# **MENOKEN INDIAN VILLAGE SITE**

United States Department of the Interior, National Park Service

#### NAME OF PROPERTY 1.

Historic Name:	Menoken Indian	Village Site	(Revised Documentation)
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Other Name/Site Number: Menoken Village, Menoken Indian Village, Menoken Indian Village State Historic Site, Menoken Site, Apple Creek Village, Verendrye Site, site number 32BL2

#### 2. LOCATION

NPS Form 10-900

Street & Number: 171 <sup>st</sup> Street at 32 <sup>nd</sup> Avenue NE	Not for publication: <u>N/A</u>
City/Town: Bismarck	Vicinity: <u>X</u>
State: North Dakota County: Burleigh Code: 01	5 Zip Code: 58558
3. CLASSIFICATION	
Ownership of Property Private:	Category of Property Building(s):

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Private:		Building(s):	
Public-Local:		District:	
Public-State:	X	Site:	X
Public-Federal:		Structure:	
		Object:	
Number of Resources with Contributin	1 •	Noncontribut buildings sites structures objects Total	C

Number of Contributing Resources Previously Listed in the National Register: 1

Name of Related Multiple Property Listing: N/A

# 4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this \_\_\_\_\_ nomination \_\_\_\_\_ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property \_\_\_\_\_ meets \_\_\_\_\_ does not meet the National Register Criteria.

Signature of Certifying Official

State or Federal Agency and Bureau

In my opinion, the property \_\_\_\_\_ meets \_\_\_\_ does not meet the National Register criteria.

Signature of Commenting or Other Official

State or Federal Agency and Bureau

#### 5. NATIONAL PARK SERVICE CERTIFICATION

I hereby certify that this property is:

- \_ Entered in the National Register
- Determined eligible for the National Register
- \_ Determined not eligible for the National Register
- \_\_\_\_ Removed from the National Register
- Other (explain):

Signature of Keeper

Date of Action

Date

# 6. FUNCTION OR USE

Historic:	Domestic	Sub:	Village Site
	Defense		Fortification
	Commerce		Trade
Current:	Landscape	Sub:	Park

# 7. DESCRIPTION

Architectural Classification: N/A

MATERIALS:	N/A
Foundation:	N/A
Walls:	N/A
Roof:	N/A
Other:	N/A

#### Describe Present and Historic Physical Appearance.

#### SUMMARY

Menoken Village is a prehistoric archeological site located on a terrace of a perennial stream approximately 12 miles east of the Missouri River in south-central North Dakota (Figure 1). The village was substantially fortified with a bastioned ditch and palisade system protecting the majority of the domestic structures in the village, while exploiting the natural defenses provided by the steep terrace edge on two sides. The ditch system and several house pits are apparent on the modern surface and define the general size and shape of the archeological resources. Fortunately, the site has been protected by the state of North Dakota since the early twentieth century. The site is nearly free from negative impacts, lying in an area where aeolian deposition has thinly mantled the Late Plains Woodland habitation surface, protecting the cultural features from the effects of erosion.

The primary component of Menoken Village is a terminal Late Plains Woodland occupation, dated to the first or second decade of the thirteenth century A.D. This age is implied through ties with known sites of the Charred Body complex and is substantiated by a suite of radiocarbon dates. Hallmarks of the physical evidence within the site include oval, earth-covered houses constructed on the surface and in shallow pits, diverse stone tools made primarily of Knife River flint, cord-roughened pottery, and a developed bone tool industry. The material evidence links Menoken Village to both Plains Woodland tradition sites in North and South Dakota as well as early Plains Village tradition sites along the Missouri River in South Dakota. Evidence for the practice of horticulture, such as abundant domestic plant remains, storage facilities, or gardening implements, is lacking, whereas a subsistence base emphasizing bison is strongly indicated. The people of this village were huntergatherers living very close to settlements occupied by Plains Village farmers. The material assemblage reflects a Late Woodland adaptation and cultural heritage, communications and cultural linkages with nearby Plains Village farming communities, and participation in a more widespread interaction sphere that distributed native copper and marine shell artifacts across large parts of interior North America. The 200 or more people who lived in Menoken Village committed time and energy to a semisedentary lifeway while supported by a simple hunter-gatherer economic base.

The property meets Criterion 6 for National Historic Landmark nomination, Criterion D for National Register of Historic Places nomination, and applies to Peopling Places under the NHL thematic framework. Menoken Village has the potential to inform us about the rapid and dramatic process of the adoption of corn horticulture as a new organizing framework for human habitation that began about 1000 years ago and transformed the cultures of interior North America. Menoken Indian Village far surpasses other sites of this era with regard to the amount of data that can inform this research. The theme Peopling Places is applicable through the study of subsistence pursuits, raw material acquisitions, long distance contacts, settlement patterns, and architectural patterns. In addition, the temporal placement of Menoken Indian Village at the terminus of the late Plains Woodland period is a unique and key attribute among all the sites of this archeological complex.

#### SITE SETTING

Menoken Village lies on a bend of Apple Creek in Burleigh County, North Dakota. Apple Creek is a small, west-flowing tributary of the Missouri River (Figure 1). The local landscape is dominated by low, rolling glacial plains with a maximum local relief of 30-90 m (100 – 300 ft) (Bluemle 1991:4-5). Environmental conditions are somewhat harsh, with maximum recorded temperatures ranging between -45 degrees F (-43 C)

and 114 degrees F (46 C). The frost-free growing season is, on average, from mid-May to late September (Wood 2003:10).

Menoken Village lies at the margin of a terrace overlooking wooded cutbanks and a small grove of timber to the west and north (Photo 1). This location, approximately 9 m (30 ft) above the stream, proves a natural defense and affords a good view of much of the surrounding area. At the time of the original General Land Office survey in 1873, the valley of Apple Creek for several miles above and below the village was relatively devoid of timber except for the prominent grove near the village site. The upland region outside the creek valley was treeless grassland, with an extensive marshland known as McKenzie Slough (Figure 1) lying about three miles east of the site (Wood 2003:13). Although no detailed reconstruction of the prehistoric environment around Menoken Village has been undertaken, there is no reason to believe that the landscape has changed significantly since the time of occupation. The situation at the time of historic settlement can probably be projected backwards in time to the period of village occupation 650 years earlier.

The immediately local area provided little, if any, of the mineral resources used by the inhabitants of Menoken Village. Cryptocrystalline rock (primarily Knife River flint), used for chipped-stone tool production, was obtained primarily from sources across the Missouri River west of the village, and up to 100 miles distant. The large quantity of igneous and metamorphic stone used for tools or found as fire-cracked rock was found no closer than two miles from the village in any direction. Thus far, catchment analysis of the known resources in the immediate vicinity of the village has revealed no strategic resource that is unique to the area (Wood 2003:12-15). If there were a specific food resource that drew people to the Menoken Village location, such as a particular plant species, it is still unrecognized in the archeological record. The village was apparently situated to take advantage of a localized timber resource, a defendable place on the landscape, nearby bison herds, and unspecified plant resources in the surrounding marshlands and prairie uplands.

The high terrace that supports the village is not prone to flooding, and stratigraphic evidence indicates that the site has been uniformly overlain with a protective layer of windblown sediment since the site's abandonment. The setting has probably changed little since the site was occupied and would be easily recognized were its previous inhabitants to visit the site today.

# PHYSICAL CHARACTERISTICS OF THE SITE

A wealth of new information, summarized in this section, is now available regarding the physical characteristics of Menoken Village. Much of the information in this section derives from research during the period 1997-2002, as reported in Kvamme (2001) and Ahler, ed. (2003). References to information in the edited 2003 volume for which S. Ahler is the principal author, will be cited below by chapter number, since Ahler is also a principal author for this nomination form. References to work by other principal authors in the edited volume will be cited more specifically by author and page number.

Integrated data from surface topography, geophysical survey, hand coring, and traditional excavation, indicate that the Late Plains Woodland occupation of Menoken Village centered around at least 11 houses within a fortified area and two houses outside the enclosure (Figure 2, Figure 3). Associated with these houses is a relatively contiguous mantle of artifact- and feature-rich midden that begins a few centimeters below the surface and extends to 60, 80, or 150 cm below surface at the base of borrow pits, house pits, and the village fortification ditch.

#### Site Type

Menoken Village is a Late Woodland fortified village used by hunter-gatherers who had a primary hunting adaptation based on bison. The village probably served as a semipermanent base for the occupants who would have had to make frequent forays into the countryside to procure meat and other raw materials. The fortification would have served as a social center and a focus for defense of the inhabitants. The layout of Menoken Village is shown in Figure 3, which identifies the principal features of the settlement that can be readily discerned on the current ground surface. The primary structural features of the settlement are described in the next subsection.

