

ETHNIC IDENTIFICATION OF AN HISTORIC SAC BURIAL FROM NORTHEASTERN KANSAS

by
Douglas D. Scott

ABSTRACT

A partial human skeleton, associated with a number of white manufactured goods, has been excavated on a bluff overlooking the Missouri River. It is a male about 20 years of age and about five feet two inches in height. He is identified as a Sac Indian who was interred between 1840 and 1860.

INTRODUCTION

In mid-August of 1968, members of the Great Plains Archaeological Field School, sponsored by the University of Kansas, Kansas State University, and Wichita State University tested a site in Doniphan County, Kansas. The author was a member of the field party that excavated the site. Excavation of the site, designated 14DP26, produced a human burial with a number of white-manufactured trade goods.

14DP26 is located on a small bluff overlooking the floodplain of the Missouri River and is about $\frac{3}{4}$ mile from the river. The site is located in the SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 17, Township 2 South, Range 20 East and is situated on the edge of a cornfield that has been under cultivation for a number of years. The soil is a sandy loess and there are a variety of grasses and deciduous trees along the periphery of the bluff.

During the pre-excavation survey, a number of glass beads, bottle glass fragments, and crockery fragments were found; and the decision to test the site was made on the basis of this evidence. Four test pits were initially begun along the edge of the cornfield. All were oriented on a north-south axis and were dug well below the eight inch plow zone into the sterile loess. A few ceramic fragments, along with some metal fragments, a few glass trade beads, and some human and animal bones were recovered from the test pits.

THE BURIAL

The burial was first noted at a depth of about eight inches in one of the tests. The

skeleton was oriented northwest-southwest and was associated with a number of items of white manufacture (Fig. 1). As the remains were uncovered, it became apparent that the entire skeleton was not present. The sacrum was vertical when recovered with the legs outstretched to the southeast, indicating that the individual was probably buried in a sitting position and possibly was a partial surface burial.

The bones that are present are in good condition, but somewhat fragmented, probably due to activities concerned with preparing the field for cultivation. Both femurs, tibias, and fibulas are present, but the proximal ends of the left femur and left tibia are incomplete and the proximal ends of both fibulas are missing. The pelvis is incomplete with only the right greater sciatic notch, part of the right iliac fossa, both ischial tuberosities, acetabulums, and sacrum being present. The calcaneum and talus of both feet are present, as are several of the metatarsals and phalanges of both feet. Metacarpals and phalanges of both hands were also recovered. A few broken ribs, a maxillary canine, and a recently or partially erupted mandibular third molar comprise the rest of the remains. One of the rib fragments and the proximal joint of the fifth digit of the left hand of the burial have green stains on them. This would indicate that they had been in contact with either copper or brass objects. The stain on the phalange is 0.5 cm. in width and encircles the bone. This stain suggests that the individual was wearing a ring at the time of burial, although no trace of the ring was found.

An iron tankard or metal pitcher was found resting on the knees of the skeleton and a flintlock pistol barrel was laid across the top of the tankard or pitcher (Fig. 1). Twenty four

wampum beads and five pony beads were recovered in the fill near the pelvic area. A piece of textile of woven brass and linen thread was also found near the left hand bones.

A brass bell was found on the same level as the burial, but about two feet northwest of it (Fig. 1). Scattered throughout the fill of the burial excavation were other artifacts consisting of a brass ramrod guide with a portion of a hickory ramrod still in it, a portion of the side plate and spring of a clasp knife, a brass pendant, a small brass hawk bell, a green glass fragment, iron fragments, probably from the tankard or pitcher, and unidentified iron fragments, a mussel shell fragment, and a utilized chert flake.

The burial was identified as a male about 20 years of age at death and about 163 cm. or 5 feet 2 inches tall. Sex was determined on the basis of the general ruggedness of the bones, the angle of the axis of the shaft to the axis of the head and neck of the femur, and largely on the configuration of the sciatic notch. Although the sacrum is unusually short and broad for a male, it is uniformly curved, as in most males. The overall view points to a male, as do the associated artifacts. (See Table 1 for measurements of the skeletal material.)

