Register of Historic Kansas Places
Registration Form

This form is for use in nominating individual properties and districts. The format is similar to the National Register of Historic Places form. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets. Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

Historic name Kanorado Archaeological District
Other name/site number 14SN00101, 14SN00105 and 14SN00106

2. Location

Street & number [Redacted] ☑ not for publication
City or town Kanorado ☑ vicinity
State Kansas Code KS County Sherman Code 181 Zip code 67741

3-4. Certification

I hereby certify that this property is listed in the Register of Historic Kansas Places.

____________________________________
Signature of certifying official
Date ________________________________
Title ________________________________
State or Federal agency/bureau or Tribal Government

5. Classification

Ownership of Property
(Check as many boxes as apply)
☑ private
☐ public-local
☐ public-State
☐ public-Federal

Category of Property
(Check only one box)
☐ building(s)
☑ district
☐ site
☐ structure
☐ object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing Noncontributing
buildings
3
sites
3
structures
3
objects
3

Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)
N/A

Number of contributing resources previously listed
0
### 6. Function or Use

<table>
<thead>
<tr>
<th>Historic Functions</th>
<th>Current Functions</th>
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<tr>
<td>Domestic: camp</td>
<td>Agriculture/Subsistence: agricultural field</td>
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<tr>
<td>Industry/Processing/Extraction: processing site</td>
<td></td>
</tr>
<tr>
<td>Agriculture/Subsistence: animal facility</td>
<td></td>
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<tr>
<td>Commerce/Trade: trade (archaeology)</td>
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### 7. Description

**Architectural Classification**  
(NEnter categories from instructions)

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<tr>
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<tr>
<td><strong>Other:</strong> N/A</td>
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</tr>
</tbody>
</table>

**Narrative Description**  
(Describe the historic and current condition of the property on one or more continuation sheets.)
8. Statement of Significance

Applicable Register Criteria
(Mark "X" in one or more boxes for the criteria qualifying the property for National Register)

☐ A Property is associated with events that have made a significant contribution to the broad patterns of our history.

☐ B Property is associated with the lives of persons significant in our past.

☐ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

☑ D Property has yielded, or likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

Property is:

☐ A owned by a religious institution or used for religious purposes.

☐ B removed from its original location.

☐ C a birthplace or grave.

☐ D a cemetery.

☐ E a reconstructed building, object, or structure.

☐ F a commemorative property.

☐ G less than 50 years of age or achieved significance within the past 50 years

Areas of Significance
(Enter categories from instructions)

Archaeology: Prehistoric

Period of Significance
12,500-8,500 RCYBP

Significant Dates
N/A

Significant Person
(Complete if Criterion B is marked above)

N/A

Cultural Affiliation
Paleoindian

Architect/Builder
N/A

9. Major Bibliographical References

Bibliography
(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):
☐ preliminary determination of individual listing (36 CFR 67) has been requested
☐ previously listed in the National Register
☐ previously determined eligible by the National Register
☐ designated a National Historic Landmark
☐ recorded by Historic American Buildings Survey
☐ recorded by Historic American Engineering Archaeological Research Center, University of Kansas

Primary location of additional data:
☐ State Historic Preservation Office
☐ Other State agency
☐ Federal agency
☐ Local government
☐ University
☐ Other

Name of repository:
Archaeological Research Center, University of Kansas
Kanorado Archaeological District
Sherman County, Kansas

10. Geographical Data

Acreage of Property 19.65 acres

UTM References (Place additional UTM references on a continuation sheet.)

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

Name/title Shannon Ryan
Organization Department of Anthropology, University of Kansas
Date April 24, 2007
Street & number 622 Fraser Hall, 1415 Jayhawk Blvd
Telephone (785) 550-8704
City or town Lawrence State KS Zip code 66044

Additional Documentation
Submit the following items with the completed form:

Continuation Sheets
Maps
A USGS map (7.5 or 15 minute series) indicating the property’s location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs
Representative black and white photographs of the property.

