Forks	1.75		
1 Lot of Dried Beef	4.00	1 Bush Hook	.30	Open Shawnee accounts due the	
Cupbord & Contents	5.00	2 Hoes & 3 Rakes	.75	Estate	
1 Dining Table	2.50	1 Grind Stone	1.00		
8 Chairs	2.50	1 Vice	2.50	Edward Dougherty	
1 Breakfast Table	1.00	1 scythe & 1 cradle	.75	atto ^s fees	112.25
2 Sugar Boxes	1.50	3 " & cradle stock	.75	Sally Rogers	33.75
2 Tea Canister		1 Cultivator &		William Doughety	3.75
1 Clock	2.50	Harrow	2.00	John A Rogers	3.75
1 Tea Waiter & Candle		1 Bell & Collar	.75	Shawnee Council	600.00
stick	.50	1 Horse	25.00	By note of Pascal	100.00
4 Window Curtains &		1 Mule Colt	25.00	1858 " " "	65.00
1 Kent [?] shell	2.50	1 Colt	15.00	Peter Buck:	
1 Rifle & Shot Gun &		1 Threshing Machine	10.00	169 lbs Bacon	
fixtures	17.50	1 Wheat Fan	10.00	5 Bush Oats	7.00
1 China Sett	6.00	1 Sleigh & Hayrake	3.50	4 Bush Corn	
1 Lot Knives & forks		Lot Hay	15.00	O B. Cash	
& Ladle	1.50	2 Plows	5.00	James Bone 5 bush	
Lot Old plates, Cups		1 Ox Wagon	100.00	Oats	2.50
saucers & Glass	2.50	1 4 Mule Waggon	50.00	" " <u>cash</u>	.50
12 Silver Tea Spoons		1 2 Horse "	20.00	John Adams 10 bu	
12 Table & Sugar		1 Iron Axel "	20.00	Oats	7.50
5 German Silver forks		1 Market Waggon	40.00	Cha ^s Tucker	130.00
3 " " spoons	20.00	1 2 horse Carriage	75.00	1 Buggy & Harness	
2 " " knives		1 Tent	3.50	A Grandstaff	
3 Flat Irons	1.50	1 Saddle & Bridle	4.00	10 Bu corn	12.00
pr And Irons & Tongs	1.00	1 New Sett 2 Horse		Joe Day	
4 Table Cloths	3.50	Harness	15.00	20 Bush Oat	6.00
8 Sheets	5.00	2 Bay Horses	160.00	40 " Corn	20.00
9 Towels	.90	2 Light Colord Mules	250.00	Cash	10.00
10 Pillow Slips	1.00	1 Sett Mule Harness	7.50	Nancy Daugherty	
1 Bedstead	2.00	2 Black Mules	280.00	<u>cash</u>	10.00
1 Straw Mattress--1 sheet		2 Cultivators		Elburgh & Hamburgh	8.35
2 Blankets--1 Quilt	3.00	4 Plows	4.00	John Proffit <u>cash</u>	30.00
1 Trundle Bed		2 Scythes & snathes		" " 599 lbs	

Pork	29.95
Sweet or	
Che lon qua <u>cash</u>	5.50
Mrs. Jackson	40.00
Goe Glints mother	20.00
William Barbee	
10 Bus wheat	12.50
John Punkin <u>cash</u>	10.00
" " "	25.00
Ela Mawbea	3.00
James Bluejacket cash	
paid Elburgh &	
Hamburgh	10.50
Chuc.the cash	<u>18.75</u>
[Total]	1593.55
Open accounts against	
white men good	
J.O. Boggs	30.00
N. Scott	42.50
Boggs & Scott	15.00
S.C. Roby	70.00
Wm Drake	30.00
" "	6.30
Mrs. W.L. Green	30.00
Joshua Packet note	40.60
Interest	8.60
Baker & Street	
40 Bu Oats	<u>20.00</u>
[Total]	\$293.00

Open accounts doubtful	
Martha Jones	\$15.96
" "	15.00
Wm Pucket	9.40
Ward	<u>4.40</u>
[Total]	44.76
Memorandum of doubtful	
accounts against white	
men	
Joshua Pucket	20.00
John J. Light &	
Adam Freelan	57.00
J.W. Keeny	20.00
W.L. Green	150.00
" " "	217.00
Samuel Bennett	141.00
Caspar Barth	67.00
Findlay & Earle	730.00
Walker & Dickson	100.00
Horrace Gray	<u>30.00</u>
[Total]	\$1532.00
Memorandum of good notes	
of White men	

Street & Baker	\$2125.00
" "	240.00
2400.00 Int 6.00	2406.00
A.M. Eisle	534.75
Geo Copeland	220.00
Golden Square Lodge	31.50
Major Arnolds two	
notes secured by	
two mortgages	<u>\$4526.39</u>
[Total]	\$11660.40

The Territory of Kansas
County of Johnson ss
We Alexander S.
Johnson and William Roy do
severally solemnly swear that we
will faithfully Appraise the
personal estate of Joseph Parks
Dec^d to the best of our ability
A S Johnson
Wm Roy

Sworn to before me and
subscribed in my presence this
the 20th day of June 18559
J.D. Allsup

APPENDIX III

Abstract of the "Census and agricultural Statistics of the Shawnee Indians who hold their lands in Severalty, as taken by Ja^s B Abbott U.S. Agt. Sep 1 A.D. 1866"

Mainstream Shawnee: 269 males, 302 females; 46 frame houses, 66 log houses; number acres cultivated, 3,652; 5,355 bushels wheat, value \$10,710.00; 87,170 bushels corn, value \$43,585.00; 9,565 bushels oats, value \$2,864.50; 3,830 bushels potatoes, value \$2,872.50; 1,340 bushels sweet potatoes, value \$2,680.00; 74 bushels onions, value \$148.00; 625 tons hay, value \$4,505.00; 360 horses, value \$27,161.00; 834 cattle, value \$15,938.00; 1,363 swine, value \$10,829.00; 179 sheep, value \$671.00; 430 bushels apples, value \$430.00; 4,750 pounds tobacco, value \$475.00; 11,000 board feet lumber, value \$330.00; 640 bushels barley, value \$640.00.

Orphan children at school not numerated: 1 male, 12 females.

Black Bob settlement: 31 males, 35 females; number acres cultivated, 15; 455 bushels corn, value \$227.50; 17 horses, value \$790.00.

Total for all Kansas Shawnee: 311 males, 349 females. Total population, 660.

14JO55: AN EARLY NINETEENTH-CENTURY SITE IN THE FORMER SHAWNEE RESERVE OF EASTERN KANSAS

William B. Lees
Kansas State Historical Society

The Kansas Anthropologist, 14(1), 1993, pp. 28-47

Site 14JO55 was discovered during a surface survey of a cultivated field along the Kansas River in Johnson County, Kansas. Numerous early historic artifacts such as ceramics, glass beads, buttons, and bottle glass were scattered over the surface. Three probable architectural features were also visible on the surface. A surface collection, limited subsurface probing, and a scale map were used to document the site. Analysis suggests this small site was occupied during the 1820s to as late as the 1860s. During this period the site was within the Shawnee reserve and an association with the Shawnee is almost certain. This may be the site of a Shawnee farmstead or, conceivably, of a Chouteau trading house for the Shawnee.

INTRODUCTION

Archeological site 14JO55 was recorded during a 1988 survey by Fred Scott, Marlin Hawley, and David Hesser, who were, at that time, students at the University of Kansas. Surface collections were obtained during this initial survey and by subsequent visits to the site during the winter of 1990 which involved Kansas State Historical Society archeologists. During one of these later visits, the site was mapped by the author with the assistance of Scott and Bill Ranney, also a KU student.

The attention that this site has received is because of its unusually early nineteenth-century assemblage. The goal of this paper is to describe and document this important site, to interpret its age of occupation and range of possible cultural and functional associations, and to make recommendations on further work at this and other eastern Kansas sites dating from the early nineteenth century.

Physiographic Setting

The site is located in Johnson County in northeastern Kansas along the southern edge of the state's glaciated region, known as the Dissected Till Plains (Schoewe 1949:289). Essentially this area is similar to the Osage Plains to the south except that it has been altered by glaciation. In this area, the cuesta-

type topography of the Osage Hills has been mantled by thick deposits of glacial drift and the result is a gently undulating landscape. Along the Kansas River the topography has characteristics of both the drift plains to the north and the Osage Cuestas to the south, and is referred to as the Attenuated Drift Border of the Dissected Till Plains (Schoewe 1949:289-291).

The site is located [REDACTED]

[REDACTED] The nearest major tributary of the Kansas, Mill Creek, is located several kilometers below the site. The site is located on a low rise some distance from the current channel of the Kansas. The area is currently cleared of trees and is used as cropland. The native vegetation of the area surrounding the site would have been floodplain forest bordered on the uplands by a mosaic of bluestem prairie and oak-hickory forest (Küchler 1974).

The floodplain forest would have included "medium tall to tall broadleaf deciduous forests, often with dense undergrowth and many lianas" (Küchler 1974:600). Dominant species along the floodplain, and including the specific site area, would have included hackberry, cottonwood, black willow, and American elm. Upland prairie in the site vicinity would have included big bluestem, little bluestem, switchgrass, and Indian

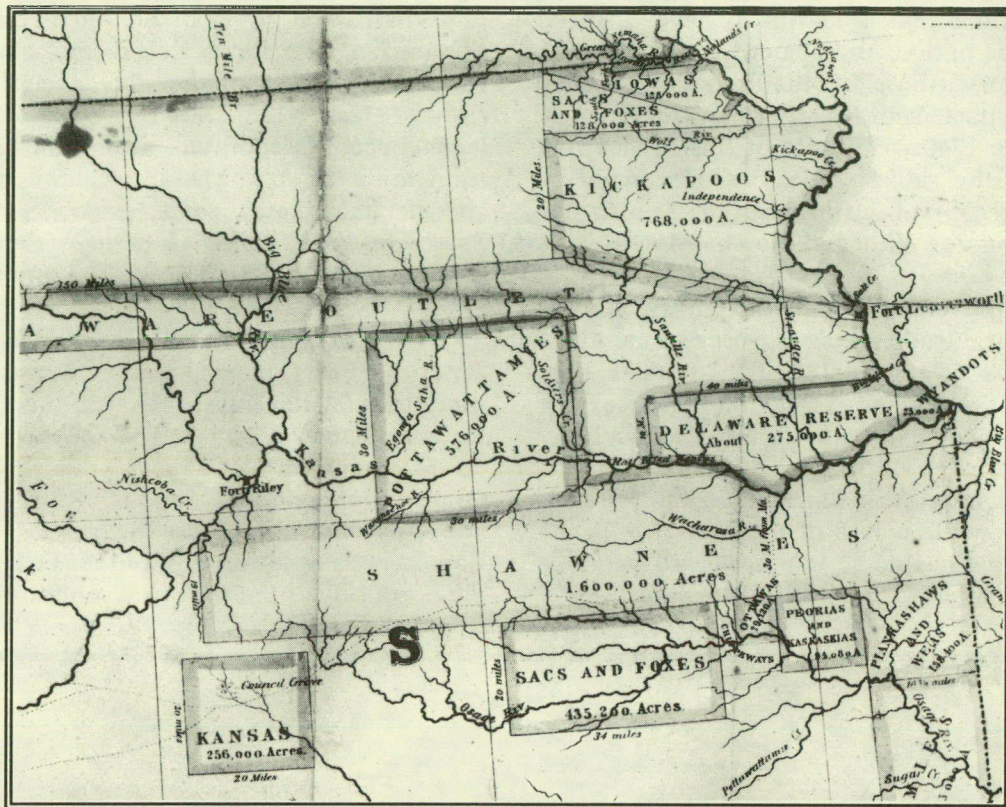


Figure 1. Location of the Shawnee reservation in northeastern Kansas in 1854 (Eastman 1854). Courtesy Kansas State Historical Society.

grass as dominant species which would have been expressed as dense stands of medium and tall grasses. On the steep valley slopes surrounding the site and in other upland areas, the oak-hickory forest would have included bitternut hickory, shagbark hickory, white oak, red oak, and black oak as dominant species, and would have been expressed as a "medium tall multilayered broadleaf deciduous forest" (Küchler 1974:599).