#### Structures

There are no standing structures from Late Plains Woodland times but a massive defensive ditch, as well as several house depressions, are still evident on the surface of the site (Figure 3). The fortification ditch is the most prominent prehistoric feature at the village (Photo 2). When accurately mapped (Figures 2, 3, 4) or viewed on aerial photos (Photo 1), it is apparent that the ditch, ignoring the bastions, forms a highly regular arc comprising slightly more than one quarter or about 100° of a nearly perfect circle. Geometric projection places the centerpoint of this arc at the extreme northwestern corner of the village, at the point where the narrow ridge of land joins the village proper. Four bastions, or outward-projecting loops, occur along the ditch line (Photo 2). Three of these are equally spaced, about 47-48 meters apart, while the fourth is placed quite close to the third. Each loop in the ditch line extends about 13 m outside the normal arc of the ditch. Excavations in 1938, 1998, and 1999 show that the ditch was dug about 1.5 m below the surrounding ground surface, and that it varied from six to seven m wide at the surface. The ditch is about 245 m in length. The ditch itself covers an area of about 0.41 acre (0.162 ha), and the site area lying inside the inner margin of the ditch is about 1.48 acres (0.593 ha) (Ahler, ed. 2003:Chapters 3, 5, 14).

Excavations in 1998 and 1999 (Photo 3) and geophysical studies revealed that sod removed from the ditch during its excavation was stacked in a relatively even line to the interior of the ditch (Kvamme 2001:23-24, 46-48). The total volume of sediment excavated from the ditch is estimated to be 1,245 cubic meters. Excavations in 1938 and 1999 documented a palisade consisting of a line of large vertical posts paralleling and 3.0 to 4.5 m inside the ditch centerline (Will and Hecker 1944:11-12, Plate 7). Altogether, an estimated 700 or more posts occur in the palisade (Ahler ed. 2003:Chapters 3, 14).

Oval depressions marking the locations of at least eight pit houses are visible on the site surface, with six of these occurring inside the fortification and two a short distance outside (Figure 3). Geophysical surveys (see Figure 4) indicate that virtually all surface-visible pit houses were earth covered and were destroyed by fire. Such surveys also reveal the location of at least three additional burned house structures inside the fortification, two of which are not visible at the surface, but no additional dwellings outside the ditch (Figure 4) (Kvamme 2001:22-23). An intensive hand coring program within the fortification revealed the presence of at least two, and perhaps four additional structures that burned but left no clear surface or geophysical expression (Figure 5). This brings the known house count within the fortification to between 11 and 13. A large part of the site interior not yet investigated by excavation or coring is thought likely to also contain additional house remains. It is estimated that remains of between 25 and 30 total dwellings may exist within the fortification ditch (Ahler ed. 2003:Chapter 8). If most of these dwellings were occupied at a single time, the village would easily have contained 200 or more individuals.

Interiors of two semi-subterranean houses and one surface house have been partially or fully excavated, yielding considerable data about architecture, associated features, artifacts, and stratigraphy. House 1, marked

by the most prominent house depression visible at the surface, was excavated by Columbia University in 1938 and Thad. Hecker in 1939. This house had an oval floor plan and measured approximately 8.5 x 6.1 m (Figure 6). The house was built in a pit about 0.76 m deep, with an entry ramp exiting to the northeast and with a central fire pit. Few roof support posts were recorded during excavation. Very little documentation exists from the excavation, although a summary may be found in Will and Hecker (1944:13-15).

House 2, excavated in 1998-1999, was built in a pit excavated about 50 cm below the surrounding ground surface and measured approximately 5 x 7 m in size (Figure 7, Photo 4). The roof contained abundant wood and was covered with a thick layer of earth (ca. 25 cm). The structure had a ridgepole supported at the back of the house by a single main post and at the front by two large posts and presumed lintel that framed the entryway. The shape of the house was an elongated and asymmetrical oval, tapering slightly in width toward the rear. Roof support posts were notably absent along the walls and perimeter, suggesting that the walls may have been constructed of stacked sod. The southwest-facing entrance was marked by an earthen ramp sloping down into the interior that served to isolate interior alcoves on either side of the ramp. A large interior hearth occurred near the house center. The house was destroyed by fire, with the heat being most intense in the front half of the structure (Ahler ed. 2003:Chapter 12).

House 17, discovered by magnetic survey (Figures 3 and 4) and excavated in 1998-1999, was an oval structure constructed on the prevailing ground surface and measured approximately 5 x 7 m in size (Figure 8, Photo 5). This house had a substantial, earth-covered roof supported by curving lines of vertical wall posts spaced about a half-meter apart and by two or three additional supports along the central axis of the house. The orientation of the structure was 90 degrees to that for House 2, with a long axis trending northwest and southeast. Neither the location nor form of the entryway could be determined, nor could the shape of the structure end opposite the door, due to incomplete excavation of the house floor area. A large fire basin occurred near the center of the structure. House 17 was also destroyed by fire, which left a 25-cm thick layer of burned earth and roof fall debris on the house floor (Ahler ed. 2003:Chapter 13).

#### Features, Artifacts, Faunal, and Botanical Remains

In addition to the posts and postmolds associated with house and palisade constructions, features consist predominantly of hearths, shallow basin-shaped pits, and debris concentrations (see Figures 7 and 8; Photo 6). Central hearths existed within each structure, and smaller surface and shallow basin hearths occur on the ground outside House 2 and House 17. Several shallow basin pits, unsuitable as storage facilities and probably reflecting borrow locations for earth for the house roofs, occur outside and around each dwelling. These basins contain refuse similar to that which mantled the ground outside each dwelling. One slightly deeper pit outside House 2 (F203) contained a mass of apparent pottery clay that may have stored at this location. One straight-sided pit (F135) of uncertain size (having been over-excavated by an inexperienced worker) occurred in the interior of House 17; this may have been a small storage facility. Lacking in this inventory of features searched for through excavation, geophysical survey, and coring, are the large undercut pit facilities that are so characteristic of Plains Village tradition, horticultural sites in the region (Ahler, ed. 2003:Chapters 12,13). One other feature of note is an apparent foot path or trail that wound between dwellings within the village. This feature was detected by electrical resistance survey and was confirmed through excavation (Kvamme 2001:48-49).

Excavations at Menoken Village during 1998-1999 provide us with a very well-controlled and sizeable artifact sample by which to evaluate and characterize the material culture as well as the organization of technology in a Late Plains Woodland context in what is now central North Dakota. The general content of the artifact assemblage from Menoken Village is briefly summarized here.

#### Ceramics

The 1998-1999 excavated pottery sample totaled 10,526 sherds down to ¼-inch in size. At least 88 Late Plains Woodland age vessels are represented by the sample (see Photos 7 and 8 for examples). Late Woodland pottery from Menoken is grit-tempered and manufactured by lump modeling rather than coiling. Vessel bodies typically have partially smoothed over cord-roughened surfaces suggesting finishing by paddle and anvil. Vessel shapes are typically globular, jar forms; well defined shoulders are present on some vessels. Vessel rims are mostly short and straight or everted, and are occasionally strongly everted, collared, or S-shaped. Straight or everted rims are most often decorated with simple designs confined to the lip or lip margin, consisting of short incisions, tool marks, or cord-wrapped tool marks. Outer faces of S-rims are sometimes more completely decorated with horizontal incised lines or parallel rows of cord-wrapped tool impressions. At least three vessels in Late Plains Woodland context have an S-shaped rim form and decoration that suggests that they were made by Plains Village tradition peoples or were copies of Plains Village (39CA3), an Initial Middle Missouri variant community about 70 miles south of Menoken (Swenson 2003).