Additional items
(Check with SHPO or FPO for any additional items)

Property Owner

Name SEE FILE
Street & number Telephone
City or town State Zip code

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127, and the Office of Management and Budget, Paperwork Reduction Projects (1024-0018), Washington, DC 20503
NARRATIVE DESCRIPTION

The Kanorado Archaeological District consists of three archaeological sites (14SN00101, 14SN00105, and 14SN00106) southeast of Kanorado, Kansas (Figure 1). These nearby sites are not contiguous and therefore this nomination is for a discontiguous district that includes sites 14SN00101, 14SN00105, and 14SN00106. The proposed district is a discontiguous district located in rural Sherman County in northwest Kansas. The district is comprised of three parcels of land totaling 19.65 acres in all. All three of these sites contain undisturbed subsurface deposits dating to early Paleoindian times. Sites 14SN00101 and 14SN00106 have multiple components that date between 11,100-10,000 radiocarbon years before present (rcybp). Radiocarbon years before present does not equate to calendar years but can be calibrated and converted to calendar years. For the time period 11,000-9,000 years ago the actual calendar dates are about 1,000-1,500 years old than radiocarbon years. This difference is due to past fluctuations in atmospheric carbon. Convention for Paleoindian sites is that the dates be reported in rcybp as the calibration curve is not well defined for this period.

Both Clovis and Folsom archaeological cultures may be represented in the Kanorado sites. Site 14SN00105 also has at least two components that date to the Paleoindian period. Collectively, these sites are unique because of the paucity of sites, especially camp sites, and information about the Paleoindian period in the western Kansas area. The proposed Kanorado Archaeological District encompasses three of the few known stratified Paleoindian sites in Kansas and is considered archaeologically significant because of its potential to yield information important to regional prehistory (Criterion D). Data recovered from excavations each year from 2002-2006 have demonstrated that each of these sites has substantial intact cultural deposits. All three sites are situated in silty alluvium beneath the T-1 terrace of Middle Beaver Creek in Sherman County, Kansas (Figure 1). Each of these sites was affected by the mechanized channelization of Middle Beaver Creek for the construction of Interstate Highway 70; however, the remaining portions of each site have not been altered by this work and retain a high degree of integrity.

The Kanorado Archaeological District is located in the High Plains physiographic subprovince of the Great Plains physiographic province (Fenneman 1931). The city of Kanorado lies just to the northwest of the Kanorado Archaeological District. The Middle Beaver Creek is a tributary of the Republican River which it enters near Orleans, Nebraska. The Republican River joins the Smoky Hill River at Junction City, Kansas to form the Kansas River. The Kanorado Archaeological District is high in the drainage network and only carries water after heavy rainfall. Late Quaternary alluvium is stored beneath two geomorphic surfaces: a low, narrow floodplain (T-0) and a broad, flat terrace (T-1). The Quaternary alluvium is inset into the Ogallala Formation. The Ogallala Formation is exposed in the Middle Beaver Creek valley as gravels and caliche caprock. Across the High Plains of this region Peoria Loess of Pleistocene age overlies the Ogallala formation. This loess provided much of the material for the alluvium stored in the Middle Beaver Creek valley. The Ogallala formation is also an aquifer and at the time of prehistoric occupation there were springs near the Kanorado Locality. Indeed, springs were common when the Ogallala is exposed in stream valleys (Sawin et al. 2002) until recent irrigation activities lowered the water table. Humans as well as fauna would have been attracted to such springs as
reliable sources of water. The native vegetation of the area is dominated by short-grass prairie with cottonwoods occurring along moisture rich areas of the valley.

The sites that make up the Kanorado Archaeological District date to the earliest time period humans have clearly been documented to be in the New World. Radiocarbon dates on bone (purified collagen) date at least one cultural component from each site to Paleoindian times (Table 1). Relative dating methods such as associations of cultural materials with extinct species of fauna and diagnostic artifacts may also be employed to help date the sites of the Kanorado Archaeological District. At sites 14SN00101, 14SN00105 and 14SN00106 several species of extinct fauna have been documented (including bison, camel, and mammoth) but the relationship between some of these species and humans is still unclear. There is clear association of cultural materials with ancient bison. Diagnostic artifacts from 14SN00106 also suggest a Paleoindian time frame, specifically Folsom and possibly Clovis.

The earliest clearly identified archaeological culture in the New World is the Clovis culture. However, this widespread culture was most likely not the earliest people in the New World. Pre-Clovis peoples, although not easily identified, may have left evidence of their presence at Kanorado and other early sites. Despite the lack of diagnostic artifacts, there are soils with associated artifacts that date to both Clovis and Folsom times. Recent research suggests that Clovis dates to 11,050-10,800 rcybp (Waters and Stafford 2007). While Folsom has been dated to 10,900-10,200 rcybp (Meltzer 2006).