The notes of the 1856 subdivision survey of Township 11 South, Range 23 East provide specific reference to some of the vegetation present at that time. Along the north-south section line due east of 14JO55, for example, timber included red and white oak, elm, sycamore, and cottonwoods. Undergrowth included hazel and briars. The land was noted to be level and "1st rate." Cultural use of the section within which 14JO55 is located was not mentioned (Swartz 1856).

Soils on the site are of the Eudora-Kimo series. The southwestern half of the site is located on Eudora soils (silt and sandy loams) covered with an overwash of fine, light colored sand. The northeastern part of the site slopes downward toward the river and may include both Eudora and Kimo soils. In the case of this site, the loamy Eudora soils appear to be present rather than the Kimo soils, which typically have a surface layer of silty clay loam (Plinsky et al. 1979). In general, the soil on this site would be extremely amenable to excavation.

Cultural-Historical Setting

The region around the confluence of the Kansas and Missouri rivers has seen considerable activity during the Historic period. The earliest historical records place the Kansa just above this confluence in the early eighteenth century (Wedel 1959:25-27). Archeological evidence suggests they had arrived in this area well before this date (Johnson 1991). Trading between the

French and Kansa is known to have occurred during this period, and somewhere probably in the Leavenworth vicinity the French established a trading post, known as Fort de Cavagnaugh, during the 1740s. The site of this French fort has been the subject of extensive searches by archeologists and historians but has so far proven elusive (Witty and Marshall 1968).

In the early nineteenth century, records show several trading houses closer to mouth of the Kansas River. In 1819 the Choteaus were trading with the Kansa, Osage, and Pawnee from a post near the mouth of the Kansas River (Barry 1972:87). In 1824, the Chouteau trading house was noted to be located on the Missouri River below the mouth of the Kansas, with the Curtis and Ely trading house located one mile above the mouth (Barry 1972:103).

In 1825 a group of Shawnee residing in Missouri were offered a reserve along the Kansas River west of the state line (figure 1) (Barry 1972:127-128). Site 14JO55 is located on lands once incorporated within this reserve. Emigration of the Missouri Shawnee began almost immediately and grew to include Shawnee from Ohio as well. Emigration continued until 1833 (Barry 1972:128).

In 1828 the Chouteaus established an American Fur Company trading house on the south bank of the Kansas River in the Shawnee Reserve (Barry 1972:153). This site is reportedly downstream from 14JO55 in Wyandotte County. Other contemporary Kansas River trading houses served the Kansa near what is now Topeka in Shawnee County and the Delaware on the north side of the river in Wyandotte County

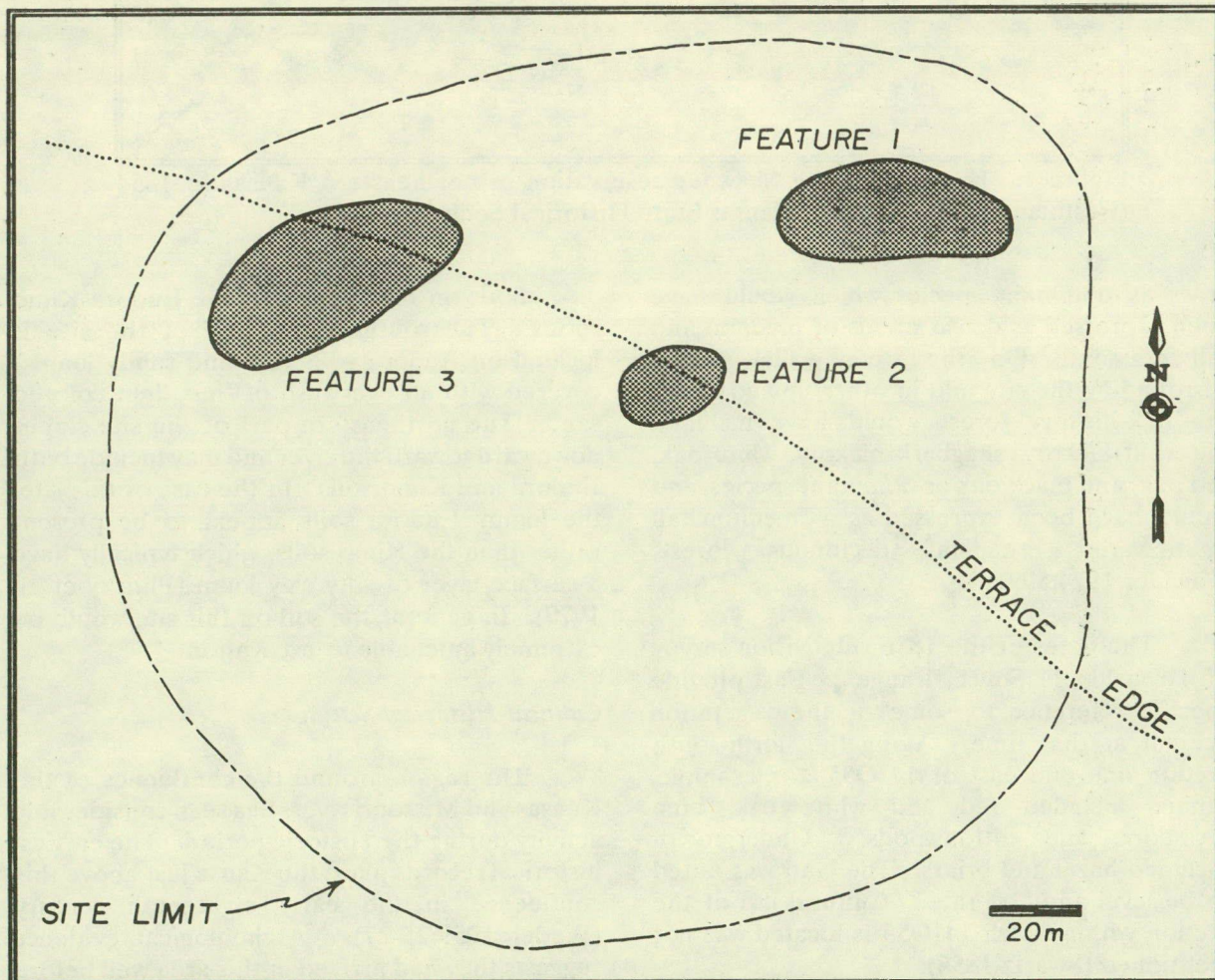


Figure 2. Plan of site showing limits and features.

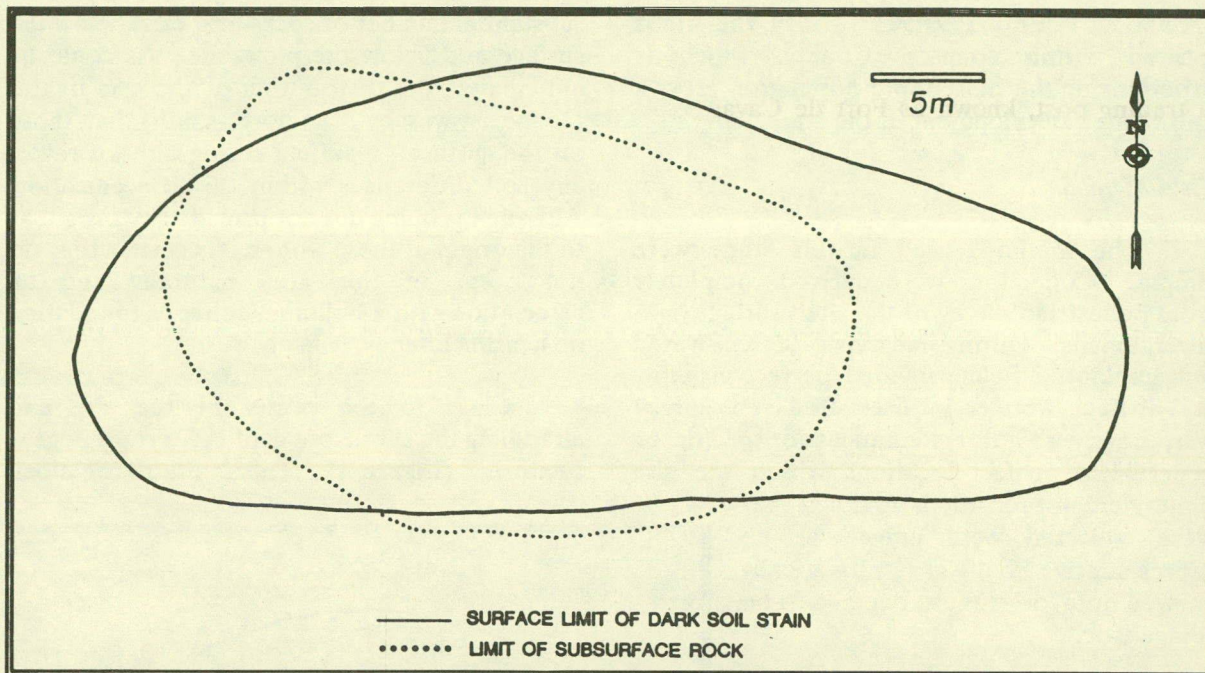


Figure 3. Plan of Feature 1 showing surface and subsurface expressions.

(Barry 1972).

Staab (1989) has provided a useful summary of what little is known of Shawnee farmsteads in Kansas. Staab divides the 100-plus farmsteads on the Shawnee reserve into three groups: 1) slave-labor farmsteads, 2) mainstream (progressive) Shawnee farmsteads, and 3) so called "Black Bob" (traditional) farmsteads. The differences between these varieties of Shawnee farmsteads in terms of buildings, layout, material culture, etc., is poorly understood (Staab 1993).