#### Stone Artifacts

Stone artifacts include chipped and ground stone tools and abundant flaking debris. The 1998-1999 excavated sample consists of 2,350 tool occurrences and 127,671 flakes. The tool collection is dominated by expedient tools made on flakes and tabular pieces of Knife River flint, bipolar nuclei, and arrowpoints. Arrowpoints (Photo 9) are predominantly the Prairie Side Notched type (Kehoe 1966, 1973), while more nondescript, sidenotched forms and Avonlea type points (Kehoe and McCorquodale 1961) also occur. Also occurring are patterned bifaces, end scrapers, non-bipolar cores, small precision implements (drills, perforators, etc.), and heavy core-tools. Particularly interesting are double-ended specialized planes made on polyhedral blades or elongated flakes and tiny spalls from the burin-like removal of the working edge on hide scrapers (Photo 10). Patterned ground stone tools include notched axes, a full-grooved ax, and grooved mauls (Photo 11). Large, heavy tools made from glacial rocks are prominent, and these include edge-modified pieces of tabular shist and pick-shaped objects of uncertain function that have not yet been recognized at any other site, as well as battered, specialized plant processing tools that have a long history of occurrence in the region. Bipolar objects are abundant, and there is some evidence that bipolar cores were produced for use as specialized wood working planes. Nonutilitarian items are rare, but include pigment stones and tubular pipes. Overall, the stone collection is oriented toward hunting and specialized processing or fabrication of wooden objects and unidentified plant species. An overriding feature of the assemblage is the near-exclusive use of Knife River flint as the single preferred, fine-grained knapping material. For reasons still unclear, the occupants of Menoken Village were strongly dedicated to the use of Knife River flint to the exclusion of all other stones (Ahler, ed. 2003:Chapter 24).

#### Bone and Antler Tools

The modified bone and antler assemblage excavated in 1998-1999 (n=113) is dominated by awls and pressure flaking tools and is augmented by a few patterned and expedient fleshers, picks and digging tools, cutting tools, scrapers, punches, and the like. Small numbers of nonutilitarian items including tubes, beads, and decorated antler wrist guards occur (Photo 12). Fishhooks and specialized cultivating tools showing extensive use, such as the bison scapula hoe, are absent. The Menoken Village assemblage indicates that the final stages of leatherworking and/or textile/basketry work as well as late stage stone tool production/maintenance were particularly important activities at the site. Despite the large amount of excavation involved in ditch and house

construction, specialized digging tools, including ones that could have been used in gardening, are notably sparse in the sample (Ahler, ed. 2003:Chapter 25).

#### Artifacts Indicating Trade

Several types of extra-local or exotic materials were found in the 1998-1999 excavations at Menoken Village. The most ubiquitous non-local material is Knife River flint, mentioned above, the most prominent sources for which occur west of the Missouri River and up to 100 miles distant. Indications of a much larger interaction sphere are given by the presence of small amounts of native copper, presumed to be from Great Lakes sources, and marine shell from the Atlantic or Gulf of Mexico coastal areas. Copper occurs as a tiny awl tip and several scraps recovered by fine-screening in each house excavation (Ahler ed. 2003:Chapter 27). Marine shell (apparently whelk, *Busycon* sp.) occurs as finished barrel-shaped beads, disk beads, and a pendant (Photo 13); marine shell items were recovered from each of the houses (Picha 2003a).

#### Faunal Remains

Vertebrate faunal remains from Menoken Village are dominated by *Bison bison* (Photo 6), with the recently excavated sample containing 1,194 identified bison specimens. The bison bones show substantial surface damage, with a high percentage of burning and cut marks, and significant evidence of weathering and carnivore chewing. There is some hint from tooth wear patterns that bison exploitation may have occurred at different seasons in each of the two houses, while there is no evidence in either house for procuring newborn or very young calves (procurement during April-May) (Cruz-Uribe 2003:287). Other animal remains present include elk, domestic dog, deer, antelope, cottontail, jackrabbit, beaver, muskrat, swift fox, red fox, badger, striped skunk, crow, raven, grouse, eagle, turkey vulture, teal, goose, swan, duck, painted turtle, gar, catfish, and a few smaller fishes. Except for the domestic dog, all of these occur in very small numbers and, consequently, offer very little conclusive information about seasonality. For every vertebrate species, group, or class except bison, the picture is one of opportunistic capture rather than focused exploitation (Falk 2003:309-310). The same can be said of freshwater mussels, which also occur in small numbers in the recently excavated sample (Picha 2003b).

#### **Botanical Remains**

Despite the widespread use of flotation and fine-screen recovery methods in the 1998-1999 excavations, the assemblage of recovered edible plant remains was remarkably impoverished compared to what is typically seen in both Late Plains Woodland and horticultural sites in the area. Cultigens are extremely rare, consisting of a few corncob fragments and a single charred squash seed; large-seeded sunflower, *Iva*, beans, and tobacco are absent. Wild fruits are well represented yet not numerous. These include chokecherry, rose (seeds), grape seeds, plum pits, snowberries, and dogwood fruit pits. Sparse numbers of carbonized weed seed materials were found but were so sparse that they could easily be accounted for as materials incorporated in the construction of houses or opportunistic collecting. The presence of charred snowberries and a small numbers of corn cupules in the pit house suggests that House 2, at least, may have been a cold-season residence (Nickel 2003). A most intriguing discovery was carbonized parenchyma, undifferentiated cells that store sugars, solutes, and starches in roots and tubers that occurred in the burned roof fall debris in each excavated house. This suggests the presence of yet unidentified plant remains that otherwise left little trace in the archeological record (Chapter 27 in Ahler ed. 2003).

#### Depth, Extent, and Distribution of Archeological Deposits

Due to recent extensive geophysical prospecting (Figure 4), coring, and excavation programs at Menoken Village (Kvamme 2001, Ahler, ed. 2003), the extent of the archeological resource is far better understood than that of most sites of this type. The primary Late Plains Woodland period cultural horizon is most concentrated at a depth of 15 to 30 cm below the present ground surface (Photo 6). Artifacts from this cultural horizon occur at greater depth only in features and other cultural intrusions such as borrow pits, house pits, and the fortification ditch. Occasional Late Plains Woodland artifacts occur at or closer to the surface, due to continuing and sporadic processes of bioturbation (primarily rodent burrowing). The primary cultural horizon is for the most part vertically sealed beneath a 10-15 cm thick layer of wind-blown sediment lain across the terrace surface.

The Late Plains Woodland cultural horizon, and certainly clear features such as dwellings associated with that horizon, are spatially concentrated within the fortification system and in a small adjacent area just south and east of the ditch. This cultural deposit may extend as refuse down the face of the cutbanks on the north and west margins of the village. The land surface immediately outside of the State Historic Site boundary to the south and east is vegetated in a dense grass cover, which limits surface visibility. These areas have also been cultivated at some time in the past. An intensive surface survey in a separate plowed field on the same terrace surface 100 m south of the site (visible in Photo 1) revealed no diagnostic Late Plains Woodland artifacts and only a thin artifact scatter thought to be post-Late Woodland in age. A 1 x 2 m pit dug in 1999 for purposes of soil profile exposure at the terrace margin about 50 m southwest of the fortification ditch revealed no artifacts of Late Plains Woodland or other age. Will and Hecker (1944:80) comment on a scatter of surface artifacts extending for several acres on the terrace south and east of the village, but note the presence of post-contact age encampments and artifacts in that area. There is every reason to believe the primary Late Plains Woodland occupation horizon that is the focus of this nomination is spatially confined to the terrace surface immediately within and adjacent to the fortification system where pit houses are visible on the present surface, and possibly along the wooded cutbank surfaces that border the village to the north and west.

#### Dating

Five AMS radiocarbon dates have been generated for Menoken Village. Dated samples were taken from the two excavated houses (Houses 2 and 17) and the fortification ditch. Samples from House 2 and House 17 were short-lived materials (seeds, small twigs), while the sample from the fortification ditch was a less ideal piece of charred wood from a tree of uncertain size and age. Dating results are summarized in Table 1, with date averaging and calendrical calibrations conducted using CALIB 3.0.3c (Stuiver and Reimer 1993).

The dates from House 2 yielded a mean calibrated, calendar curve crosspoint of A.D. 1211. The two dates from House 17 yielded a mean calibrated, calendar curve crosspoint of A.D. 1213. One sigma ranges are A.D. 1163-1227 for House 2 and A.D. 1168-1225 for House 17. Wood charcoal from the defensive ditch yielded a somewhat older calibrated, calendar date, but its greater age may be due to the "old wood" effect. Thus, the four dates from the two houses are not only internally very consistent but are also most firmly associated with Late Plains Woodland use of the site. Together, the four house samples yield a mean calibrated, calendar curve interception of A.D. 1213 with a one-sigma range of A.D. 1168-1225. This is the preferred calendar age for the Late Plains Woodland occupation at the site (Ahler ed. 2003:Chapter 16).

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United States Department of the Interior, National Park Service	

#### **Site Formation Processes**

Menoken Village is situated well above the floodplain of Apple Creek and has apparently suffered no appreciable erosion since abandonment. Inspection of the terrace cutbanks revealed no truncated houses or other village features, suggesting that significant erosion has not affected either site margin. About 10-15 cm of windblown sediment now mantles the Late Woodland occupation horizon.