The stature was determined by measurements of the right femur and tibia, using formulas from Genoves (1967:76). The femur gives a calculation of $163 + 3.417$ cm. or 5 feet 2 inches for the height. The tibia gives a calculation of $161 + 2.812$ cm. or 5 feet 1 inches for height.

Age was estimated on the basis of the closure of the epiphyses of the femur and tibia, which close between the ages of 18 and 20. A second consideration was the recently or partially erupted third molar, which appears between the ages of 17 and 25. These considerations yielded an age of 19 or 20.

A second individual is represented by the head and neck of a right femur from the burial excavation, in which the epiphyses has not fused. This individual is probably under 18 years of age, as indicated by the unfused epiphyses of the head and trochanters. The sex is indeterminate.

Perhaps one other individual is represented by one third unerupted molar, one second left maxillary molar, a portion of the left ramus of

the mandible, and a small portion of the occipital bone and a broken rib. These bones are from the surface-test pit collection. The ramus has green stains on it, which would indicate that it had been in contact with either copper or brass objects. This individual is probably about 15 or 16 years of age, as indicated by the unerupted third molar, which would place the individual under 25 and probably under 17. The heavy tartar buildup on the second molar, which appears about 12 or 13, would indicate that it had been in use for some time, placing the age between 12 and 17, and probably about 16. The sex is indeterminate. The femur fragment and the other human bones mentioned above probably represent other burials at the site that have been disturbed by cultivation. The bones indicate that the area was used for more than one interment. Whether it was a formal cemetery or not remains to be determined.

THE ARTIFACTS

Of the 81 artifacts recovered, only 32 can be directly associated with the burial. Trade beads comprise 29 of the 32 associated artifacts. The entire collection includes: 1 potsherd, 19 stone artifacts, 2 earthenware fragments, 10 glass fragments, 36 trade beads, 7 brass artifacts, 4 iron artifacts, and 2 pieces of textile.

Most of the surface collection and the test pit collection were inadvertently mixed during shipment and artifacts from this collection are designated surface-test pit collection when they are described.

ABORIGINAL MATERIAL

Pottery

The one small body sherd is from the surface-test pit collection and is grit tempered with mica, feldspar, and quartz inclusions. The exterior surface is cord-marked and mottled buff to dark brown in color. The interior is gray, grading to buff in the center. The sherd is 0.5 cm. thick. Although the sherd is too small to assign it to a definite type, it does resemble Doniphan Ware described by Wedel (1959:112).

Chipped Stone

The single chipped stone artifact was recovered from the surface-test pit collection. It is a bifacially retouched blade fragment, roughly oval in shape, and is mottled gray in

bottom to top. The reconstructed form has been bent out of proportion, probably due to the weight of the earth on it during burial. The original form was probably a quart-sized measuring tankard or pitcher, of the type used for measuring liquids, such as liquors.

Unidentified Iron Fragments

Three unidentified iron fragments were also found in the burial excavation. They range in thickness from 0.3 cm. to 0.5 cm. and are probably from the same unidentified object.

Pocket Knife

A portion of the brass side plate and iron spring of a clasp knife was recovered from the burial excavation (Fig. 2e). The spring is attached to the side plate by means of a brass double stage rivet. The overall length is 4 cm.

and the width is 0.4 cm. The spring is 3.2 cm. in length, 0.4 cm. in width, and 0.6 cm. in thickness in the center, tapering to 0.4 cm. on either end. The brass side plate is 3 cm. in length, 1.1 cm. in width, and 0.1 cm. in thickness.