From the sketchy accounts that do exist, it is known that most Shawnee lived in well made frame or more commonly log dwellings, of which the "dog trot" was a common form, surrounded by a variety of outbuildings, fences, and fields. The dogtrot is a structure with two rooms separated by a covered breezeway (see figure 1 in Staab, this volume).

The precise farmstead layout and the patterns of life that characterized the three factions of Shawnee during the 1820s to 1860s is not clear and pose an important question for archeology. It is clear from several contemporary sources that the Shawnee

practiced a very successful agricultural economy that produced consistent surpluses sold for cash to travelers on the Santa Fe Trail (Staab 1991).

As provided in the 1831 removal treaties of the Ohio Shawnee (Staab 1993), the United State awarded a contract in 1835 to Michael Rice to construct a "water grist and saw mill for the benefit and use of the Shawnee Indians" (Bennett 1987). This mill was constructed along Mill Creek not far from 14JO55 and was completed in 1837 (Barry 1972:328). According to the contract, the mill complex was to include a 120 ft long dam, a two story saw mill (40 by 16 ft), a grist mill (30 by 25 ft), and a stone water house (14 by 22 ft) (Bennett 1987). The mill buildings were destroyed during the 1844 flood (Blair 1915). No traces of the mill have ever been found and its precise location remains somewhat of a mystery (Lees 1988).

Starting with the creation of Kansas Territory in 1854, the process of removing the emigrant Native Americans, including the Shawnee, was begun (Miner and Unrau 1990). In January of 1861 Kansas was admitted to the Union. By the end of the decade of the 1860s, most Shawnee had relocated to new lands in

Oklahoma (Unrau 1991:91). Today, the site is located within Johnson County, which is experiencing the most rapid population growth and related development in the state.

Field Methods

The methods used in this study were simple. Collections were derived completely from pedestrian survey of the site's surface over several visits. During each visit, the cultivated but unplanted field provided perfect visibility and artifacts were easily discovered. The survey was, however, not systematic and specific or generalized artifact locations within the site limits were not recorded. Artifacts that were collected were judged to be representative but are numerically skewed in favor of those deemed to be "diagnostic."

During the final visit to the site prior to the preparation of this report, solid and Oakfield core probes were used to define the three identified features and to search for others that did not show clearly on the site's surface. The solid probe was used to explore for buried rocks, whereas the Oakfield core, which removes an intact soil column about 2.5 cm in diameter, was used to search for differences in soils across the site. Finally, an alidade and plane table were used to construct a scale map of the site showing the site limits, the edge of the terrace, and the surface and subsurface expressions of the three feature areas (Figure 2).

SITE STRUCTURE

The site was originally identified as a surface scatter of artifacts that extends approximately 200 m east-west by 200 m north-south. Within this, there are three features that further define the site. Feature 1 is in the northeastern part of the site and shows on the surface as a dense concentration of limestone rocks, 48 m east-west by 21 m north-south, some of which are burned (Figure 3).

Solid core probing of this area shows a

substantial number of rocks also exist below the surface and below the plowzone. As could be anticipated, the distribution of these is tighter (36 m east-west by 21 m north-south) than those on the surface. Oakfield coring did not reveal any soil differences within this concentration. Although probing did not provide any insight as to the origin of these stones, it is certain they do not occur in this area naturally and an association with a building, either as foundation or hearth/chimney, is likely.

Close to the center of the site and straddling the subtle break of the terrace edge is Feature 2 (Figure 4). This is a striking albeit

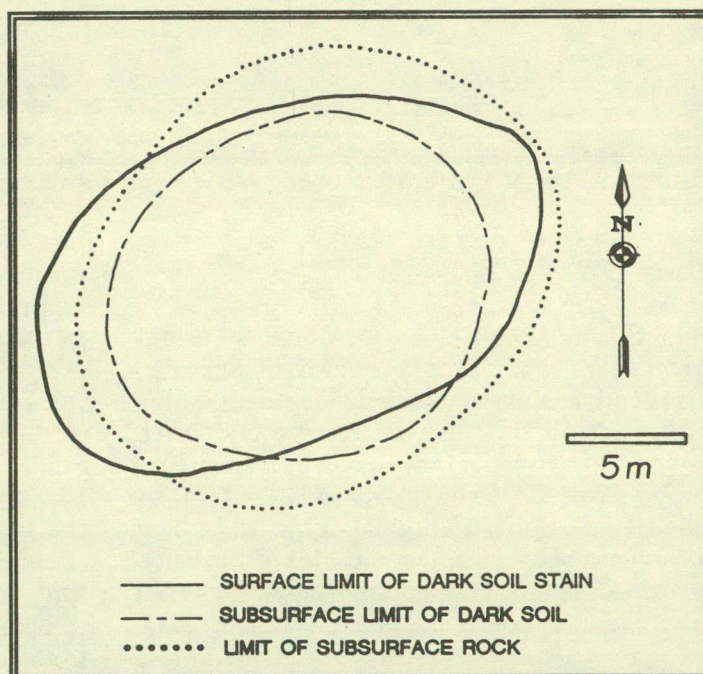


Figure 4. Plan of Feature 2 showing surface and subsurface expressions.

low mound surmounted by limestone rocks and covered with an irregular, dark gray organic soil stain that measures 21 m east-west by 17 m north-south. Oakfield coring revealed that below the plowzone this dark organic soil covers a somewhat smaller, roughly circular area some 17 m in diameter and that this organic soil extends to 70-80 cm below surface. At this point, a sharp break to a lighter brown soil was consistently encountered.

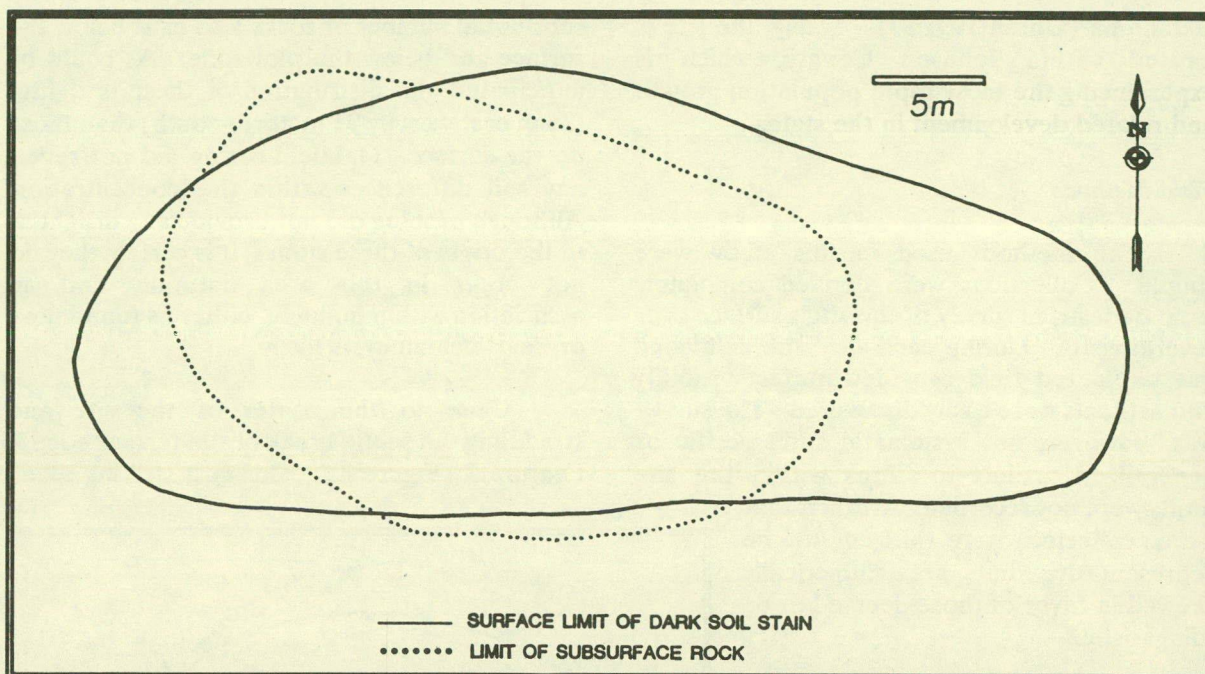


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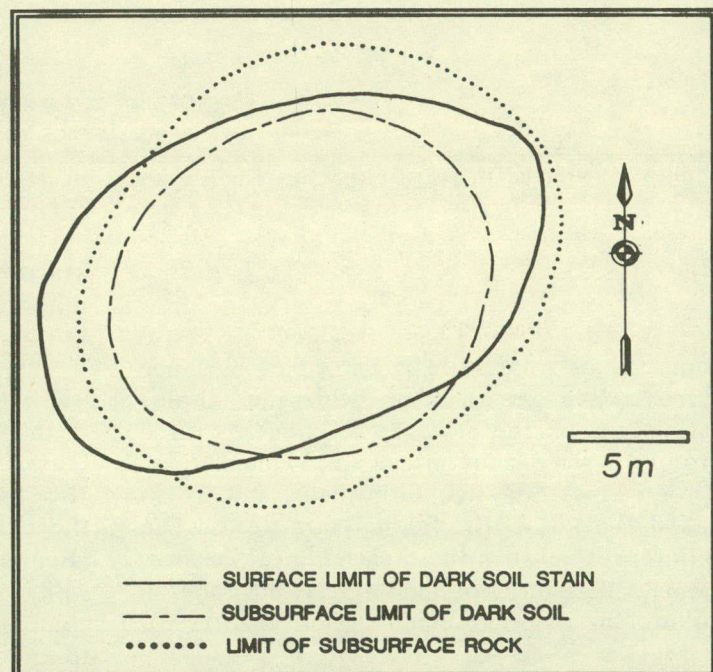


Figure 4. Plan of Feature 2 showing surface and subsurface expressions.