#### **Noncontributing Components**

Analyses of all excavated materials indicate the presence of several components in addition to the primary Late Plains Woodland period occupation at Menoken Village. All of these are ephemeral, by comparison to the Late Plains Woodland occupation, and collectively account for a very small fraction of artifacts at the site. In evaluating these components, most weight is given to recently excavated materials, which are best controlled, as opposed to the collections from the 1930s that include an uncontrolled mixture of surface and excavated samples. Artifacts clearly older than the Charred Body complex are documented by five dart point fragments in the excavated collection that are probably Late Plains Archaic in age. Components of similar or earlier age are indicated by a small number of patinated flakes found in stratigraphically deeper contexts in a few excavation units (Ahler ed. 2003:Chapter 24). There is evidence that the site has one, or possibly two later components represented by non-Late Woodland specimens found very near the surface in the area of House 2. Artifacts from this horizon include two vessel rim fragments and simple-stamped body sherds thought to post-date A.D. 1600 (Swenson 2003) and a small collection of lithic debris not consistent in raw material type with debris from the houses (Ahler ed. 2003:Chapter 24). The latest Native American cultural component within the site is represented by a shallow hearth as well as a small number of glass trade beads and metal trade objects that occur predominantly within the sod horizon. This component is estimated to date after A.D. 1820 (Ahler ed. 2003:Chapter 27). Artifacts from this component were also found during poorly controlled investigations in the 1930s, and led in part to the erroneous association between Menoken Village and the La Vérendrye expedition in A.D. 1738-1739 (Ahler, ed. 2003:Chapter 3). The most recent component consists of historic age "picnic" debris, accumulated primarily during the twentieth century. This material is concentrated in the sod horizon and near the cutbank margin (Ahler ed. 2003: Chapter 9).

#### APPEARANCE OF THE SITE WHILE OCCUPIED

Around A.D. 1210, Menoken Village probably contained 25 to 30 oval house structures notably surrounded by a bastioned stockade fence, supplemented by a defensive ditch outside the palisade. The stockade was possibly covered with stretched bison hides as is known from later Contact Period sites in the region. At least two houses were located outside the line of defense, with the majority located inside. The houses, at any given time, were probably a mix of construction styles including both surficial and shallow pit house types, and all were probably earth covered. The community probably consisted of more than 200 individuals at the time of its occupation. During any given year, the village was probably occupied continuously for a period of several months, most likely during fall, winter, and early spring seasons, and this pattern probably continued over the course of several years.

#### IMPACTS TO THE SITE AND HIGH INTEGRITY

Menoken Village has a high degree of integrity. Most known impacts to the site are demarcated on Figures 2 and 3 and can be seen in Figure 4. A narrow strip of land within the southern margin of the State Historic property and the proposed landmark area was apparently cultivated until the time the site was purchased by the

state and was fenced in 1937 or 1938. The northern edge of the presumed cultivated area is indicated by the "ridge" marked on Figure 2, also visible in Photo 1. This cultivation line intersects the southern edge of the second bastion loop in the fortification ditch. Impact by cultivation to the primary Late Plains Woodland component at the site is considered to be minimal.

The next most extensive impacts to the site are from testing and excavation by archeologists since the 1930s. Old areas of disturbance, as well as the recent excavations, are all shown on Map 3. The largest early excavation, House 1, completed by Thad. Hecker in 1939, was never backfilled and is visible as a large, crater-shaped depression in the western portion of the site (Photo 1). Hecker's 1938 excavation of the palisade at the western-most bastion loop was apparently recontoured and backfilled, and is not visible today. A few other apparently disturbed areas, small in size, are shown on the map. Notable are historic trails, visible on the surface and in geophysical data (Figure 4); impacts from the trails are minimal, however, as they penetrate in most places well less than 15 cm below surface. The 1998 and 1999 investigations in the site have been backfilled and revegetated. It is estimated that no more that 10% of the dwellings within the village have been excavated, and that less than 5% of the total site occupation area containing significant archeological remains has been disturbed by any combination of processes.

# PREVIOUS INVESTIGATIONS AND DOCUMENTATION OF MENOKEN INDIAN VILLAGE SITE, WITH SPECIAL REFERENCE TO ITS CURRENT NATIONAL HISTORIC LANDMARK STATUS

Menoken Village was discovered and sketch mapped by Walter D. Powell in May and June of 1936 (Powell 1936). Powell sketched approximately 20 house depressions as well as the fortification ditch. The village and adjacent land were purchased by the state of North Dakota in February 1937 and have been a protected archeological resource ever since.

The first test excavations at Menoken Village were conducted on July 1, 1938, by Russell Reid, Oscar Will, and four graduate students from the Columbia University expeditionary team under the direction of W. Duncan Strong (Weiant 1938). Menoken was one of several locations where minor work was conducted by Strong's team prior to major excavations at On-A-Slant Village during the same season (see Strong 1940). This group dug test pits in three house depressions, examined five cuts along the eastern cutbank, trenched across the largest lodge depression (House 1) which lay in the southwestern part of the site, tested the fortification ditch, exposed a short section of palisade interior to the ditch, and tested an area outside the ditch.

Later in July 1938 as well as in 1939, Thad. Hecker expanded on the work of the Colombia team. He exposed and mapped a much larger section of the palisade, confirmed burning of the palisade in multiple locations, and deepened the trench through the House 1 depression (Hecker 1938). The following field season Hecker (1939) completely exposed the floor of the same house, with the results discussed in a previous section (Figure 6). Records and documentation for the 1938-1939 work are very scant; the palisade and lodge excavations are described in summary fashion in Will and Hecker (1944:11-15). All available artifacts recovered from the 1938 and 1939 work are housed at the North Dakota Heritage Center under a single accession number. No distinction can be made in this collection among specimens from several different excavations and from the surface of fields covering perhaps 30 acres around the village proper.

Much of the early work at Menoken Village was focused on demonstrating that it was the specific Mandan community visited by the French explorer, La Vérendrye, who in A.D. 1738 made the first recorded contact between Europeans and Plains Village peoples residing along the upper Missouri River (Smith 1980). There were many advocates for this dramatic interpretation of Menoken Village, although Will and Hecker's

published statements about the village and its archeology (1944:4, 79-80, 123) are at times direct, vague, and contradictory regarding this point. Archeologist Preston Holder (1963) accepted Menoken Village as the La Vérendrye village without serious question in his discussion of Menoken as a site of "Exceptional Value" relative to the National Historic Landmark theme titled "Contact with the Indians." As a direct result of Holder's endorsement of Menoken Village as the La Vérendrye expedition contact site, the U.S. National Park Service designated Menoken Village a National Historic Landmark property in 1964.

In recent years, many other scholars have reserved judgment on the position and historical importance of the site. A review and update of the National Historic Landmark nomination conducted by National Park Service archeologist Ronald Corbyn and historian Cecil McKithan (1975/1979) emphasized the lack of firm information about the site and the lingering controversy surrounding its place in history. At about this time, W. Raymond Wood (1982:331) referred to Menoken as an "unknown quantity." In a more in-depth review of the basis for National Historic Landmark status for the site, Jake Hoffman (1982) reexamined site collections, records, and relevant documents in the context of a much-expanded corpus of Plains Village archeological information. He concluded (1982:11-12) that rather than being post-contact in age (and a candidate for La Vérendrye's contact point), Menoken was in fact prehistoric in age and was in all likelihood assignable to the Initial variant of the Middle Missouri tradition (IMM). This assignment and age were consistent with the majority of artifacts in the extant site collection from Will and Hecker's work as well as with discovery of other IMM sites in locations well removed from major rivers in South Dakota. In 1985, Hoffman updated the National Register of Historic Places Form for Menoken Village (a.k.a. Menoken Indian Village). He noted that the site was still of national significance, but for reasons other than those that led to its original designation as a Landmark. Hoffman indicated that the preservation and integrity of the site were excellent, marred only by the unbackfilled House 1 excavation (Hoffman 1985).

Analysis in 1996 performed by Paul Picha and Fern Swenson (1996) marked the beginning of current research at Menoken Village. They conducted a new analysis of the site collections made during the 1930s and produced a 15-cm-interval site contour map using conventional optical mapping equipment (a portion of this map is used as Figure 2, herein). Sixteen definite or possible house depressions were accurately located on this map through a combination of air photo study, on-the-ground examination, and subsurface coring with a one-inch soil probe (Picha and Swenson 1996:1-2).