Archaeological Investigations

The history of investigations at the Kanorado Archaeological District sites begins with a paleontological discovery in 1976. In the late 1960s Middle Beaver Creek was channelized as a part of Interstate 70 construction. This channelization created a cutbank along the locality now referred to as 14SN00105. It is this area in 1976 that the landowner and his son discovered mammoth bones eroding out of the bank. K. Don Lindsey, then Curator of Paleontology at the Denver Museum of Natural History (now the Denver Museum of Nature and Science) was notified of this discovery and conducted test excavations in 1976, 1978, and 1981. Some of the mammoth bones recovered by Lindsey had unusual fracture and wear patterns that he thought may have been caused by humans. This was also the conclusion of archaeologist Dr. Steve Holen (Curator of Archaeology, Denver Museum of Nature and Science) when he examined the bones in 2001.

In early 2002 the site was visited again, this time by archaeologists. Accompanied by Dr. Jack Hofman (Department of Anthropology, University of Kansas) and volunteers, Holen relocated the area of Lindsey’s investigations and recorded bone eroding from the cut bank in that locality. Cultural materials warranting an archaeological site number (14SN00101) were discovered about three eighths of a mile east of the original mammoth bone discovery in mid 2002. At that time three test units were excavated with a goal of discovering where in the buried soil the artifacts may be coming from as well as to discover if bone at the mammoth locality was associated with cultural materials. In mid 2003 cultural materials were also found in the area of the original mammoth bone discovery (although higher in the profile) and it was given an archaeological site number (14SN00105).
Further testing of these sites, as well as soil stratigraphic study and more survey of the area, was conducted in 2003. Steve Holen and Jack Hofman were joined by Rolfe Mandel (Kansas Geological Survey) and several students and volunteers at the two aforementioned sites. Another site was recorded (14SN00106) southwest of the highway also along the channelized Middle Beaver Creek. In 2004 a small amount of testing was conducted at each of these three sites. At each of these sites a buried soil dating to Paleoindian times and containing cultural materials has been found. The testing in 2003 and 2004 was concentrated on answering two primary questions: What is the extent and age of the cultural deposits at 14SN00101 and 14SN00105? And, are there any remaining bones in the same area as Lindsey’s earlier excavations; if yes, is there any cultural material associated with them?

In 2005 extensive testing of all three of these sites was conducted in conjunction with the Kansas Archaeological Training Program, an annual archaeological field school sponsored by the Kansas State Historical Society and the Kansas Anthropological Association. This field program included archaeologists from the Denver Museum of Nature and Science, University of Kansas, the Kansas State Historical Society as well as many avocational archaeologists. As material at the Kanorado Archaeological District is relatively sparse, the advantage to testing in 2005 was the number of people participating which allowed a larger area to be exposed. This helped us to further identify the extent and age of the deposits at each site in the buried soil. Additionally, it allowed continued excavation in the area that Lindsey had originally worked.

An archaeological field school from the University of Kansas was held at Kanorado in 2006 under the direction of Jack Hofman. This field school concentrated its efforts at 14SN00106 and a newly discovered surface lithic scatter 14SN00005. Mapping and collection of artifacts at two small lithic scatters (14SN00006 and 14SN00007) was also completed. The Odyssey Archaeological Research team also completed limited excavations at 14SN00105 in the area of Lindsey’s excavations. Although work has been ongoing at the Kanorado Archaeological District there is evidence that the three buried Paleoindian sites each have substantial and extensive deposits with more to offer. Additionally, continued monitoring of the lithic scatters and analyses of existing collections will likely produce more key information.

Each of the sites in the proposed Kanorado Archaeological District has been tested to some degree. All field work at these sites has been under the direction of Dr. Steve Holen (Denver Museum of Nature and Science), Dr. Rolfe Mandel (Kansas Geological Survey/University of Kansas), and Dr. Jack Hofman (University of Kansas). Excavation research goals at each of these sites were to ascertain the size and number of components at each site, identify activity areas, understand how the spatially differentiated areas of the sites relate, and finally, to understand when people occupied these sites. Other, specific objectives are described below with a more complete description of each site.