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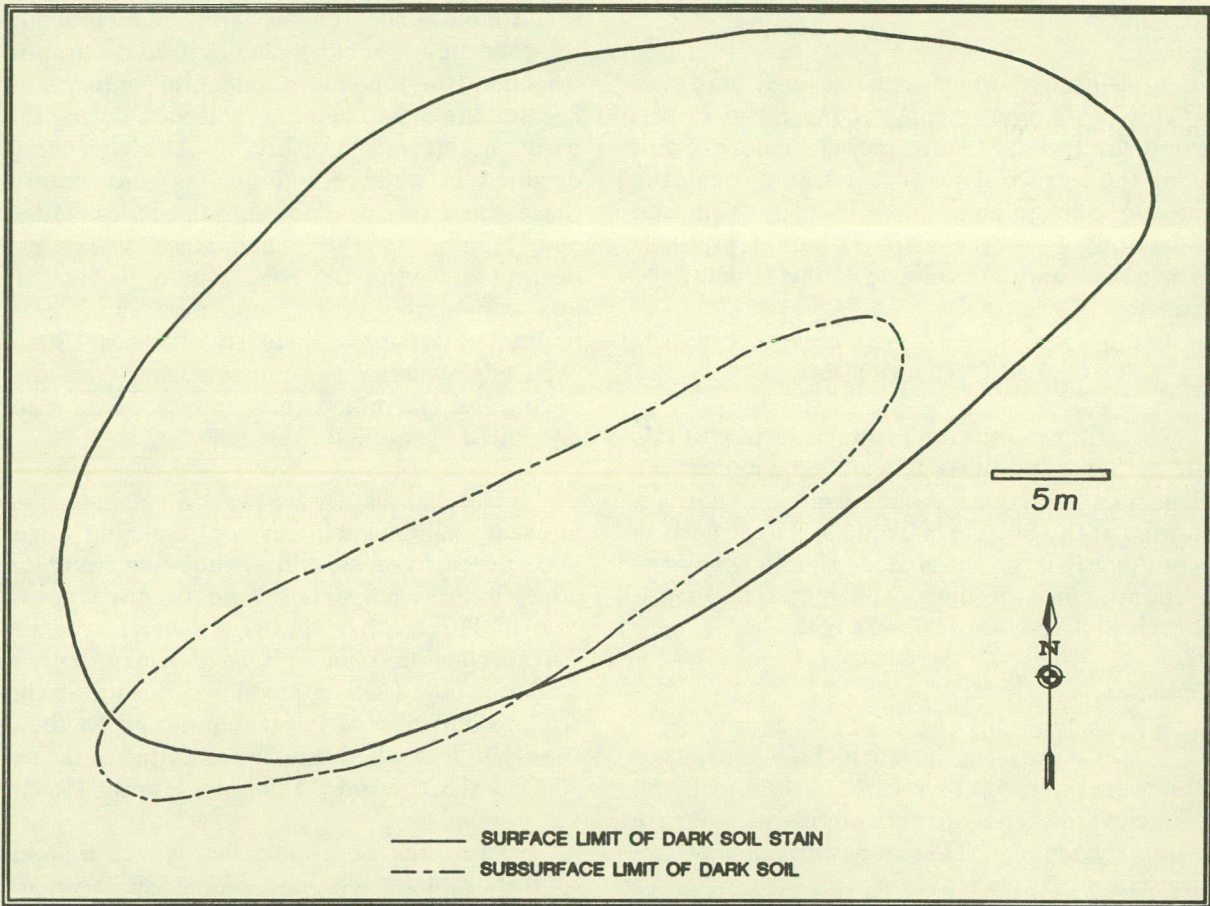


Figure 5. Plan of Feature 3 showing surface and subsurface expressions.

Probing also showed this area of buried organic soil to be surrounded by rocks which appear to occur no more than about 30 to 40 cm beyond the dark organic soil. The precise subsurface form of this feature is, of course, uncertain. If it is a circular, stone-lined feature, a well does not appear to be a reasonable explanation because of its apparent shallowness (ca. 80 cm). It is probably just as likely, however, that excavation would show that this feature is not at all circular. Regardless, it does appear to be a purposefully constructed, probably architectural feature.

In the northwest portion of the site along the terrace edge is Feature 3 (Figure 5). This area shows on the surface as a very subtle mound and a more distinctive, ovoid stain of dark gray organic soil. This surface stain measures approximately 55 m northeast-southwest and 27 m northwest-southeast.

Oakfield core probing revealed a much smaller area of buried organic soil along the southeastern edge of this surface stain. This buried soil measures approximately 43 m northeast-southwest by 10 m northwest-southeast. The depth of this organic soil is variable, but was noted to extend to ca. 50 cm in numerous areas. No sign of surface or buried rock was found. This long, narrow feature may represent a constructed trash pit or a trash filled ravine.

In the southern part of the site several areas of concentrated artifacts along with light gray soil were noted. Solid and Oakfield probing in these areas did not reveal any buried rocks of note or any buried dark organic soils. The possibility exists, however, that these are the location of features that are either much more subtle than others noted on the site or that have been substantially destroyed through repeated

cultivation.

Although surface artifacts were found over a wide area, the greatest concentration was noted for the area surrounding Feature 2 and along the terrace slope as it passed through the site and touched on features 1 and 3. A plotted collection of surface artifacts would probably provide substantial evidence of the structure of the site.

COLLECTED ARTIFACTS

Artifacts collected from the surface of this site by Scott and other KU students and by the Historical Society have been combined and are curated at the Society in Topeka. The collection is not overly large but is made significant by the preponderance of diagnostic materials that it contains. These are reviewed below.

Ceramics

Ceramics from the site include a variety of stoneware and earthenware. None of the earthenware sherds are very large and some are extremely small. The stoneware sherds are larger in a relative sense only.

Shell-Edged Earthenware. A total of 15 sherds

identifiable as shell-edged wares are included in the collection (figure 6). Shell-edged decoration originated in the late eighteenth century and became the most common tableware during the early nineteenth century. Although they declined in popularity following mid-century, these wares were available into the 1890s (Miller and Hunter 1991). Shell-edged wares are decorated around the edge usually in blue or, less commonly, green, and most also have impressed designs of a variety of forms. Some shell edge wares have embossed patterns and, during the late nineteenth century, some were decorated by applied color only.

The sherds from 14JO55 include five unusual examples with evenly scalloped edges and curved impressed lines radiating from the edge, but the edge is devoid of any applied color. Three other sherds are more typically decorated with blue and have similar evenly scalloped edges with curved lines. From the rim scallops and type of impressed design on these sherds, they can be identified as dating to the ca. 1802 to 1832 period (Miller and Hunter 1991).

Also present are five sherds with a green coloration along the edge. Three of these are definite examples and two probable examples of shell edge with embossed patterns. Embossed

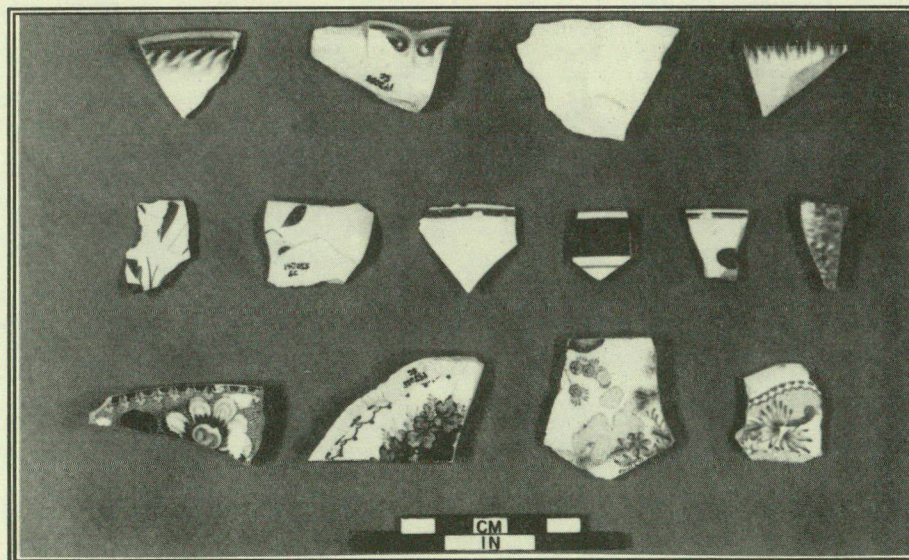


Figure 6. Earthenwares: Top row, edge-decorated wares; Middle row, hand-painted wares and spatterware (far right); Bottom row, transfer-printed wares.

patterns are a hallmark of the ca. 1823 to 1835 period (Miller and Hunter 1991).

The final two sherds are badly burned. Both are split and both represent the back of the sherd. It cannot be determined if impressed or embossed patterns were present. Both, however, exhibit an evenly scalloped rim that probably places these sherds in the ca. 1802 to 1835 period of manufacture (Miller and Hunter 1991).

In terms of manufacture, these sherds thus date from the ca. 1802 period to the middle 1830s. All would appear to have been available during the early 1820s up until the mid 1830s. The embossed patterns were apparently not produced until ca. 1823; thus it is certain that this site was occupied after that date although it may have been in use earlier as well.

Transfer-Printed Wares. A total of 58 sherds carry a transfer decoration (figure 6). Transfer decorations on ceramics were first used successfully during the mid-eighteenth century, became common following ca. 1800, and have been used continuously ever since.

The process of transfer decoration involves the transfer of color (a mixture of metallic oxides and fluxes with printing oils) from a hand-engraved copper plate to a fibre-free tissue paper sized with a mixture of soft soap and water. The color is then transferred from this tissue to the actual ceramic vessel. Each vessel was fired three times; once before the transfer was applied, once after it had been applied (to burn out the printing oils), and once after the glaze had been applied. The result is a very fine and detailed decoration which is typically composed of lines and fine dot patterns (Noël Hume 1980; Copeland 1982). Colors represented in the collection are magenta, black, blue, and purple.

The 22 magenta sherds include one that is burned. Design elements include floral, scenic, and geometric. These different elements could originate from a single piece or from several different pieces with drastically different overall designs. Rims are typically scalloped and four carry embossed patterns along the edge. The vessel form of one sherd is identifiable as a deep

soup or gumbo plate.

Another 20 sherds are decorated in a pastel blue and in a slightly more vivid blue. Pattern elements all appear to be floral. Three of the sherds have been burned.

Black decorations are found on eight sherds. Patterns are both floral and scenic. One sherd is identified as a teacup rim. Also noted is 1 scalloped rim and one well worn, footless base.

A final eight sherds are decorated with a purple transfer with floral and geometric elements. A footring on one sherd has an intense bluish cast to the puddled glaze; this is identifiable as pearlware. Three sherds are notable because they can be identified as rim fragments from tea cups.

Spatterware. Two small sherds are decorated with a pastel blue spatter decoration (figure 6). Vessel form is unknown.

Mold Decorated. A single small sherd is decorated only with an embossed, molded decoration. This sherd is too small to tell much of the design, but it appears to be floral.

Hand Painted. Thirty-nine sherds, six of which are burned, carry hand-painted decoration (figure 6). The majority of these, 24 in number, have similar bold floral designs executed in magenta, green, and blue. All have black stems. The rim sherds of this pattern have a black line around the inside of the rim or on both sides of the rim. Vessel forms represented are probably small bowls or cups.

The other 15 hand-painted sherds carry a variety of patterns. Several rim sherds have only a blue, black, or green band around the rim whereas other rim and body sherds have evidence for decoration using broader hand-painted bands and floral designs.

Caramel-Colored Ware. Seven sherds have a clear glaze over a light brown paste. The result is a surface that has a rich caramel color. Vessel forms cannot be determined from these small sherds.

Soft-Paste Porcelain. A single small sherd from an undecorated soft-paste porcelain vessel is included in the collection. This sherd is thin and is probably from a tea cup or similar light vessel.

Undecorated White Earthenware. A total of 53 sherds, eight of which are burned, are undecorated white earthenware. One of these is a small base sherd with a small fragment of a maker's mark which is, unfortunately, not identifiable because it is so incomplete. Forms included among these sherds include plates, cups, and bowls. The plate fragments may very possibly be sherds of edge-decorated plates which, except for their rims, are undecorated. One relatively large sherd is a fragment of a heavy ironstone serving bowl, and is the only serving ware definitely present in the collection.