In 1997, active research at Menoken Village was carried out by Kenneth L. Kvamme with a grant from the National Center for Preservation Technology and Training (NPS) to explore multiple geophysical survey technologies at a Plains Village site (Kvamme 1998). The following year, 1998, the University of Missouri-Columbia with PaleoCultural Research Group, conducted a field school in collaboration with the Kvamme team with support from the State Historical Society of North Dakota (see Ahler, ed. 1999). The geophysical team completed survey and re-survey of nearly the whole village using multiple methods (Figure 4). The 1998 fieldwork included detailed surface mapping, metal detector work, hand coring, and test excavations at three locations.

Fieldwork by the same team continued in 1999, focusing primarily on two house excavations as well as dispersed tests of specific geophysical anomalies (Figure 3). All of the excavation work, in both block areas and dispersed tests, led to more accurate interpretations of geophysical data, as reported by Kvamme (2001). The 1999 field program yielded a great deal of field data about architecture, stratigraphy within houses, and general distributions of artifacts observed during excavation (mainly features and plotted specimens). The history of Menoken Village, as well as results of the 1997-1999 field program, are reported in detail in Ahler, ed. (2003).

#### **8. STATEMENT OF SIGNIFICANCE**

Certifying official has considered the significance of this property in relation to other properties: Nationally:  $\underline{X}$  Statewide: Locally:

Applicable National Register Criteria:	A_B_C_D <u>X</u>
Criteria Considerations (Exceptions):	A_B_C_D_E_F_G
NHL Criteria:	6
NHL Theme(s):	I. Peopling Places
Areas of Significance:	Archeology, prehistoric
Period(s) of Significance:	A.D. 1000-1300
Significant Dates:	N/A
Significant Person(s):	N/A
Cultural Affiliation:	Late Plains Woodland
Architect/Builder:	N/A
Historic Contexts:	I. Cultural Developments: Indigenous American Populations B. Post-Archaic and Pre-Contact Developments 10. Plains Hunters and Gatherers 11. Plains Farmers

# State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.

## SUMMARY

Menoken Village is nationally significant because of the unique scientific information it contains that can inform us greatly about processes involved in the appearance of village-dwelling, farming-based cultures along most of the major river systems in the Northern Plains in the period A.D. 1000-1300. Menoken Village is clearly part of the Late Plains Woodland tradition, occupied by hunter-gatherers who did not practice maize horticulture and who had a strong interest in bison hunting. Although Menoken Village is not itself an early horticultural community, it contains information critical to the issue of origins of horticulture because it is strategically positioned, from geographic, chronological, and cultural perspectives, just in front of a moving frontier that involved change from the Woodland lifeway to the Plains Village lifeway. It therefore contains data essential to understanding a fundamental cultural change that was taking place at roughly the same time across much of North America east of the Rocky Mountains. No other known archeological site in the Middle Missouri subarea is so positioned. Indeed, data from Menoken Village have already informed us greatly in this regard, indicating that this process involved not migration of peoples bearing a different cultural tradition, but transformations of local cultural groups having a long history of residence in the area.

The property meets Criterion 6 for National Historic Landmark nomination, Criterion D for National Register of Historic Places nomination, and applies to Peopling Places under the NHL thematic framework. Menoken Village has the potential to inform us about the rapid and dramatic process of the adoption of corn horticulture as a new organizing framework for human habitation that began about 1000 years ago and transformed the cultures of interior North America. Menoken Indian Village far surpasses other sites of this era with regard to the amount of data that can inform this research. The theme of Peopling Places is applicable through the study of subsistence pursuits, raw material acquisitions, long distance contacts, settlement patterns, and architectural patterns. In addition, the temporal placement of Menoken Indian Village at the terminus of the late Plains Woodland period is a unique and key attribute among all the sites of this archeological complex.

# PERIOD OF OCCUPATION AND CULTURAL ASSOCIATION

The primary prehistoric occupation at Menoken Village, which is the focus of this nomination, occurred during the first decade or two of the thirteenth century A.D. Archeologists do not know why the site was vacated or abandoned. The fortification system and two houses in Menoken Village are firmly radiocarbon dated to about A.D. 1210. The specific radiocarbon dates from the site are discussed in greater detail in Section 7 of the form. These dates are consistent with the material content of the primary cultural component at the site.

The concept of the Plains Woodland tradition is not yet well developed in the Northern Plains and in North Dakota (Gregg 1985:117). Within central North Dakota, sites in this tradition can be subdivided by chronology and material content into the Middle Plains Woodland period (ca. A.D. 1-700) and the Late Plains Woodland period (ca. A.D. 700-1200). The Middle Plains Woodland period includes the Besant and Sonota complexes (Gregg 1985:118-124; Newman 1975) characterized by use of dart points, subconoidal cord-roughened pottery vessels, conical burial mounds, and heavy reliance on bison hunting. The Late Plains Woodland period is distinguished in part by use of arrowpoints rather than dart points, and by changes in pottery and settlement patterns.

The primary cultural component at Menoken Village is readily classified as Late Plains Woodland period in age. The cultural taxon to which Menoken Village is assigned is the Charred Body complex, defined in 1993

(Ahler 1993:65) to encompass the earliest known nucleated settlements in the Knife and Heart regions of the North Dakota. Menoken Village lies in the Heart region, that portion of the Missouri trench and its immediate tributaries that extends from just below the mouth of the Heart River upstream to Square Buttes. When originally defined, key features of the Charred Body complex included residence for at least part of the year in oval, semi-subterranean dwellings, use of pottery with predominantly cord-roughened surface treatment, and a chronological position that immediately predated the earliest village settlements clearly associated with the horticulturally-based Plains Village lifeway in the two regions.

Menoken Village meets these requirements and in fact provides substantial new information by which to refine the definition of the Charred Body complex. Menoken Village can easily be considered the premier example among sites that can be assigned to the complex. Continuing work with regional radiocarbon dates, as reported in Ahler and Haas (1993) and Johnson (2003:Table C.3), indicates that Menoken Village, occupied circa A.D. 1200-1220, predates by a few decades the earliest dated Plains Village tradition sites anywhere in North Dakota (Clark's Creek and White Buffalo Robe sites, north of Menoken, date around A.D. 1280 to 1300, and Bendish, Fire Heart Creek, and Paul Brave sites, south of Menoken, date around A.D. 1280 to 1290). At the same time, Menoken Village postdates a number of Plains Village tradition sites in South Dakota, clearly demarcating its national significance as a location containing information about the spatial-temporal dynamics of the Woodland-Plains Village transformation that occurred in an area much greater than the state of North Dakota.

Recent research at Menoken Village and closely associated sites indicates that material attributes of the Charred Body complex can be expanded to include cord-roughened pottery vessels with predominantly simple, everted rim forms; use of oval houses constructed either on the surface or in shallow pits; heavy reliance on Knife River flint for production of chipped stone tools; predominant occurrence of Plains Side-Notched arrowpoint forms (Kehoe 1966, 1973); lack of evidence for practice of horticulture involving tropical cultigens; and a huntergather subsistence base with a heavy focus on bison hunting.

Other sites that contain Charred Body complex components and assist in our understanding of Menoken Village include several Late Woodland period sites on the Cross Ranch, on the west side of the Missouri River a short distance north of Square Buttes; Flaming Arrow Village, on the left bank of the Missouri River in McLean County a few miles north of Menoken Village; a Late Plains Woodland component at 32MO98 in Morton County on the west bank of the Missouri downstream from Bismarck; and 32EM72, in Emmons County on the east bank of the Missouri also several miles south of Bismarck (Figure 9). The Cross Ranch sites (Legacy, Stoney, Robin, Shide, Hat, Carroll, and Bundlemaker, reported in Ahler et al. 1981 and 1982) have produced cord-roughened pottery associated with arrowpoints of the appropriate form and heavy use of Knife River flint. These sites are predominantly hunting and bison processing camps associated with bison kills in the breaks zone, and the Cross Ranch sites are thought to represent a settlement facies of people who lived in villages such as Menoken and Flaming Arrow. A peculiar method for resharpening hafted hide scrapers (first discussed in Ahler et al. 1982:258-259) links Menoken Village and the Cross Ranch sites. Flaming Arrow Village is a nucleated settlement containing several pit houses, cord-roughened pottery, and arrowpoints of the appropriate form, and apparently lacking any evidence for practice of maize horticulture (Ahler et al. 1991:27-30). A single partially excavated house at Flaming Arrow has an architectural plan very similar to houses at Menoken Village. Very interestingly, Flaming Arrow Village is a specific location that also figures prominently in the origin traditions of the Awatixa subgroup of the Hidatsas (Bowers 1948:115-116, 1965:291), a Plains Village tribal group that occupied part of the Missouri Valley in historic times. Oral traditions combined with archeology therefore suggest cultural continuity between Late Plains Woodland and Plains Village peoples in this region, and because of the close similarity between Menoken Village and Flaming Arrow Village, this interpretation would apply equally to residents of Menoken Village. Site 32MO98 has produced a large surface

collection of pottery, stone tools, and other artifacts very similar to those found at Menoken Village and considered typical of the Charred Body complex. Site 32EM72 has been tested and found to contain a component with cord-roughened Late Woodland pottery similar to that at Menoken Village (McKibbin et al. 1994).