14SN00101 (no recorded site name): 14SN00101 is in an alluvial terrace created by the ancient Middle Beaver Creek (Figure 2). Testing at this site took place from 2002-2005 in areas where bone and artifacts were found eroding out of the cutbank. At this site artifacts have been found eroding out of both sides of
the channelized Middle Beaver Creek. Despite the obvious disturbance to the site, testing has provided evidence that a portion of it remains intact. Test units on the south cutbank have yielded chipped stone debitage and tools, animal bones, mussel shell, fire-cracked rock, and a piece of incised hematite (red ocher). All of these items were found in the lower part of the buried soil and perhaps slightly below this soil. No diagnostic artifacts have been recovered but two radiocarbon dates on bone of 10,950±60 (CAMS-112741) and 10,370±20 (CURL-8998) rcybp reflect early Paleoindian ages. Based on the stratigraphic location of the artifacts and dates an early Paleoindian time frame for these occupations is suggested.

14SN00105 (Chester Cramer Site): 14SN00105 is the location of the first discovery of bone from extinct fauna at the Kanorado Locality. Originally investigated as a paleontological site, the presence of artifacts has prompted an archaeological designation as well. [REDACTED] Along this extensive exposure are several places where bone and artifacts have been found eroding from the T-1 terrace. Approximately 35 square meters have been (at least partially) excavated at this site since 2002. The majority of these units have been in the same area as K. Don Lindsey’s excavations in the 1970s. In this location, in 2003, a concentration of mammoth and camel bones representing axial and appendicular elements was exposed about 2.5 meters below the buried paleosol. This concentration has been correlated with the lower mammoth level excavated in the 1976. Like bones from the 1976 excavation, some of the recently excavated specimens exhibit spiral fractures, suggesting the possibility of human modification. Excavations from 2004-2006 have revealed only a few more mammoth and camel elements. Radiocarbon dates from this level indicate a date about 1000 years before Clovis times (Table 1). The mammoth levels at 14SN00105 may represent a pre-Clovis occupation; however, because there are no unequivocal stone tools associated with this level, the possibility of pre-Clovis activity at Kanorado remains at the hypothetical level. In the mammoth area there is also a sparse occupation in the overlying buried paleosol. Other areas of the site have yielded a greater density of material, including chipped stone tools and burned bone, in the upper portion of the buried paleosol dated to Paleoindian time. The chipped stone materials are composed almost exclusively of exotic materials including materials from Texas, Colorado, and Wyoming. The faunal elements present in this level are primarily camel and bison size. Two radiocarbon dates on bone from the buried paleosol resulted in ages of 10,150±500 and 10,350±20 rcybp. Only approximately six 1 by 1 meter units have been excavated with a focus on this component and analysis of materials from them is underway. Future research will help better determine the age and nature of activities that took place at 14SN00105.

14SN00106 (Rolfe’s Endscraper Site): Since its discovery in 2003 site 14SN00106 has been extensively tested. A total of four locations have been identified with area designations. One by one meter units have been excavated in three of the areas while the forth was defined in 2006 and has not yet been tested. The Main Block has seen the most excavation take place (Figure 4). One area yielded mammoth bone eroding from the terrace face. This bone was recorded and collected but to date there are no artifacts in association. A third area is on the southwest bank of the channelized Middle Beaver Creek (Figure 5). Bison bones have been eroding from this location since at least 2002. Some salvage of these bones took place in 2005 and this continued with the excavation of one unit in 2006. It appears that this is an isolated bison that died in the paleochannel. Bone from this bison has yielded a radiocarbon date of 10,854±40
rcybp (NZA-27348). The current assessment is that this bison location may represent part of a kill site. Support of this hypothesis is found in the modified ribcage of this bison. The ancient channel where these bison bones were found is an interesting feature of 14SN00106. In 2006 both cutbanks in this location were profiled. Also, two backhoe trenches were excavated east of the channel and profiled to test for other bison remains, and to document landscape changes and stratigraphy in this locality. In the Main Block area of 14SN00106, approximately 16 m² have been excavated; however, a significant portion of the site remains undisturbed. Artifacts have been recovered from the middle to the lower part of the buried soil in this location. In 2006 Dr. Rolfe Mandel conducted soil coring to map the eastward extent of the buried soil which contains artifacts and is exposed in the cutbank. His conclusions suggest that although the buried soil continues into the bank it apparently does not continue more than about 50 m before older Pleistocene gravel fill is encountered. Though systematic recording of the three dimensional position of rocks and artifacts it appears likely that there were two components at 14SN00106. Site 14SN00106 appears to have multiple Clovis and/or Folsom components. The main block is interpreted as a hide processing area as numerous chipped stone scrapers (n=6) and scraper resharpening flakes (n=67) have been recovered. Five other chipped stone flake tools have been found but no projectile points or other diagnostics have been recovered. The scarcity of bone and fire-cracked rock supports the hypothesis that this may have been an area specifically dedicated to hide processing. Further testing is needed to determine if there are other anticipated areas related to hearth centered activities and initial bison processing. The lithic materials represented at 14SN00106 include Hartville Uplift chert from Wyoming and Edwards Plateau chert from central Texas, as well as materials that may be local in origin. Although the assemblage is not large, the materials are quite diverse suggesting significant movement and interaction of peoples.