The bulk of the undecorated earthenware is probably contemporary with the other ceramics and, in fact, most may have been part of edge-decorated and hand-painted wares. The single ironstone lid fragment may be somewhat more recent than other earthenwares in the collection. Simple, undecorated ironstones became popular during the Victorian era, and were most popular in North America during the ca. 1840 to 1870 period (Wetherbee 1985:6)

Stoneware. Four distinct types of stoneware are represented among the 12 sherds in the collection. Eight of the sherds are a dark brown salt glazed ware, probably all from a shouldered, wide mouth bottle that is probably of English origin (Greer 1981). One sherd is from the neck of a bottle with a Bristol type glaze on the interior and a ferruginous solution dip under a Bristol glaze on the exterior. This bottle is most certainly English, and probably dates after ca. 1860 (Greer 1981). A base to a vessel 4.3 in (11 cm) in diameter has a ferruginous dip on both the interior and exterior. The remaining two sherds are sections of relatively heavy, salt glazed strap handles. These salt glazed sherds are probably from vessels made in a local stoneware pottery somewhere in the eastern United States.

Bottle Glass

Bottle glass occurred in a variety of colors,

including olive, aqua, colorless, and amber.

Olive Bottle Glass. A total of nine fragments of bottles made with olive colored glass are included in the collection. Seven of these are relatively non-descript body sherds. Of these, one is from a flat-sided bottle but the rest are from cylindrical bottles.

The single finish is a flat lip champagne type with an irregular, flattened string rim applied to a "cracked off" neck. A cracked off neck is formed when the bottle is separated from the blow pipe by scoring and snapping the glass. The sharp, slightly irregular surface is usually reheated to smooth the sharp edges. This type of finish is characteristic of the eighteenth century but was also in use during the nineteenth century (Jones and Sullivan 1985:80). Within the nineteenth century, however, it is an early form.

The single base is square with rounded corners (61.3 mm across). It has a scar from what was probably a glass-tipped pontil in the center of the base. A pontil is a rod temporarily affixed to the base of a bottle and used as a handle as the finish is completed. A glass-tipped pontil is an iron rod which is dipped into molten glass and stuck to the base of a bottle (Jones 1971). Because of its color and shape, this base is probably from a "case" type bottle common in the eighteenth and early nineteenth centuries and often containing gin. Because of the use of a pontil in finishing this bottle, it was made prior to about 1870 at the latest.

Amber Bottle Glass. Amber glass accounted for eight of the bottle fragments. One of these is embossed with what appears to be part of the wing, breast, and neck of an eagle. This is probably from a pictorial flask made during the early or middle nineteenth century. Two fragments are from bottles that were probably square with flat chamfered corners; snuff or bitters bottles are a possibility here. Another two fragments are flat and are embossed with writing and may be from similar types of bottles. One of these is embossed with "..LL.." but the other letters cannot be identified. Other fragments include one relatively heavy fragment from a bottle with recessed panels, a small sherd

from a cylindrical bottle, and a small flat fragment that is partially melted.

Aqua Bottle Glass. Thirty-six fragments are aqua in color. Included among these are nine bases. One of these is partially melted and eight are from cylindrical bottles. The other bottle has a diamond-shaped cross section. Except for one of the circular bottles, all have pontil scars and pre-date ca. 1870. The three scars that are relatively complete are from blowpipe pontils. Blowpipe empontilling "consisted of using the glass left on the blowpipe after the bottle had been snapped off. In other words, the blow pipe was itself used as a pontil" (Jones 1971:69). The single base without a pontil scar may have been manufactured using a snap case, and therefore may date after ca. 1850 (Jones and Sullivan 1985:46). A snap case is an iron device which held the bottle while it was finished, and left no mark.

Seven finish fragments are also present in the collection, and two of these are partially melted. Five of these are straight finishes with simple folded-in lips, one has a crude flanged lip, and one has a wide down-tooled lip. The down-tooled lip is probably relatively late and may be roughly contemporary if not from the same bottle represented by the snap case base discussed above as post dating 1850. The other six finishes all probably date within the first half of the nineteenth century.

The bases and finishes are by and large from small bottles. Except for the down-tooled specimen, the finishes are of a small diameter and are of very thin glass. They are consistent with the bottle sizes suggested by the bases, which include diameters ranging from 22.3 mm to 40 mm and also including a single base that is substantially larger but unmeasurable. The miscellaneous body fragments, however, include evidence for bottles of a substantially larger size that may be associated with the single larger base and finish.

A total of 20 body, shoulder, and neck fragments of aqua glass were found. Ten of these are relatively non-descript, but it is noted that three have been partially melted. The other 10 body fragments are embossed. One of these

is a relatively large fragment of a scroll- or violin-shaped pictorial flask of the ca. 1840 to 1860 period (Munsey 1970:91). Another six fragments are embossed with ribs or unidentified designs that may be from flasks of other types. One fragment is embossed with ".H" and another has very faint and illegible lettering. The final body fragment is from an embossed recessed panel bottle. While not enough is present to tell what the embossing is, this type of bottle is relatively late and may post date ca. 1865 (Jones and Sullivan 1985:48-49).

Colorless Bottle Glass. Three colorless fragments from bottles were found on the site. These are all from the body of probably relatively small bottles, but none are particularly diagnostic as to age. Two of the sherds are from cylindrical bottles and the other is badly melted.

Decorative Glass

Six fragments of decorative pressed-glass vessels are present in the collection. Four of these are fragments of tumblers. Two of these tumbler fragments are decorated with ribs extending from the base to midway up the sides. The other two have more complex designs consisting of ribs of varying size as well as hobnail elements. The final two fragments are very small but are from vessels with complex decorations including sharp notches and grooves. None of these pressed-glass artifacts is particularly diagnostic with respect to age.

Flat Glass

Fifteen sherds of flat glass which could be reasonably interpreted as window glass were found on the site's surface. There is a possibility that some of these sherds may have been part of thin-walled, flat-sided bottles, but their precisely flat and parallel sides makes this unlikely.

Thickness of window glass has emerged as a key variable for analysis, and changes in thickness through time have been used to develop mathematical models capable of estimating the initial date of construction/occupation of a building or site (Schoen 1990). Using sites from the Central and Northern Plains dating between 1813 and 1900,

Schoen (1990) developed a formula to predict the initial date of construction/occupation of sites in the region:

$$Y = 1725.664 + (1713.008 [X])$$

Where:

Y = estimated date of initial construction/occupation

X = mean thickness value in inches

The thickness of the 15 sherds were measured in hundredths of an inch and were found to range from .035 to .074 in with an average or mean of .052 in. When used in Schoen's formula a date of initial construction/occupation of 1815 is derived. This date is early for eastern Kansas, but is not necessarily inconsistent with other chronological data from the site.

Marbles

Two white stone marbles, one whole and the other broken, were found at the site (figure 7c). The whole specimen measures 16.7 mm in diameter and is made of a limestone-like stone. The broken specimen is a slightly larger 17.5 mm across and appears to be made of marble. Stone marbles were produced in quantity throughout the eighteenth and nineteenth centuries although they declined in popularity starting in the 1870s

due to competition from glass, porcelain, and clay marbles (Randall 1971:102). During this period, Germany was the major producer and none were apparently ever manufactured in North America (Randall 1971).

Glass Beads

Twelve faceted glass beads in a variety of sizes and colors are present in the collection (figure 8). Translucent blue faceted beads were of both simple and compound (more than one layer of glass) construction. The four simple blue beads ranged in size from 3.5 mm long and 3.5 mm in diameter to 7.1 mm long and 8.1 mm in diameter. The three compound blue beads ranged from 3.6 mm in length and 3.9 mm in diameter to 6.8 mm in length and 6.5 mm in diameter. Two translucent aqua faceted beads of simple construction were of a similar size (4.7 mm long, 4.5 mm diameter; 4.8 mm long, 5.1 mm diameter). A single translucent emerald green bead of simple construction measures 5.0 mm long and 4.4 mm in diameter. The final bead is an opaque black specimen of simple construction and measures 6.5 mm long and 8.1 mm in diameter.

Faceted beads of simple and compound construction of the type found at this site occur on sites throughout the Plains and Midwest.

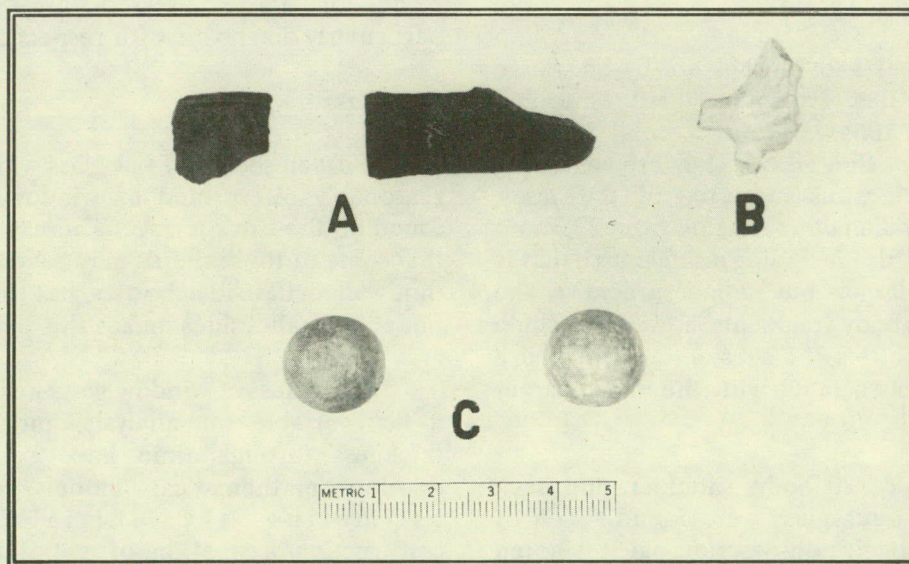


Figure 7. Pipes and marbles: a, stub-stemmed pipe fragments; b, kaolin pipe fragment; c, stone marbles.

These beads were generally available starting in the mid-eighteenth century, and are extremely common on sites throughout the first half of the nineteenth century (Good 1972; cf. Lees 1991).

Pendant

The single pendant from the site is teardrop shaped (figure 8). The setting is handmade copper or copper alloy which surrounds an emerald green teardrop-shaped piece of glass. The glass is multifaceted on the reverse and on the obverse is flat with beveled edges. This pendant has a loop at the top for suspension.

Finger Ring

The finger ring in the collection is brass and may at one time have been plated. It is plano-convex in cross section and the band is 3.7 mm wide. It has an inside diameter of 19.4 mm.

Gun Flints

Two gun flints were found at the site. One is a grey flint of English origin. It measures 19.5 mm wide and 23.5 mm long. It is in relatively good shape and while it may have been used is certainly still serviceable. The second flint, however, is not only badly burned but is

exhausted -- probably beyond use. This flint may be of European origin but its burned condition makes source identification impossible. It is 20 mm wide and only 16.6 mm long.