Ramrod Guide

A brass pistol ramrod guide with a fragment of hickory ramrod remaining in it was recovered from the burial excavation (Fig. 2f). The guide is 2.1 cm. in length with raised bands on either end. Its outside diameter is 0.9 cm. A piece of the iron stock retaining pin is still in position. The hickory ramrod fragment is 0.6 cm. in diameter and 1.7 cm. in length. The guide probably was part of the pistol found with the burial, but as it was not in direct association, this cannot be

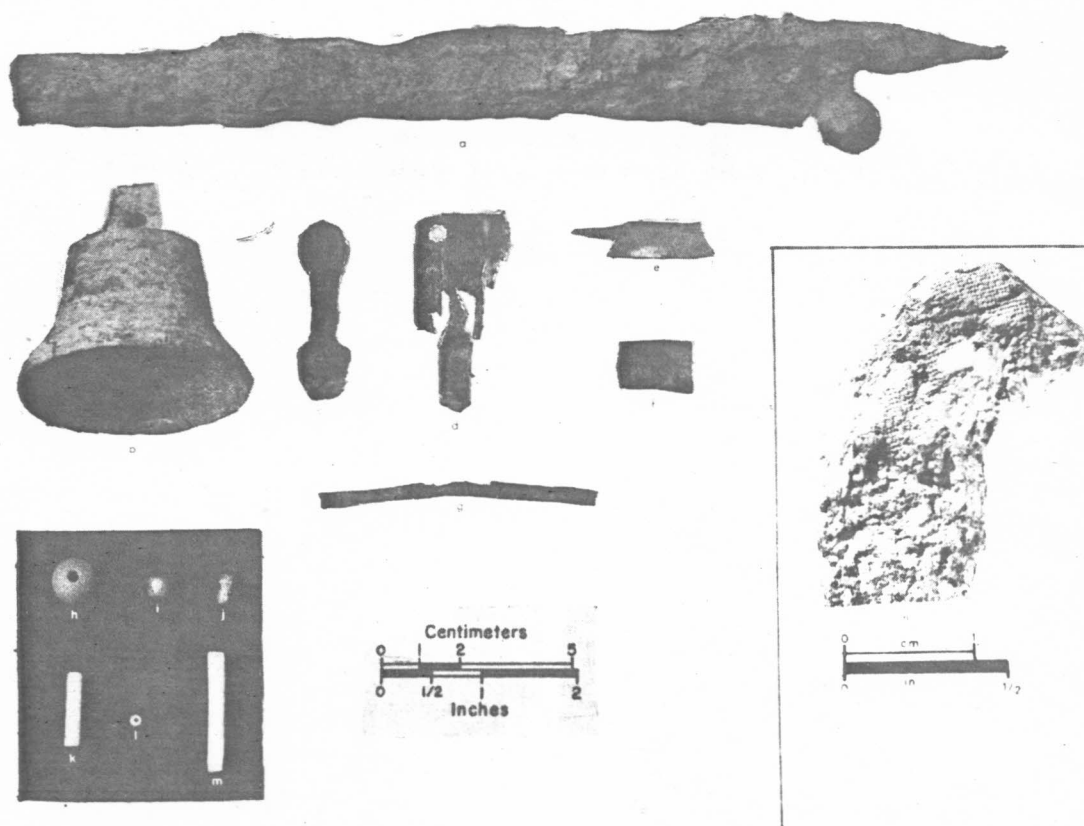


Fig. 2. Artifacts recovered during excavation: a. left side of flintlock pistol barrel; b. c. brass bell and iron clapper; d. brass pendant; e. pocket knife side plate and spring; f. pistol ramrod guide; g. brass rod; h. blue spheroid bead; i. blue faceted bead; j. copper colored bead; k. white wampum bead; l. white seed bead; m. purple wampum bead; n. fabric adhering to end of oval strike a light

proven.