While Flaming Arrow and the Cross Ranch sites provide information that supports the culture-historic placement of Menoken Village, Menoken Village far surpasses all of these sites in the greater amount of data it is known to contain regarding many aspects of subsistence pursuits, raw material acquisition, long-distance contacts, settlement patterns, and architectural patterns. In addition, the temporal placement of Menoken Village at the very terminus of the Late Plains Woodland period is a unique and key attribute among all the sites assignable to the Charred Body complex.

Some of the geographically closest neighbors for the residents of Menoken Village were probably the people who lived at a site called Jones Village (39CA3), on the east bank of the Missouri River about 70 miles due south of Menoken just within what is now South Dakota (Figure 9). Jones Village is the northernmost known settlement of Initial Middle Missouri peoples (Johnson 1997, 1998) who were clear adherents to a Plains Village tradition, farming-based lifeway. The Initial Middle Missouri variant (IMM) (Lehmer 1971) is a well documented cultural manifestation at Jones Village and especially at many other villages farther south along the Missouri River and the lower James River in central and eastern South Dakota (Figure 9).

#### STATEMENT OF SIGNIFICANCE: PEOPLING PLACES

As discussed in Section 7, Menoken Village is an existing National Historic Landmark, so designated in 1964 based on an assumed connection between the site and the La Vérendrye Expedition in 1738. We now know this assumption to be false, with recent work having demonstrated conclusively that the village was occupied during the early A.D. 1200s and not the A.D. 1700s. The actual Mandan village visited by La Vérendrye remains unidentified. We have also learned, however, that Menoken Village should retain its National Historic Landmark status. This is so because of its potential to inform us about the rapid and dramatic process of adoption of corn-horticulture as a new organizing framework for human habitation in much of the Northern Plains that started about 1000 years ago.

Archeologists have long been interested in the adoption of horticulture or farming based on corn, beans, and squash and the role that this process played in the transformation of cultures in the interior of North America. In the western prairies and eastern Great Plains the adoption of corn-based horticulture is closely associated with the appearance of the Plains Village tradition (Willey 1966:320-329) or pattern (Lehmer 1971:65), a new lifeway that featured (1) residence in permanent or semipermanent hamlets and nucleated settlements along major water courses, (2) heavy involvement in farming as documented by abundant cultigens, gardening tools, and food storage facilities in the archeological record, and (3) heavy reliance on bison as an important food resource and for raw material for production of bone tools.

In the prairies of western Iowa and southwestern Minnesota and along the James and Missouri Rivers in South Dakota, the earliest Plains Village tradition peoples are referred to by archeologists as belonging to the Middle Missouri tradition, or more specifically, the Initial variant of the Middle Missouri tradition (the IMM) (Lehmer 1971:65-105; Johnson 2003). During the A.D. 1100s, the Plains Village lifeway was flourishing in the parts of Iowa, Minnesota, and South Dakota just mentioned (Figure 9). By A.D. 1300, the Plains Village lifeway extended much farther northward along most of the Missouri River trench in North Dakota (Wood 2001:Figure 1). By around AD 1400, corn-based horticulture had spread as far northwest as the lower Yellowstone River in

eastern Montana (Ahler and Haas 1993) and southern Manitoba (Deck and Shay 1992). Shortly thereafter, the territory commanded by the village farmers contracted, and, at the time of historic contact, the farming frontier extended up the Missouri River only to the mouth of the Knife River in central North Dakota.

Archeologists who study this broad region, and more specifically the early Plains Village cultures in the Northern Plains, have discussed for many years the processes by which the horticultural transformation took place, and the question of the origins of the Plains Village lifeway. Some writers have argued for westward and northwestward migration of horticulturalists (most recently Toom 1992), while others have favored in situ transformation of local populations in the absence of significant population movements (Tiffany 1982, 1983). The origin traditions of the Mandans, arguably the historic descendants of the prehistoric cultures under debate, support both views, with some historic Mandan subgroups claiming migration from distant places to the east and others claiming origin on the Missouri River (Bowers 1948). Most recent discussions of this topic appear to favor in situ development of the Plains Village lifeway, perhaps promoted in some manner by connections and influences from the "Mississippian interaction sphere" centered far to the east (Tiffany 2003).

To address this topic of how the Plains Village transformation took place, and whether it involved migration or local development, one must examine well controlled data from archeological sites in the appropriate geographic location and sites that immediately predate first appearance of unequivocal Plains Village manifestations. In northwestern Iowa, southwestern Minnesota, eastern Nebraska, and eastern South Dakota, more than 150 sites have been recognized that collectively meet these requirements, presently classified as the Great Oasis culture (Figure 9) (Lensink and Tiffany 1999, cited in Tiffany and Alex 2001:71). In that region, Great Oasis culture is considered Late Woodland in character due to a diversified hunting economy and many lacustrine settlement locations, while expressing locally strong but uneven emphasis on corn horticulture and developed bone tool industries that portended the eminent appearance of Initial Middle Missouri variant Plains Villagers (Tiffany and Alex 2001:71-85).

Immediately to the west and northwest, in central South Dakota and more broadly in North Dakota, there is no widely recognized equivalent to the Great Oasis culture. There is in fact a near-vacuum of information regarding what would be called Late Plains Woodland manifestations (Gregg 1985). Not long ago, W. Raymond Wood stated the following about this area, with some accuracy:

"No really meaningful assessment of the origins of the Middle Missouri tradition is possible, as no plausible antecedent cultural units for the tradition are known." (Wood 2001:190)

Now, strategically positioned in the middle of this information vacuum, is Menoken Village (see Figure 9). This is why Menoken Village is a nationally significant site and warrants continued National Historic Landmark status, under Criterion 6. The site has landmark significance under the theme Peopling Places that deals with "population movement and change through prehistoric and historic times" and "group interaction, from peaceful accommodation to warfare and extermination" (NPS 1999:81). Under this theme, the topic "migration from outside and within" (NPS 1999:81) is particularly relevant. The fundamental question that Menoken Village can help us understand, in a way no other presently known archeological site can, is this: When and by what combination of processes did the revolutionizing event – the adoption of intensive horticulture – appear on the Northern Plains, and, more particularly, was this singularly significant event due to migration into the region of peoples having a distinctly different cultural background that carried with it horticulture, or did it involve a transformation of the basic subsistence practices exercised by the local, in situ populations?

At the time Menoken Village was occupied, in the early decades of the A.D. 1200s, the Lower James River valley and all of the Missouri River trench in South Dakota was well settled by Initial Middle Missouri tradition (IMM) village farmers. IMM settlements dating in the A.D. 1100s and early 1200s were most dense in the southern part of this area, with the northernmost communities being Fay Tolton (Wood, ed. 1976) and Jones Village (Johnson 1997, 1998) (Figure 9). Jones Village is in fact an outlier from the main group of IMM settlements, marking the northern frontier of IMM territory, only 70 miles south of Menoken Village. Five radiocarbon dates from Jones Village reported in Johnson (2003:Table C.2) have a calibrated one-sigma range of A.D. 1065-1184 and a two-sigma range of A.D. 1046-1217. All dated samples from Jones Village are charred wood that may not be short-lived, so the actual date of occupation may be slightly more recent than the dates suggest due to the "old wood" effect. The four dates from Menoken Village (Table 1, Section 7) have a calibrated one-sigma range of A.D. 1168-1285 and a two-sigma range of A.D. 1065-1256. Thus, there is a strong likelihood that the occupations of Menoken Village (hunter-gatherers) and Jones Village (horticulturists) overlapped in time and that their inhabitants were in fact living neighbors of one another. Fay Tolton, the next closest IMM community to Menoken farther down the Missouri River, is also radiocarbon dated to almost precisely the same calendar span as Jones Village (Johnson 2003:Table C.3).