Gun flints were, of course, used in flintlock firearms which were the standard weapon until the 1830s when percussion ignition firearms were introduced. Flintlocks remained in use, however, well beyond their technological obsolescence. A case of flintlock trade rifles found on board the steamboat *Arabia*, sunk in 1856 (Hawley n.d.) and a flintlock mechanism found at the 1864 Mine Creek Civil War battlefield (Lees 1990), both in Kansas, illustrate their continued importance. Other later examples abound as well (cf. du Mont 1974).

Tobacco Pipes

The 10 fragments represent four distinct types of tobacco pipes. Most numerous are six fragments of long stemmed pipes made from white kaolin. Three of these are stem fragments, including a section of a ribbed bowl, a fragment of a decorated bowl, and a fragment of the base of a bowl showing a spur and a ribbed bowl pattern (figure 7b). Among the less common fragments is a pipe stem similar to those from long stemmed white kaolin pipes except that it is brick red in color.

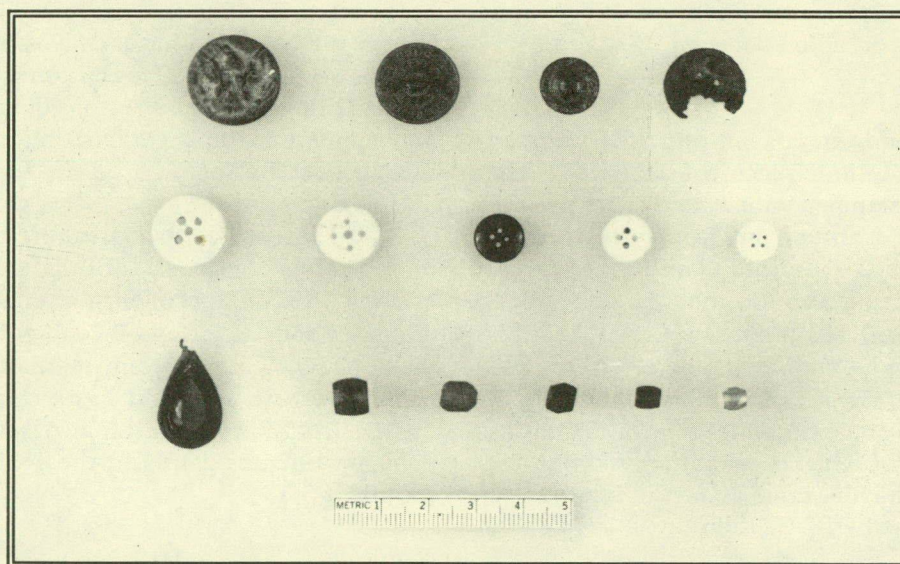


Figure 8. Buttons and beads: Top row, metal buttons; Middle row, bone and ceramic buttons; Bottom row, pendant and glass beads.

What appears to be a section of a burned pipestone pipe is also included. This is a small fragment but is similar to pipestone pipes found on Native American sites during the Protohistoric and early Historic periods in Kansas.

The final two pipe fragments are from stub-stemmed stoneware pipes (figure 7a). Stub-stemmed or elbow pipes have short stems into which a detachable reed was fitted. These fragments include a section of a bowl and the stem, both finished with an identical salt glaze and both carrying similar embossed bands with a cross-hatch design. These may be from the same or from identical pipes. These are similar to pipes illustrated as coming from pottery site 33CT256 at Point Pleasant, Ohio (Sudbury 1979:Plate 11), and are probably attributable to that source. This pottery was in operation from the 1840s until ca. 1890. Sudbury (1979:182) believes pipe production at this location dates to after ca. 1850.

Clothing Buttons

The 11 buttons in the collection include metal, bone, shell, and ceramic types (figure 8). One of the metal buttons is a two-piece brass button (18 mm diameter) with a plain front and with a brass eye soldered to the back. Engraved on the back is "TREBLE GILT COLOUR" around a sunburst design. This type of button is found on sites occupied between 1800 and 1865 (South 1964).

A second metal button, 12.4 mm in diameter, is of three-piece construction. The brass front is stamped with a decorative pattern and is crimped around an iron back through which a brass eye is inserted. This type of three-piece construction was invented by R. Sanders and patented in 1823 (Johnson 1948:13) and is found commonly on sites dating after ca. 1830 (Olsen 1963). The use of iron instead of copper or brass was a somewhat later innovation dating to the time of Queen Victoria's Coronation (1837) and which became almost ubiquitous on civilian buttons by 1850 (Johnson 1948:14).

Yet another metal button is a three-piece U.S. general service button. This features a

copper front with an eagle with lined shield stamped on it and a copper back stamped with "EXTRA QUALITY," to which a copper eye is soldered. This is the model 1855 general service button that remained in use until the turn of the century (Johnson 1948). What is probably a second military button is represented by the front of a two-piece, iron, four-hole suspender type button. These are found on Civil War period and later sites (Olsen 1963; cf. Herskovits 1978:39-41; cf. Lees 1990).

Bone buttons are represented by two five-hole specimens measuring 11 and 15.7 mm in diameter. The smaller of the two is broken but is flat on both sides. The larger button has a flat back but on the front has a convex band around the edge. This type of bone button is dated to the 1750-1830 period by Olsen (1963) and as late as 1865 by South (1964).

Two shell buttons are included in the collection. These include a four-hole button 8.4 mm in diameter. This button is flat on both sides but has an engraved design on the front. The second button is badly deteriorated but the center is still present. This fragment is characterized by the remains of a brass shank inserted through what was probably its center.

Porcelain buttons are represented by three specimens. The most unusual is a white, five-hole button 13.3 mm in diameter. This button is flat on the back and has a convex band around the edge on its front. This button is identical in form to one of the bone buttons described above and appears to be a ceramic imitation of this type of bone button.

The other two specimens are more typical of porcelain buttons. Both are four-hole buttons. A white specimen measures 10.4 mm in diameter and is convex on both sides. A dark blue specimen is 10.6 mm in diameter. It is convex on both sides but has a concave center on the front. These latter two specimens are common on sites dating to the 1830s and later (South 1964).

Nails

Fourteen nails were found at 14JO55. Of

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Nails

Fourteen nails were found at 14JO55. Of

these, one is a wire nail, made after ca. 1880, and is certainly a modern intrusion into this site. The other nails are all machine cut nails.

The cut nails include eight head fragments, one tip fragment, and one shank mid-section. Also present are three whole nails. One of these has a severe bend near its head; this specimen measures about 40.6 mm long. Another whole nail is straight and measures 47.5 mm long. The final whole nail has a slightly curving bend in its shank and measures 55.3 mm long.

Screw and Bolt

The collection includes a single screw and a single bolt. The bolt is square headed and broken. The screw is 48.2 mm long and is a wood screw. It is notable because it is pointless. Wood screws were little used prior to the development of mechanized screw lathes during the ca. 1800 to 1830 period (Walker 1971:87). Screws produced during this period and up to about 1846 were characteristically pointless (Mercer 1976:25 [1923]). The screw from 14JO55 is of this early, pointless variety and thus can be associated with the pre-1846 period.

Utensils

A number of artifacts were found that are identified as utensils that probably served in a kitchen or similar utilitarian function. These include an iron bale ear that was fastened with iron rivets (figure 9a), a fragment of a thin walled cast iron vessel, a pewter ferrule probably for a table utensil such as a fork, and the bowl of what appears to be a pewter spoon.

Locks

Two locks are included in the collection. One of these is a complete iron padlock (figure 9b) while the other is a furniture or trunk lock, also constructed of iron.

Trap

A fragment of the spring to an iron trap was identified in the collection (figure 9c).

SITE CHRONOLOGY

The collection from 14JO55 contains many items that are specifically or generally age-diagnostic. The earliest and most intriguing indicator is the window glass which, using a mathematical formula, provides the year 1815 as an estimated date of initial construction/occupation for the site. This date is relatively early for Kansas sites sharing characteristics with 14JO55, but is not inconsistent with other information from the site.

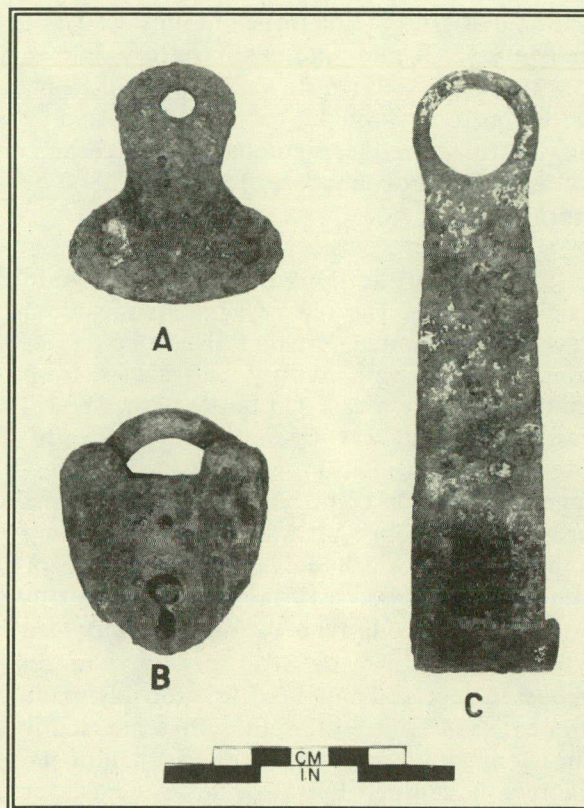


Figure 9. Iron artifacts: a, bale ear; b, padlock; c, trap spring.

Some of the more precisely dateable artifacts, the shell-edged ceramics, are also early. The white and blue shell-edged fragments from the site date to the 1802 to 1832 period, which brackets the 1815 window glass date. The embossed green shell-edge was manufactured during the ca. 1823 to 1835 period, which dates immediately after the window glass date. While it must be kept in mind that considerable lag

may exist between the initial manufacture of a ceramic vessel and its discard on a site, the relatively high frequency of shell-edge fragments on this site and the lack of shell-edge forms post-dating the mid-1830s is seen as potentially significant.

The transfer-printed wares, and in particular the black colors, are consistent with a date within the first half of the nineteenth century. Most of these could, however, date later as well. The hand-painted wares, in particular the bold floral patterns, are characteristic of the first three to four decades of the century. A mid-nineteenth century date is, however, suggested by the single piece of heavy white ironstone (probably ca. 1840-1870) and by the Bristol glazed/ferruginous dipped ceramic bottle, which probably dates to around 1860 or later.