Pendant

A thin, sheet brass pendant was also recovered from the burial excavation (Fig. 2d). When excavated, it was incomplete and badly bent, as if it had been hit by a plow. It is a rectangle 0.6 cm. in length and 2.7 cm. in width. The pendant has a series of three sets of vertical striations separated by two plain vertical bands. Two holes in the plain bands on one end were probably used for suspension.

Bells

Two brass bells were recovered from the burial excavation. One is a section of a small, round bell of the type known as hawk bells and is about 0.6 cm. in diameter. The section has a small opening in the top, probably for suspension.

The second brass bell is a large, expanding base shaped bell (Fig. 2b). The bell is 6.2 cm. in length and 3.6 cm. in width at the top, expanding to 5.8 cm. at the bottom. It was manufactured by casting. The cast iron clapper (Fig. 2c) was found in position and is 5 cm. in length. The clapper was attached to the bell by means of an iron loop. The top of the bell has a brass tab protruding from it, which has a hole drilled through it for suspension.

Unidentified Brass Fragments

Two brass objects, unidentified as to function, were also found. An elongated brass rod, rectangular in cross-section, was found in the surface-test pit collection (Fig. 2g). It is 7.5 cm. in length with notches having been cut into the center. The notches consist of two crude cuts taken from one edge in the center. The cuts are angled downward and toward each end. The results are two small triangles of brass removed and the remaining area rounded and smoothed. It is 0.4 cm. in width and 0.5 cm. in height. One end shows heavy oxidation where it has been in contact with an iron object. This rod may be a bracelet blank.

The second unidentified brass piece is from the burial excavation and is a small concave disc 0.05 cm. in thickness and 0.4 cm. in diameter. A small piece of brass wire has been placed through a hole in the disc. The wire is 0.7 cm. long and 0.1 cm. in

diameter. This may be a bead fragment.

Glass

Ten fragments of glass were recovered from the excavations, nine from the surface-test pit collection. Of the nine, one is a flat, clear glass fragment, 0.3 cm. in thickness. Another is a slightly curved pink glass fragment 0.7 cm. in thickness, probably from a bottle. The other seven fragments are translucent and are a light green in color. They range in thickness from 0.2 cm. to 0.6 cm. The four thickest appear to be from the base and kickup of a bottle, and the rest appear to be from the body. They would all appear to be from the same container, possibly a wine bottle.

The remaining fragment was found in the burial excavation. It is a translucent green glass and measures 0.2 cm. in thickness. It appears to be from the neck and shoulder area of a bottle and is probably part of the same bottle as the seven other green fragments.

Trade Beads

Two multifaceted, blue glass trade beads were recovered from the surface-test pit collection (Fig. 2i). They measure 0.6 cm. in diameter and 0.5 cm. in length. One light blue spheroid trade bead, 0.12 cm. in diameter, was found in the surface-test pit collection (Fig. 2h).

One copper-colored, elongated glass bead was also found in the surface-test pit collection (Fig. 2j). It has a white core surrounded by a mottled copper-colored glass. It is 0.9 cm. long and ranges from 0.4 cm. in the center to 0.2 cm. in diameter on either end.

Six opaque, white glass pony beads were recovered (Fig. 2l). Five of these were in direct association with the burial. They all measure 0.3 cm. in diameter and 0.2 cm. in length.

Twenty-six wampum beads were recovered, 24 of which were found in association with the burial. There are two white beads (Fig. 2k) from the burial excavation and 24 purple beads (Fig. 2m). The wampum beads range from 1.0 cm. to 3.2 cm. in length and from 0.3 cm. to 0.5 cm. in diameter.

Hardpaste Earthenware

The two pieces of earthenware or ironstone come from the surface test pit

collection. One is a small fragment from the rim of a plate or bowl. It is 0.3 cm. in thickness and is slightly curved. The exterior is white, while the interior is decorated with a series of polychrome bands.

The second piece is probably from the rim of a cup. It also is 0.3 cm. in thickness and is slightly curved. The interior is white, while the exterior is decorated with a floral style brown transfer design.