At the time of occupation the terrain at the Kanorado Locality is assumed to have been very similar to that of today. The vegetation was probably more lush with a tree lined riparian valley and surrounding grasslands dotted with spruce and pine.

Alluvial deposition, erosion, and deflation are all natural processes at work in the Kanorado Archaeological District. In addition to these there are also cultural or modern impacts to consider. The major impact to these sites was the channelization of Middle Beaver Creek as this has removed an unknown amount of 14SN00101, 14SN00105, and 14SN00106. Bioturbation and modification of the sediments containing these sites has been ongoing for 10,000 years. The agents of bioturbation include gophers, prairie dogs, ground squirrels, insects and plants, especially grasses, yucca, and trees including cottonwood and probably willow. While the depth below surface of these sites is well within the reach of these agents most intensive disturbances probably occurred during the period of terrace surface stability which resulted in formation of the buried soils. This was probably a period of several hundred to 1,000 years followed by relatively rapid burial of these surfaces during the early Holocene. The land these sites are contained within is currently being used as pasture and the intact portions of the buried Paleoindian sites are relatively protected.
STATEMENT OF SIGNIFICANCE

Summary

The Kanorado Archaeological District (Sites 14SN00101, 14SN00105, and 14SN00106) is being nominated to the National Register under Criterion D for its continuing potential to yield significant information about the life ways of people on the High Plains from 12,500 – 8,500 rcybp. Data from the district is of value to researchers of the earliest occupants of the region and to Paleoindian studies in general. This is evidenced by recent reference to data from this locality in an article in Science (Waters and Stafford 2007). These sites are highly significant in that they are among few known stratified Paleoindian sites in Kansas, and they are the only known campsites of this age with good stratigraphic context which are known from the region. Excavations at each of these sites have demonstrated that significant potions of each are intact and the integrity of these deposits has not been significantly altered by natural or cultural processes. Each of these sites is providing important data about subsistence, land use, the organization of people, and domestic activities of early Paleoindian groups. These locations appear to include camping and a wide range of activities rather than only animal kills. This makes them especially unusual and important to Paleoindian studies in general and significant on a national level.

Culture History

The Clovis cultural complex is the oldest widely recognized prehistoric culture in the Great Plains region. It was first documented during archaeological investigations in the 1930s at several key sites including Blackwater Draw, New Mexico; Dent, Colorado; and Miami, Texas (Hofman and Graham 1998). Each of these sites demonstrated the association of distinctive Clovis technology with extinct late Pleistocene (Ice Age) animals including mammoth and, at Blackwater Draw, bison. Current evidence of Clovis occupation in Kansas, other than at Kanorado, is limited to surficial records of Clovis points and deflated or shallow disturbed sites (Hofman and Hesse 2001; Holen 2001; Blackmar and Hofman 2006). The Kanorado sites provide an unusually well preserved series of stratified sites which contain archaeological, paleontological, and paleo-ecological evidence from pre-Clovis through post Clovis time, minimally about 12,500 to 8,500 rcybp. No other such records are known for the region and the full significance and potential of the Kanorado locality sites will only be revealed through continued field investigation and analytical study.

Site Integrity and Research Potential

Although diagnostic Clovis and Folsom points have repeatedly been found in Kansas (Blackmar and Hofman 2006), the Kanorado sites 14SN00101, 14SN00105, and 14SN00106 are the first in situ stratified sites dating to Clovis time to be recorded in the state. There are only two other recorded Folsom age sites in the state (12 Mile Creek (Hill 2006) in Logan County and Vincent-Donovan (Ryan et al. 2004) in Barber County). The Kanorado sites represent the only known stratified Folsom age components in the state. The sites of the Kanorado Archaeological District have the potential to answer or contribute significantly to research questions such as: When did the earliest people come to Great Plains? What was
the nature of their group organization, mobility, and interactions? Did they interact with now extinct fauna? How did their life ways change when key species became extinct? Lithic materials can help us understand the mobility patterns of the people occupying these sites while fauna and spatial patterning will provide information related to other questions. The events that took place along the Middle Beaver Creek are recorded in the archaeological record and their location on the landscape has retained integrity. Despite modern earthmoving and highway related construction site areas still in place are proving to be of considerable aid for learning about how the area was used and how it looked in ancient times. Indeed, as suggested above, this has been one of the goals of the research undertaken there.