Menoken Village was therefore a nucleated fortified community clearly belonging in the Late Plains Woodland tradition, positioned only 70 miles north of a contemporaneous, large nucleated and fortified Plains Village tradition settlement at Jones Village (Figure 9). Within 50 years after Menoken Village was occupied, Plains Village settlements dotted the Missouri Valley through most of North Dakota, extending upstream as far as a site called Grandmother's Lodge (Lehmer 1971:Figure 113), 120 miles past the mouth of Apple Creek and Menoken Village. Even though Menoken Village is not a community of early horticulturalists, for us to research and interpret the answer to the fundamental question posed above about the origins of horticulture in the Northern Plains, we must have data from archeological components that lie on both sides - the before and the after – of the horticultural transformation. The best possible case for meeting this requirement would be a single site with sequential or continuous occupations that immediately predated and postdated the transformation. No such site is known in the Northern Plains. Lacking such a site, the next best case is individual sites in close geographic proximity that immediately predate and postdate the horticultural transformation. Several well understood, early Plains Village sites meet the requirement for the "after" side of this duality. Menoken Village alone comprises the other side of that duality, lying on the "before" side of the transformation. It is the only known terminal Late Woodland site that is in the correct geographic position to meet this requirement. Menoken Village is strategically positioned relative to the geographically and chronologically shifting frontier of horticultural transformation. The site is both on a frontier of place, a line or boundary where culture contact took place, and also on a frontier of process, or a changing societal panorama within a larger geographic region (Rice 1998:49-50). In conjunction with Menoken Village's singularly significant temporal and geographical context, its rich material content and high degree of integrity guarantee that the location can inform us greatly about the origins of intensive crop cultivation and, with it, the Plains Village lifeway (Peopling Places theme) in the Northern Great Plains.

Recent research at Menoken Village, based on information and artifacts from the 1998-1999 studies, have in fact already provided significant new information bearing on the question of Plains Village origins in the Middle Missouri subarea. Many aspects of the material record link Menoken Village both to earlier Woodland Tradition sites in both North and South Dakota as well as to the early Plains Village sites just mentioned in South Dakota. The oval form, size, depth, and entry configuration of House 2 at Menoken Village (Figure 7), including an interior ramp and the adjacent lobed alcoves, have closely parallel features in the partially excavated house at Flaming Arrow Village (Ahler et al. 1991:29-30). Flaming Arrow is thought to date about 100 years earlier than Menoken Village (Ahler and Haas 1993:132-133) and, chronologically, lies firmly within

the regional Plains Woodland period as currently understood. At the same time there are strong similarities in specific elements of house construction that link Menoken Village (particularly House 2), Flaming Arrow, and several IMM components in South Dakota. Most specific in this regard is the combination of entry ramp that projects into the house interior, setting off two lobes or alcoves of the interior space on either side of the entryway (for example Houses IV and VI at Sommers [39ST56; Steinacher 1990:54,59], Features 2, 4, and 7 at the Pretty Head site [39LM232; Caldwell and Jensen 1969:7,9,10], and the two excavated houses at Fay Tolton [39ST11; Cottier and Cottier 1976:5,6]. The IMM houses (see Figure 10) differ particularly from those at Menoken in their larger size, rectangular form (most apparent at the rear of the structure), and use of an additional central support post behind the central hearth (a similar post pattern may have been used at House 17 at Menoken). Many IMM houses appear to be enlarged and formalized versions of the oval pit houses at Menoken and Flaming Arrow, with accentuation of a rectangular form at the back of the structure.

Except for the occurrence at Menoken of S-rim vessel forms, pottery from Menoken Village (Photos 7 and 8) differs little if any from that found at Flaming Arrow (another Charred Body complex village) and several Late Plains Woodland camps and bison processing sites on the Cross Ranch in Oliver County. The most common, straight rim forms also resemble Sandy Lake pottery that is widely dispersed through a long time period in eastern North Dakota (see Figure 9) (Michlovic and Swenson 1998). Although not classified as such by Menoken Village researchers, the straight rim pottery from Menoken differs very little from Anderson ware, a prominent constituent of IMM Plains Village assemblages in South Dakota (Johnson 2003; Caldwell and Jensen 1969:33-41; Steinacher 1990). One particularly significant feature of the Menoken pottery assemblage is the occurrence of Foreman ware, an S-rim form that also typically makes up a substantial part of IMM collections. Foreman ware sherds at Menoken could well be from vessels imported from nearby contemporaneous Plains Village sites such as Jones Village or Fay Tolton. Petrographic, trace element, and production sequence studies can provide information regarding the local or non-local origin of the Foreman ware vessels at Menoken, and relationships between potting traditions in Late Plains Woodland and Plains Village communities. In fact, based on research in progress as this nomination is written, Richard Krause (personal communication to S. Ahler, 1/6/04) reports that the Menoken ceramic collection contains both coiled and mass modeled vessels that fused in a complex manner elements of Woodland and Middle Missouri tradition manufacturing practices. This evidence argues strongly for close interaction between the occupants of Menoken Village and Plains Village people to the south.

Other material linkages shared among Menoken Village, earlier Woodland manifestations (Sonota complex and Cross Ranch sites), and IMM Plains Village sites include heavy use of Knife River flint as a preferred knapping stone regardless of distance from source; native copper artifacts; and marine shell pendants and beads (Photo 13) (see particularly Neuman 1975; Johnson 1984; Caldwell and Jensen 1969). While evidence for trade at Menoken Village is not singularly significant, the important fact is that the Menoken occupants and early horticulturalists were all involved in exchange of the same materials from the same sources. Additional links between Menoken and several IMM Plains Village sites include use of Bijou Hills silicified sediment (a stone having its origins in IMM territory to the south; see Johnson 1984), distinctive L-shaped scapula cutting tools (hooked knives), and antler bow guards having identical decorative motifs (Photo 12) (e.g., Caldwell and Jensen 1969:65). The parallels in organization of lithic technology between Menoken Village and the horticulturalists at Jones Village to the south (Johnson 1997, 1998) are both detailed and extensive, centering on patterned biface production from large pieces of Knife River flint procured at distant quarry locations, extensive use of bipolar reduction technology, occurrence of specialized pointed wood planes, and incorporation of unusual stones such as vein quartz and exotic stone types (in addition to Bijou Hills silicified sediment) such as Flattop chalcedony (from Nebraska) and plate chalcedony (from the South Dakota Badlands) in the tool assemblages.

By examining the data from these sites, with Menoken providing the key linkage, it can be seen that a strong degree of material, technological, stylistic, and extra-community interactive continuity existed across the Middle Plains Woodland, Late Plains Woodland, and Early Plains Village traditions in the Middle Missouri subarea. This continuity strongly indicates that the appearance of the Plains Village lifeway in the subarea, particularly in the Dakotas west of the prairie border, reflects not migration but rather an in situ cultural transformation of local populations. This qualitative change is closely associated with the wholesale adoption of corn/bean/squash horticulture. While we conclude that data from Menoken Village argues strongly for in situ development rather than migration as the dominant process in the origin of horticulture in the region, we are not necessarily arguing that this transformation was peaceful. The strong continuities in material remains and details of technological traditions do not fully address the nature of the interactions of peoples on either side of the frontier of horticultural transformation. In terms coined by Martínez (1994:6-9) for culture-contract situations, their interaction may have been coexistent or interdependent (with varying degrees of communication and cooperation) or it may easily have been alienated, with extremely little interaction. The relatively elaborate fortification system at Menoken Village clearly indicates that the occupants lived in a hostile environment, but it is difficult to know who they may have been threatened by. Jones Village was fortified (Johnson 1997, 1998), as were some but not all of the IMM horticultural settlements farther south (Lehmer 1971:69-70), some earlier than and some contemporaneous with Menoken. It is clear that the coming of the Plains Village lifeway brought with it, at the minimum, reorganization into much larger settlements than that at Menoken (e.g., Jones Village, Fay Tolton, and many IMM sites are several times the size of Menoken). Such reorganization may have involved collapse of several smaller local communities into fewer larger ones, and such processes may not have been entirely voluntary or without conflict. Data from Menoken do not yet speak clearly on this issue, which is not a central element in the Landmark nomination. The Menoken data do make it clear that local terminal Late Woodland peoples and the earliest Plains Villagers in the Northern Plains shared a common cultural base, and that the coming of the horticultural transformation on the Northern Plains did not involve immigration of distant peoples into the area (Peopling Places theme).