Textiles

The oval strike-a-light has fabric impression and pieces of fabric adhering to one end (Fig. 2n). The fabric is a fine weave in an alternating over-and-under fashion. The fabric is now a rust color and its original color could not be determined. The fabric is similar in weave and in texture to a cotton cloth, and may have been part of a pouch or some form of clothing.

The second piece of textile was found in the burial excavation near some of the bones of the left hand. The textile is made up of two kinds of thread, a heavy linen thread, white in color, and a fine brass wire or thread. The linen threads are in close parallel rows with the brass thread woven through the linen thread at a 90 degree angle. The brass thread is placed in pairs and woven in an over-and-under fashion through the linen. The brass thread is woven through the linen on both sides so that the linen thread forms a core. This fabric is similar to the type of fabric that made up the gold braid or lace on military coats.

Non-Artifactual Material

Of the three pieces of mussel shell recovered, only one was from the burial excavation. All are too small to identify as to species. One piece from the surface-test pit collection has a portion of the bivalve hinge.

A number of small fragments of unidentified animal bone were also recovered. One piece found in the burial excavation is possibly a food offering. The rest of the fragments are from long bones and ribs.

DATE OF INTERMENT

The suggested range of dates for the interment are based upon analysis of the white manufactured goods. Though many of the trade goods span a wide chronological range

of use and manufacture, a possible or most likely date of interment can be suggested. The wampum beads, for instance, are a poor time marker, as they were used from the early 17th century until the late 19th century. The length of the beads recovered from 14DP26 indicates that they were manufactured after 1746 (Douglas 1931:2, Orchard 1929:68).

The fragments of the hardpaste earthenware are too small to identify as to manufacturer or area of origin. The ceramic types and their designs, however, are of a style that did not gain popularity until about 1800 and this popularity lasted until just after mid-century. (Noel Hume 1970:130). The firearms material also has a broad date range. The flintlock ignition system was the common type from the 18th century until about 1825 and on past mid-century in the West. This type of ignition was more reliable to the inhabitants of the frontier and thus retained its popularity in the Indian trade until well past 1850 (Noel Hume 1970:213-214). The ramrod guide found at 14DP26 is similar in design to one found at a Wichita site in northeastern Texas that dated from 1700-1850 (Jelks 1966:57). The pocket knife fragment on the other hand, is from a style common throughout the 19th century (Russel 1967:351) and therefore, is reasonably non-diagnostic.

Several of the artifacts have a "tighter" date range than those previously discussed. One of these is the small hawk bell. This bell type is commonly encountered on sites dating to the first half of the 19th century (Jelks 1966:90). The oval strike-a-light, on the other hand, has a broad date range; however, it does have a rough terminus of about 1840 (Russel 1967:351).

Several artifacts tend to suggest a date of interment after 1840. The fragments of fabric were made on power looms which would indicate they could not date prior to 1838 (Kidwell and Christman 1974:37). The wine bottle fragments are from a bottle style common from about 1840 through the 1870s. The trade beads are reasonably good time markers. The seed beads are a reasonably common form throughout the historic period and are generally considered non diagnostic. However, the blue faceted beads and the blue spheroid bead can be dated with more precision. The blue faceted trade beads are a

TABLE II Mortuary Traits Observed at 14DP26 Compared to Iowa, Sac, Fox and Kansas Mortuary Customs

Trait	14DP26	Iowa	Sac	Fox	Kansa
1. Grave goods with body	X	X	X	X	X
A. Receptacle (bottle, tankard)	X			X	X
B. Weapons or tools (firearms, knife)	X	X	X	N	X
C. Ornaments (pendants, beads, bells)	X		X	X	X
D. Clothing (possibly coat)	X				
E. Food	X	X	X	X	X
2. Interment in ground	X	A	X	X	X
3. Buried in sitting position	X	A	X	A	N
4. Northwest-southeast orientation of burial	X	L	X	X	N
5. Partial surface burial	?	N	X	X	N

After Voegelin 1944:339-372

Key: X — Trait Present
 A — Recent Adoption
 L — Recent Loss
 N — Not Present
 ? — Possible but not known

form common from about 1830-1860+ (Woodward 1965:10-11, Good 1972:6-7); and the large blue spheroid bead has been found on fur trade sites such as Kipp Post dating 1820-1840 (Woolworth and Wood 1960:255).