Hunter/gatherer life ways on the High Plains at the end of the Pleistocene and in the early Holocene are beginning to be explored at the Kanorado Archaeological District using the following data sets: fauna (found at sites 14SN00101, 14SN00105, and 14SN00106 in levels dating to Paleoindian time) to help document the economy and paleoecology, lithic artifacts (also found at each site) to document technological variation, mobility, and land use patterns. Stratigraphy and paleoenvironmental reconstruction to understand the environment of the late Pleistocene and early Holocene as well as site formation processes. And, finally, radiocarbon dating provides us with a data set derived from absolute dating techniques (e.g. Waters and Stafford 2007).

Association, as defined by the National Register Bulletin is the “strength of relationship between the site’s data or information and the important research questions”. Given this definition, association is a strong aspect of integrity for the Kanorado Archaeological District. Important research questions in the Plains include understanding when the first people arrived and how they lived (Hofman and Graham 1998, Blackmar and Hofman 2006). Kanorado can help us answer these questions as well as those related to trade/movement of peoples, subsistence, and site specific spatial division of activities. This is the only known group of sites in Kansas, and one of very few such groups of sites in the Great Plains, that can help us answer each of these questions. The spatial information to be offered by the buried sites included in this nomination is excellent. At two of the sites more excavation would be required in order to identify particular activity areas, however, at 14SN00106 it is clear that the Main Block of excavations is in a hide processing area whereas Area C was probably a bison kill. The type of chipped stone artifacts found in the Main Block (scrapers and scraper retouch flakes dominate the assemblage); along with the paucity of bones and features such as hearths all support this interpretation. It is likely that the other sites also have this high quality preservation of site layout and there are almost certainly other identifiable activity areas at 14SN00101, 14SN00105, and 14SN00106.

Paleoindian artifacts are often admired for their workmanship and, although we have not yet found any projectile points, a number of formal and informal tools made on exotic lithic materials have been recovered. The materials from which Paleoindians chose to use for their tools are often thought of as aesthetically pleasing. Additionally, as people have begun replicating stone tools they have realized the highly skilled workmanship required to make them.

A portion of these sites has been destroyed by modern development, notably construction of I-70. The overall topography and viewshed, however, is similar to what it would have been like thousands years ago. Items that impede this view include Interstate 70, farmhouses, city of Kanorado (specifically the
grain elevators). Topography such as the hills to the southeast and southwest of 14SN00106 would have been present even in Paleoindian times. Also, the sites are buried under alluvium and wind blown loess, so the shape and topography of the valley would have been slightly different than today.

The significant cultural materials found at these sites include stone artifacts and bone evidence from a variety of probable economic species. These materials occur in patterned spatial arrangements reflecting prehistoric human behaviors with only minimal evidence of disturbance. Evidence of camp fires, bonebeds, and structures may also be present in unexcavated areas of the sites. These hold considerable long term research potential and the materials are well preserved and have good integrity (or have been modified in predictable ways) since the sites were used.

In sum, the sites of the Kanorado Archaeological District, dating to Paleoindian times and exhibiting excellent subsurface artifact assemblage integrity, are contributing significantly and have the potential to contribute further to our knowledge of early prehistory on the High Plains region.
Kanorado Archaeological District