Glass bottles provide relatively good insight on age. The olive fragments include a cracked off champagne-type finish, a hold over from the eighteenth century, and a base from what is probably a case gin bottle with a pontil scar. The pontil scar shows this bottle to pre-date about 1870 at the very latest. The aqua fragments include eight bases with pontil scars (pre-1870) and one that was probably held in a snap case and which dates to about 1850 or later. Also included with the aqua fragments is a sherd of a violin-type pictorial flask, which dates to the 1840 to 1860 period, and an embossed recessed panel bottle, probably made after ca. 1865. The bottles, therefore, are clearly consistent with a date within the first half of the nineteenth century but provide evidence for occupation within the third quarter of the century as well.

The faceted glass trade beads all share a similar date of availability from the mid-eighteenth century through at least the 1840s. These types of beads are extremely common on sites during the first half of the nineteenth century.

The buttons provide a variety of dates. Present are a two-piece brass button dating to the 1800 to 1865 period, a three-piece iron back button dating after ca. 1840 and being extremely

common by 1850, a three-piece U.S. general service button made between 1855 and 1902, several five-hole bone buttons which date between ca. 1800 and ca. 1865, and two four-hole porcelain buttons that are common on sites dating after the 1830s. Once again, these buttons support a date within the first half of the nineteenth century but also clearly show the site was occupied into the third quarter of that century.

Two final items must be mentioned. One is a pointless wood screw, said to date prior to ca. 1846. Assuming an architectural function, which is likely, this would point to initial construction prior to the mid 1840s. The other item consists of two gun flints. While gun flints continued to be used throughout the nineteenth century, flintlocks were the standard firearm through the 1830s and were extremely common for several decades following that.

Overall, the artifacts provide very strong evidence for occupation of the site at least as early as the 1840s and relatively convincing evidence for occupation well before that, perhaps as early as the 1820s. On the other end, the artifacts provide equally strong evidence that the site was used into the third quarter of the nineteenth century, perhaps as late as the Civil War. Use does not appear to have extended much beyond this event; if it had, the composition of the assemblage would be notably more diverse, especially in terms of bottles and ceramics.

A best estimate of the dates for this site is:

Initial occupation: 1820 to 1840

Abandonment: 1865 to 1870

The span of occupation thus may have lasted for as little as 25 years or as many as 50. These dates would suggest that this site was occupied at the time of the 1844 flood that destroyed the nearby Shawnee mill and which by all rights should have destroyed this site as well.

SITE FUNCTION AND CULTURAL ASSOCIATION

It is difficult to speculate as to site function and cultural association on the basis of a surface collection of artifacts and a number of poorly defined, buried features. In terms of function, an assemblage heavily weighted towards personal artifacts and artifacts associated with kitchen activities suggests a site with a strong domestic function. Personal artifacts of note include the numerous buttons and beads, the pendant, the ring, the marbles, and the tobacco pipes. Kitchen related artifacts include evidence for utensils and numerous fragments of refined earthenware vessels such as plates, cups, and bowls; fragments of utilitarian stoneware vessels; and fragments of bottles holding liquors and other contents.

The presence of several large, distinct (but undefined) features on the site suggests remains of buildings and/or constructed trash pits may be present. The presence of buildings is also supported by the presence of window glass, nails, and possibly by a screw. These architectural artifacts and features along with the artifact profile reviewed above indicate that this site was one of primary cultural use as opposed to an area of secondary deposition through trash dumping activities or through natural erosion and transport of artifacts. Based on the evidence, it is strongly suspected that site 14JO55 supported a dwelling and related extramural features.

Cultural association is a difficult characteristic to measure regardless of the level of archeological information available. The glass trade beads are on the surface suggestive of an association with Native American cultures because beads are known to be found commonly on such sites. Although associated with the Native American trade, beads are also found in quantity on trading post sites. Likewise, the refined earthenwares are on the surface suggestive of a Euroamerican cultural tradition, but these ceramic types are indistinguishably present on Native American sites. Given the limitations provided by the nature of the collection and the lack of substantive work in distinguishing site function based on artifact

profiles for the early nineteenth century in this area, no firm statement on cultural affiliation is possible.

Given the fact that during most if not all of the period during which this site was occupied it was located within the Shawnee reserve, an association with the Shawnee is certain. It may be that this site is a Shawnee farmstead but a persistent possibility remains that this is the site of a Chouteau trading house; in 1854 the land on which this site is located was owned by Francis Chouteau (Stuck 1857). Members of the Chouteau family were, however, large landholders within the Shawnee reserve and within the 14JO55 vicinity. The plat and field notes for the 1856 subdivision survey provide no clues to the existence of this site at that time (Swartz 1856).

SUMMARY AND RECOMMENDATIONS

The surface collection for 14JO55 very clearly illustrates that this site was first occupied during the first half of the nineteenth century and potentially during the second or third decade of that century. It also is clear that occupation continued into the third quarter of the century, possibly up to the Civil War. The artifacts that suggest such a late occupation are rare, however, and it is possible that these do not reflect the main site occupation.

The structure of the site and the artifacts strongly suggest this is a site of primary use, and that this use probably included a dwelling and the associated domestic activities. As to cultural affiliation, this is a more difficult question that cannot currently be confidently addressed. Chronologically, the site fits the Shawnee occupation of this portion of Kansas extremely well, and it is possible, if not probable, that this is a Shawnee farmstead. Other cultural interpretations cannot be ruled out but a very strong association with the Shawnee remains certain.

The difficulty in examining this site, and the fact that more information on the archeology of this period comes from surrounding states, in particular Oklahoma, than from Kansas,

illustrates a significant need. The first half of the nineteenth century, and in particular the pre-Territorial era, is very poorly known in Kansas. Numerous groups of people inhabited the state during this period which were to a greater or lesser degree historically disenfranchised. That is, the little information that we have about these people derives not from their own words but from the words of others. Archeology emerges in this setting as a fundamental way to learn about this period and about these people.

It is no secret that in the 1830s, 1840s, and 1850s many thousands of sites dotted the eastern Kansas landscape in the form of Native American farmsteads and villages and the sites of trading posts, agencies, missions, etc. The largest part of this settlement pattern was abandoned as the Native Americans were moved out of state or as their lands were allotted, and as a new wave of settlement spread across the land.

To date, very few archeological sites that can be firmly associated with this period are recorded in the state site files of Kansas. There is a need for these sites to be found and documented with site records. Without a comprehensive site record, archeological research on these sites will be difficult, and it will not be possible to understand and preserve this important part of Kansas history which, in Johnson County, is very rapidly being destroyed by rapid urban growth.

As has been alluded to above, there has been little in the way of archeological research on sites of this period and type. Sites dating to the pre-Territorial nineteenth century that have been excavated include villages of the indigenous Kansa and Pawnee, areas at Fort Scott and Fort Leavenworth, and sites associated in some way with Native American groups that emigrated to the state during this period. Work on the indigenous villages include the Pawnee Kansas Monument and Bogan sites (Smith 1949; Witty 1968; Marshall and Witty 1990) and the Kansa Blue Earth and Hard Chief's villages (Wedel 1959; Thies 1988). Extensive excavation was conducted at Fort Scott (1842-1853), and limited work was done at a dump in use between about 1840 and 1880 at Fort Leavenworth, established

in 1827 (Reynolds 1983; Wagner et al. 1988). Sites associated with emigrant Native Americans are limited to two mission sites, the Ottawa Baptist Mission (Lees 1986) and Potawatomi Baptist Mission, and a trash pit in Shawnee County (14SH315) interpreted to be associated with Potawatomi use during the 1847-1875 period (Reynolds 1987).

While a fair amount of work has been accomplished on sites of the period, none with the exception of the interpreted Potawatomi trash pit has been conducted on small, isolated sites such as is represented by 14JO55. These types of sites, whether they be associated with Native American use, which has the greatest probability, or have other cultural affiliations, can certainly be expected to be the most common site type from this period in eastern Kansas. They are further the type of site for which the documentary record is the poorest. A concerted, scientific program of site testing and excavation is needed to build a set of comparative data capable of informing us on this period of Kansas history.

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REFERENCES

- Barry, Louise
1972 *The Beginning of the West, Annals of the Kansas Gateway to the American West 1540-1854*. Kansas State Historical Society, Topeka.
- Bennett, Marsha
1987 Transcription of National Archives microcopy of an Indian Affairs manuscript relating to the Shawnee Indian Mill, Microcopy M-234, Roll 300, Frames 0866-0868. Copy of transcription on file, Archeology Department, Kansas State Historical Society (Johnson County Small Projects File).

- Blair, Edward
1915 *History of Johnson County, Kansas*. Standard Publishing Company, Lawrence, Kansas.
- Copeland, Robert
1982 *Blue and White Transfer-Printed Pottery*. Shire publications.
- du Mont, John S.
1974 *Custer Battle Guns*. The Old Army Press, Fort Collins, Colorado.
- Eastman, S.
1854 *Map of Nebraska and Kansas Territories, Showing the Location of the Indian Reserves According to the Treaty of 1854*. Lippincott, Grambo, Philadelphia.
- Good, Mary Elizabeth
1972 *Guebert Site: an 18th Century Historic Kaskaskia Indian Village in Randolph County, Illinois*. Memoir II, The Central States Archaeological Societies, Inc.
- Greer, Georgeana H.
1981 *American Stonewares, The Art and Craft of Utilitarian Potters*. Schiffer Publishing, Exton, Pennsylvania.
- Hawley, David
n.d. *The Raising of the Shipwreck "Arabia."* River Salvors, Inc.
- Herskovits, Robert M.
1978 *Fort Bowie Material Culture*. Anthropological Papers of the University of Arizona Number 31. The University of Arizona Press, Tucson.
- Johnson, Alfred E.
1991 *Kansa Origins: an Alternative*. *Plains Anthropologist* 36(133):57-66.
- Johnson, David F.
1948 *Uniform Buttons, American Armed Forces 1784-1948*. Century House, Watkins Glen, New York.
- Jones, Olive
1971 *Glass Bottle Push-ups and Pontil Marks*. *Historical Archaeology* 1971:62-73.
- Jones, Olive, and Catherine Sullivan
1985 *The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures*. Studies in Archaeology, Architecture, and History. National Historic Parks and Sites Branch, Parks Canada, Environment Canada.
- Küchler, A.W.
1974 *A New Vegetation Map of Kansas*. *Ecology* 55(3):586-604.
- Lees, William B.
1986 *Jotham Meeker's Farmstead, Historical Archeology at the Ottawa Baptist Mission, Kansas*. Anthropological Series Number 13, Kansas State Historical Society, Topeka.
1988 *The Search for Shawnee Mill (1837-1844): Results of an Archeological Survey of Portions of the Mill Creek Valley, Johnson County, Kansas*. Unpublished manuscript on file, Kansas State Historical Society, Topeka.
1990 *Getting the Lead Out: Archeological Research at the Mine Creek Civil War Battlefield, Kansas*. Paper presented at the Plains Conference, Oklahoma City.
1991 *Report on Artifacts from Sites 34MI121, 34MI144, and 34MI313, Eufaula Lake, Oklahoma*. Unpublished manuscript in possession of the author.
- Marshall, James O., and Thomas A. Witty, Jr.
1990 *The Bogan Site, 14GE1, An Historic Pawnee Village*. *The Kansas Anthropologist* 11(1):21-32.
- Mercer, Henry C.
1976 [1923] *The Dating of Old Houses*.