In considering the entire collection, a date in the first half of the 19th century is obviously suggested. A tighter range is suggested by the ranges of several of the artifacts. The dates suggested are in the second quarter of the 19th century with the most probable dates clustering between 1840 and 1860.

ETHNIC IDENTIFICATION

To assign the burial to an ethnic group poses some problems since a variety of Indian groups have resided in the area of northeastern Kansas. Kansa Indians, for instance, were known to have been in present Doniphan County as early as 1724, when Bourgmond visited the area (Gray 1905:21). Since the date range for the interment suggests a 19th century date, the discussion will focus in that area. In 1836, the Missouri branch of the Iowa Sac and Fox were removed to the area and placed on the Great Nemaha Reservation on the Kansas-Nebraska line (Skinner 1926:191). Since these were the only Indians living in that vicinity during the probable date of interment, this then suggests that the burial has an affiliation with one of these groups. In addition, local tradition assigns the area of

14DP26 as an Iowa burial ground.

Skinner (1926:254) has pointed out that the Iowa practiced scaffold burial and surface burial, in which the body was flexed and sitting upright. The Sac have also practiced several forms of burial including: complete burial in the earth, surface burial in sitting posture in several forms, and scaffold and tree burial (Yarrow 1880:141). It should be noted that members of the turkey clan of the Sac buried their dead in a sitting position on an isolated knoll under a tree, suitable for a turkey roost (Skinner 1923:37).

Comparative mortuary data seems to preclude the possibility of an Iowa ethnic affiliation (see Table II). As Table II also shows, the Kansa do not have burial in the sitting position, northwest-southeast orientation of the dead, or partial surface burial, as are observed at 14DP26. This, therefore, would also seem to preclude Kansa as the ethnic affiliation for this burial.

The Fox have only recently adopted burial in the sitting position, and are also known to have built grave houses over their dead (Voegelin 1944:359). However, no mortuary fence or other enclosure was noted during excavation. This feature is common not only for the Fox, but also of the Sac and late Iowa. Based on all considerations, however, this would leave the Sac as the most likely candidate for an ethnic affiliation of the burial.

Of the ten mortuary features observed at 14DP26, eight are found in the Sac burial practices, suggesting that this burial is probable Sac affiliated. If, indeed, this is a Sac burial, it would fall well within the 1840-1860 period suggested for the date of interment, as the Sac were removed to the Kansas area in 1836 and most of the tribe did not remove to Oklahoma until after 1876 (Kent 1880:116)

CONCLUSIONS

A study of the burial remains and its associated features has produced a possible ethnic identification and date range for interment. The historic burial recovered from the test excavations at 14DP26 has been identified as a male about 20 years of age at death. Analysis of the mortuary traits associated with the burial suggests that he was a Sac Indian. Further analysis of the trade goods associated with the burial suggest a date of interment in the second quarter of the 19th century with the most probable dates clustering between 1840 and 1860. Though the ethnic affiliation and date of interment can best be described as tentative, the analysis of the burial and its features yield the above as the best possible indication based on present available evidence.

ACKNOWLEDGEMENTS

I am deeply indebted to Dr. David A. Breternitz and Dr. Joe Ben Wheat of the University of Colorado and Dr. Alfred Johnson of the University of Kansas for their invaluable assistance and criticisms in the preparation of this paper.

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Bureau of Land Management
Montrose, Colorado 81401
August 1975