Kanorado vic., Sherman County, KS

Redacted.
Figure 2. Overview of site 14SN00101. View is to the southeast (Summer 2005).
Figure 3. Overview of site 14SN00105. View is to the southeast (Summer 2005).
Figure 4. Overview of site 14SN00106 Main Block. View is to the east (Summer 2006).
Figure 5. Area C at site 14SN00106. View is to the southwest (Summer 2006).
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<td>11,834 ± 45</td>
<td>-11.3‰</td>
<td>NZA-27349</td>
</tr>
<tr>
<td></td>
<td>Mammoth radius</td>
<td>12,375 ± 35</td>
<td>-18.2‰</td>
<td>UCIAMS-11214</td>
</tr>
<tr>
<td></td>
<td>Bison metacarpal</td>
<td>10,350 ± 20</td>
<td>-11.5‰</td>
<td>CURL-9002</td>
</tr>
<tr>
<td>14SN00106</td>
<td>Bison astragulus</td>
<td>11,085 ± 20</td>
<td>-8.3‰</td>
<td>CURL-9009</td>
</tr>
<tr>
<td></td>
<td>Metapodial</td>
<td>11,005 ± 50</td>
<td>-13.51‰</td>
<td>CAMS-112742</td>
</tr>
<tr>
<td></td>
<td>Bison humerus</td>
<td>10,854 ± 40</td>
<td>-9.4‰</td>
<td>NZA-27348</td>
</tr>
</tbody>
</table>

Table 1. Radiocarbon dates (all taken on purified bone collagen) from Kanorado Locality Sites (Mandel et al. 2005, unpublished data).
References


**Bibliography**


A symposium of recent research at the Kanorado Locality was presented at the 2006 Plains Anthropological Conference:


Papers presented in this symposium include:


Redacted.
PHOTOGRAPIC INFORMATION

The following information is applicable to photos 1-2 and 9-10:
Property Name: The Kanorado Archaeological District
Location: Kanorado vic., Sherman Co. Kansas
Photographer: Shannon Ryan
Date: Summer 2005
Location of Digital Images: Archaeological Research Center, University of Kansas

The following information is applicable to photos 3, 11, and 12:
Property Name: The Kanorado Archaeological District
Location: Kanorado vic., Sherman Co. Kansas
Photographer: Shannon Ryan
Date: Summer 2006
Location of Digital Images: Archaeological Research Center, University of Kansas

The following information is applicable to photo 4:
Property Name: The Kanorado Archaeological District
Location: Kanorado vic., Sherman Co. Kansas
Photographer: Jack Hofman
Date: Summer 2006

The following information is applicable to photos 5-7:
Property Name: The Kanorado Archaeological District
Location: Kanorado vic., Sherman Co. Kansas
Photographer: Janice McLean
Date: Summer 2005
Location of Digital Images: Archaeological Research Center, University of Kansas

The following information is applicable to photo 8:
Property Name: The Kanorado Archaeological District
Location: Kanorado vic., Sherman Co. Kansas
Photographer: Chris Widga
Date: Summer 2003
Location of Digital Images: Archaeological Research Center, University of Kansas

The following information is applicable to photo 13:
Property Name: The Kanorado Archaeological District
Location: Kanorado vic., Sherman Co. Kansas
Photographer: Shannon Ryan
Date: Fall 2006
Location of Digital Images: Archaeological Research Center, University of Kansas

Photos referenced as Figures in text.
Photo 1: Figure 2. Overview of site 14SN00101. View is to the southeast (Summer 2005).
Photo 2: Figure 3. Overview of site 14SN00105. View is to the southeast (Summer 2005).
Photo 3: Figure 4. Overview of site 14SN00106 Main Block. View is to the east (Summer 2006).
Photo 4: Figure 5. Area C at site 14SN00106. View is to the southwest (Summer 2006).

Additional Photos for 14SN00101.
Photo 5: Excavations underway at 14SN00101. View is to the southeast (Summer 2005).
Photo 6: In situ view of dated bison humerus from 14SN00101 (Summer 2005).
Photo 7: Incised ochre from 14SN00101. *Not* in situ (Summer 2005).

Additional Photos for 14SN00105.
Photo 8: Excavation units in the Mammoth Area of 14SN00105. Exposed bones are both mammoth and camelid. View is to the east (Summer 2003).
Photo 9: Mammoth vertebra excavated from the Main Block of 14SN00105 (Summer 2005).
Photo 10: Nancy Arendt, Kansas Anthropological Association member from Colby, Kansas excavates in the Main Block of 14SN00105. View is to the North (Summer 2005).
Additional Photos for 14SN00106.

Photo 11: Excavation underway in the Mail Block (south portion) of 14SN00106. Student participants in the 2006 University of Kansas Archaeological Field School: David Unruh in foreground, Adam Hefling in background. View is to the east (Summer 2006).

Photo 12: Excavation of bison in Area C of 14SN00106 in progress. View is to the west (Summer 2006).

Photo 13: Six scrapers recovered from or near the Main Block excavation of 2004-2006 at 14SN00106. They are all made of exotic material (Fall 2006).