Bucks County Historical Society
Papers 5 (original edition 1923).

Series Number 14, Kansas State
Historical Society, Topeka.

Miller, George L., and Robert R. Hunter, Jr.
1990 English Shell Edged Earthenware:
Alias Leeds Ware, Alias Feather
Edge. *35th Annual Wedgwood
International Seminar*, pp. 107-136.

Miner, Craig, William E. Unrau
1990 *The End of Indian Kansas, A Study of
Cultural Revolution, 1854-1871.*
University Press of Kansas,
Lawrence.

Munsey, Cecil
1970 *The Illustrated Guide to Collecting
Bottles.* Hawthorn Books, New
York.

Noël Hume, Ivor
1980 *A Guide to Artifacts of Colonial
America.* Alfred A. Knopf, New
York.

Olsen, Stanley J.
1963 Dating Early Plain Buttons by Their
Form. *American Antiquity* 28:551-
554.

Plinsky, Robert O., Jerome L. Zimmerman,
Harold P. Dickey, George N. Jorgensen, Jr.,
Richard W. Fenwick, and William E. Roth
1979 *Soil Survey of Johnson County,
Kansas.* United States Department
of Agriculture, Soil Conservation
Service, in cooperation with Kansas
Agricultural Experiment Station.

Randall, Mark E.
1971 Early Marbles. *Historical
Archaeology* 1971:102-105.

Reynolds, John D.
1983 *Archeological Investigations at Old
Fort Scott, 14BO302, Fort Scott,
Kansas, 1968 to 1972.* National Park
Service, Midwest Region, Omaha,
Nebraska.

1987 *The Archeology of Grove Reservoir,
Kansas, 1969.* Anthropological

Schoen, Christopher M.
1990 Window Glass on the Plains: An
Analysis of Flat Glass Samples from
Ten Nineteenth Century Plains
Historic Sites. *Central Plains
Archaeology* 2(1):57-90.

Schoewe, Walter H.
1949 The Geography of Kansas.
*Transactions of the Kansas Academy
of Science* 52(3):261-333.

Smith, Carlyle S.
1949 Fieldwork in Kansas, 1949. *Plains
Anthropological Conference Newsletter*
2(4):5-6.

South, Stanley
1964 Analysis of the Buttons from
Brunswick Town and Fort Fisher.
The Florida Anthropologist 17(2):113-
132.

Staab, Rodney
1989 Proposal for a Shawnee Indian
farmstead of the late 1840s living
history project. Photocopy on file,
Kansas State Historical Society,
Topeka.
1991 How Much Produce did the Shawnee
Farmers Sell to Trail Emigrants?
Trails Head Tidings 5(6):3-5.
1993 Farmsteads of the Kansas Shawnee.
The Kansas Anthropologist 14(1):13-
27.

Stuck, I.C.
1857 Plat maps of land included in the
Shawnee Indian reservation of 1854,
ca. 1857. 22 color maps, 37 x 32
inches. Map collection, Kansas State
Historical Society.

Sudbury, Byron
1979 Historic Clay Tobacco Pipemakers in
the United States of America. In
The Archaeology of the Clay Tobacco

Pipe II, edited by Peter Davey, pp. 151-341. BAR International Series 60, British Archaeological Reports, Oxford, England.

Swartz, James T.

1856 Field Notes of the Subdivision and Meandering Lines of Township 11 South Range 23 East of the 6th Principal Meridian Kansas Territory "Known as Part of the Shawnee Reserve." Archives Division, Kansas State Historical Society, Topeka.

Thies, Randall M.

1988 Hard Chief's Village and the 1987 Kansas Archeology Training Program. *Journal of the Kansas Anthropological Association* 8:86-108.

Wagner, Mark J., Mary R. McCorvie, Terrance J. Martin, and Kathryn E. Parker

1988 *Draft Report, Phase I, II, and III Archeological Investigations at Fort Leavenworth, Kansas*. Cultural Resource Management Report No. 132, American Resources Group, Ltd., Carbondale, Illinois.

Unrau, William E.

1991 *Indians of Kansas*. Kansas State Historical Society, Topeka.

Walker, John W.

1971 *Excavation of the Arkansas Post Branch of the Bank of the State of Arkansas, Arkansas Post National Memorial, Arkansas*. National Park Service, Southeastern Archeological Center.

Weatherbee, Jean

1985 *A Second Look at White Ironstone*. Wallace-Homestead, Lombard, Illinois.

Wedel, Waldo R.

1959 *An Introduction to Kansas Archeology*. Bulletin 174. Bureau of American Ethnology, Smithsonian Institution.

Witty, Thomas A., Jr.

1968 The Pawnee Indian Village Museum Project, 14RP1, Republic County. *Kansas Anthropological Association Newsletter* 13(5).

Witty, Thomas A., and James O. Marshall

1968 *Archeological Survey of the Lower Salt and Plum Creek Valley, Leavenworth County, Kansas*. Kansas State Historical Society, Topeka.

BOOK REVIEWS

Archaeological Method and Theory, vol. 3. MICHAEL B. SCHIFFER, editor. The University of Arizona Press, Tucson, 1991. 198 pp., 11 figs., 6 tables, references. \$35.00 (cloth).

Reviewed by Jim D. Feagins, Saint Joseph Museum

There can be no actual separation (consciously or unconsciously) between theory, method, and the ability to obtain and interpret archeological data. The theories and methods used, even when not formally stated or even when not on a level of conscious awareness, will still profoundly influence the outcome (for better or worse) of archeological research. This subject should not only be of interest to ivory tower archeologists but, so called, "dirt archeologists" can profit greatly by paying more attention to method and theory in archeological and related fields of research.

The *Archaeological Method and Theory* series helps fulfill a need and perform a service to the archeological community. It is useful to have method and theory of archeological and related fields collected within a series, rather than dispersed throughout many publications (some of which may be obscure, unnoticed, and/or hard to obtain). Volume 3 contains six chapters on a wide diversity of topics.

The first chapter, by Cathy Lynne Costin, is titled, "Craft Specialization: Issues in Defining, Documenting, and Explaining the Organization of Production." Costin reviews and critiques how archeologists have defined, documented, and organized the study of craft production. She provides a somewhat formal framework useful to archeologists and ethnologists when explaining a society's production, distribution, and consumption of craft products. The chapter is most applicable to complex social, political, and/or economic systems; however, there is considerable theoretical content which also could be useful for understanding craft specialization in somewhat simpler societies.

Chapter two, "The Study of Technological Organization," is written by Margaret C. Nelson. Her study of the selection and interaction of strategies by individuals for making, using, transporting, and discarding tools is quite beneficial. She also considers the selection of materials necessary for tool manufacture and maintenance and considers the social and economic factors that influence the organization of technological strategies. Nelson addresses the problem-solving processes necessary for humans to produce tools and other related technological adaptations for survival in their environment.

Vernon L. Scarborough, in "Water Management Adaptations in Nonindustrial Complex Societies: An Archaeological Perspective," defines water management as "...the interruption and redirection of the natural movement or collection of water by society" (pp.101). This chapter discusses water management techniques, physical and environmental properties, social costs of water management, and archeological case studies. The case studies document water management methods among historic people in regions in both the Old and New World including the Southern Maya Lowlands, Highland Mexico, American Southwest, North-Central Sri Lanka, and Lower Indus Valley.

One of the most interesting and useful chapters in the volume is "Structure Abandonment in Villages" by Catherine M. Cameron. An understanding of the abandonment of structures is absolutely necessary in order to comprehend the very nature of most archeological sites and the demographics of the inhabitants who resided there. This study involves both time and space. Determining the contemporaneity of structures (or lack thereof) for prehistoric sites and communities is a topic of primary interest among Plains and other archeologists. To answer this question, and a host of others, structural "taphonomic" processes must be carefully examined. It is important to understand natural and cultural formation processes within a site in order to know what happens before, during, and

after structural abandonment. Obviously this understanding is necessary in order to correctly read and interpret the archeological record.

Cameron discusses physical factors that influence structure abandonment, such as deterioration, intended settlement longevity, rate of structure decay, and the changing function of structures. Also social factors affecting structure abandonment are considered: domestic cycles, changes in population, death and disease, natural catastrophes, availability and cost of land and construction materials, social structure, remodeling, vermin, and external social changes (such as warfare). In addition, the cultural factors influencing post-abandonment processes are briefly discussed. All of the above can have profound effect on the archeological record and thus the interpretations derived from that record.

The uses and abuses of computer simulation by archeologists is discussed by Mark Aldenderfer in "The Analytical Engine: Computer Simulation and Archaeological Research." Computer simulation studies in archeology often have been marred with misunderstandings and confusion. Advocates and detractors of computer simulation, either tout it as a wonderful way to have a "poor man's systems theory" or ridicule it as a "manipulated waste of time." Its advantages and limitations are certainly worth noting. This is the chief value of this chapter. There are three main ways

computer simulation is used in archeology: as a tool to create clear problem development, as an experimental laboratory, and to produce data. Aldenderfer does a thorough job of introducing and critiquing archeological computer simulation.

The last chapter, "Normative Thinking and Shell-Bearing Sites" is written by Cheryl Claassen. "Normative thinking . . . is that which seeks to identify typical or average behavior and occurrences" (pp. 249). Claassen primarily discusses midden variation and dietary reconstruction. Certainly shell midden variation is not a "hot" topic among Plains archeologists; however, foods utilized and cultural feeding methods are important considerations to most archeologists, regardless of their geographic interests. Shell is used in varying amounts in many geographic regions. Concerning cultural usage of shell, Claassen examines gathering and consumer behavior, nutritional reconstructions, growth line seasonality studies, habitat reconstruction, and ethnoarcheology.

The value of any method and theory volume (or series) is in the quality of writing, timeliness of material, generation of new ideas, and the consolidation of theory and method in one (or a few) easy to reference sources. In this reviewer's opinion, this is the best volume published, so far, in this fine series by the University of Arizona Press.

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INFORMATION FOR AUTHORS

Manuscripts are actively solicited for *The Kansas Anthropologist*. Manuscripts should have a relationship to Kansas anthropology (archeology, ethnography, ethnohistory, cultural/social anthropology, physical anthropology, etc.). The varied readership of the journal should be kept in mind when preparing manuscripts, and jargon should be judiciously avoided. All manuscripts submitted must be original, unpublished work of the author(s). Style should follow that of *American Antiquity* (see Vol. 57, No. 4, 1992 issue); professionals are expected to submit their manuscripts with this in mind, others who may not be familiar with the *American Antiquity* style guide will receive editorial assistance. Illustrations are encouraged, at least two to three should be used where possible. All illustrations must be of reproduction and if protected by copyright this must be noted so permission for their use can be obtained. Manuscripts will be reviewed by the editorial staff who will judge whether or not an article will be used and what revisions may be necessary before publication. Outside reviewers may be used.

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