The information potential of Menoken Village, particularly in the area of Late Plains Woodland – Plains Village comparative research, is quite large. Here we call attention to the potential for the site to yield yet more detailed information bearing on the topic of cultural change (Peopling Places theme) and extraction and production. An especially enigmatic question still to be answered is how and why Late Plains Woodland peoples such as those at Menoken and Flaming Arrow villages managed to maintain fortified, nucleated settlements in the absence of any type of cropping or food storage practices. The subsistence economy at Menoken Village, as presently understood, appears incongruous with a settlement that involved substantial house constructions, communal efforts for defensive constructions, and periods of site occupation that extended across several months if not portions of several years. The answer to this question is particularly critical to understanding the full scope and scale of cultural transformations that the coming Plains Village lifeway embodied. A partial answer may lie in focused study of charred parenchyma remains, preserved in multiple contexts within Menoken Village, which may reflect a presently unidentified plant resource that played a key role in Late Plains Woodland subsistence-settlement systems.

#### 9. MAJOR BIBLIOGRAPHICAL REFERENCES

Ahler, Stanley A.

1993 Plains Village Cultural Taxonomy for the Upper Knife-Heart Region. In *The Phase I Archeological Research Program for the Knife River Indian Villages National Historic Site, Part IV: Interpretation of the Archeological Record*, edited by Thomas D. Thiessen, pp. 57-108. Midwest Archeological Center, Occasional Papers in Anthropology No. 27, United States Department of the Interior, National Park Service, Midwest Archeological Center, Lincoln, NE.

#### Ahler, Stanley A., editor

- 2003 Archaeology at Menoken Village, A Fortified Late Plains Woodland Community in Central North Dakota. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.
- 1999 Interim Report and Work Plan for Continuing Archaeological Investigations at Menoken Village State Historic Site, 32BL2, Burleigh County, North Dakota. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.

#### Ahler, Stanley A. and Herbert Haas

1993 The KNRI Phase I Chronometric Subprogram. In *The Phase I Archaeological Research Program for the Knife River Indian Villages National Historic Site, Part I: Objectives, Methods, and Summaries of Baseline Studies*, edited by T. D. Thiessen, pp. 115-166. Midwest Archeological Center Occasional Studies in Anthropology No. 27. National Park Service, Midwest Archaeological Center, Lincoln.

#### Ahler, Stanley A., Thomas D. Thiessen, and Michael K. Trimble

1991 People of the Willows: The Prehistory and Early History of the Hidatsa Indians. University of North Dakota Press, Grand Forks.

#### Ahler, Stanley A., Chung Ho Lee, and Carl R. Falk

1981 Cross Ranch Archeology: Test Excavations at Eight Sites in the Breaks Zone, 1980-81 Program. Department of Anthropology and Archeology, University of North Dakota, Grand Forks. Submitted to the State Historical Society of North Dakota, Bismarck..

#### Ahler, Stanley A., Carl R. Falk, and Paul R. Picha

1982 Cross Ranch Archeology: Test Excavations at Twelve Sites in the Breaks and Upland Zones, 1981-82 Program. Department of Anthropology and Archeology, University of North Dakota, Grand Forks. Submitted to the State Historical Society of North Dakota, Bismarck.

#### Bluemle, John R.

1991 *The Face of North Dakota*. Revised edition. North Dakota Geological Survey, Educational Series 21. Bismarck.

#### Bowers, A. W.

1948 A History of the Mandan and Hidatsa. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Chicago.

1965 *Hidatsa Social and Ceremonial Organization*. Bureau of American Ethnology, Bulletin 194. Smithsonian Institution, Washington D.C.

#### Caldwell, W. W., and R. E. Jensen

1969 *The Grand Detour Phase*. Smithsonian Institution River Basin Surveys, Publications in Salvage Archeology No. 13. Lincoln, NE.

#### Corbyn, Ronald and Cecil McKithan

1975/1979 National Register of Historic Places Inventory – Nomination Form. Menoken Indian Village Site. Copy provided by the National Historic Landmark Office, Washington, DC.

#### Cottier, John W. and Randy Cottier

1976 Site Description. In *Fay Tolton and the Initial Middle Missouri Variant*, edited by W. Raymond Wood, pp. 2-8. Missouri Archaeological Society Research Series No. 13, Columbia, Missouri.

#### Cruz-Uribe, Kathryn

2003 Faunal Analysis of Bison Remains. In *Archaeology at Menoken Village, A Fortified Late Plains Woodland Community in Central North Dakota*, edited by S. A. Ahler, pp. 277-290. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.

#### Deck, D. M. and C. T. Shay

1992 Preliminary Report on Plant Remains from the Lockport Site (EaLf-1). *Manitoba Archaeological Journal* 2(2):36-49.

#### Falk, Carl R.

2003 Unmodified Vertebrate Remains from Menoken Village: Fish, Amphibian, Reptile, Bird, and Select Mammals. In *Archaeology at Menoken Village, A Fortified Late Plains Woodland Community in Central North Dakota*, edited by S. A. Ahler, pp. 291-314. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.

#### Gregg, Michael L., compiler

1985 An Overview of the Prehistory of Western and Central North Dakota. Bureau of Land Management. Cultural Resource Series, Number 1. Montana State Office, Billings, MT.

#### Hecker, Thad. C.

- 1938 Letter from Thad. Hecker to Russell Reid dated July 25, 1938. In Burleigh County Site Survey File, Series 226, Box 17. State Historical Society of North Dakota Archives, Bismarck.
- 1939 Stratigraphy Of Lodge Site. Handwritten manuscript dated July 1939 in Burleigh County Site Survey File, Series 226, Box 17. State Historical Society of North Dakota Archives, Bismarck.

#### Holder, Preston C.

1963 Menoken Indian Village Site, North Dakota. In *Theme VII. Contact With the Indians*, pp. 155-156. Manuscript on file, Midwest Archaeological Center, National Park Service, Lincoln.

#### Hoffman, J. J.

- 1983 An Investigation of Menoken Indian Village National Historic Landmark. Manuscript on file, Midwest Archeological Center, National Park Service, Lincoln.
- 1985 National Register of Historic Places Inventory-Nomination Form. Menoken Indian Village Site. Document on file, Midwest Archeological Center, U.S. National Park Service, Lincoln.

#### Johnson, Craig M.

- 1984 Time, Space, and Cultural Traditions as Factors in Lithic Resource Exploitation in the Middle Missouri Subarea. *Plains Anthropologist* 29:289-302.
- 1997 *Archeological Investigations at the Jones Village Site (39CA3), Campbell County, South Dakota.* PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the Omaha District, U.S. Army Corps of Engineers.
- 1998 *Archeological Investigations at the Jones Village Site (39CA3), Campbell County, South Dakota.* PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the Omaha District, U.S. Army Corps of Engineers.
- 2003 A Chronology of Middle Missouri Plains Village Sites. Publications In Anthropology, Smithsonian Institution, Washington, DC. In Press.

#### Kehoe, Thomas F.

1966 The Small Side-Notched Point System of the Northern Plains. American Antiquity 31:827-841.

1973 *The Gull Lake Site: A Prehistoric Bison Drive Site in Southwestern Saskatchewan*. Milwaukee Public Museum, Publications in Anthropology and History, No. 1

#### Kehoe, Thomas F., and Bruce A. McCorquodale

1961 The Avonlea Point: Horizon Marker for the Northern Plains. Plains Anthropologist 6(13):179-188.

#### Kvamme, Kenneth L.

- 1998 Geophysical Explorations at the Menoken Indian Village State Historic Site (32BL2), Burleigh County, North Dakota, 1997 Field Season. Report submitted to the State Historical Society of North Dakota.
- 2001 Final Report of Remote Sensing Investigations Conducted at The Menoken Village State Historic Site (32BL2), 1997-1999. ArcheoImaging Lab, Department of Anthropology and Center for Advanced Spatial Technologies, University of Arkansas. Fayetteville. Submitted to the State Historical Society of North Dakota, Bismarck.

#### Lehmer, Donald J.

1971 Introduction to Middle Missouri Archeology. Anthropological Papers 1, U.S. National Park Service, Washington, D.C.

#### Lensink, S. C. and J. A. Tiffany

1991 Great Oasis in Space and Time. Paper presented at the 11<sup>th</sup> Annual Meeting of the Iowa Academy of Science, Ames.

#### Martinez, Oscar J.

1994 Border People: Life and Society in the U.S.-Mexico Borderlands. University of Arizona Press, Tucson.

#### McKibbin, Anne, Michael McFaul, Karen Lynn Traugh, and Grant D. Smith

1994 32EM72: Results of Test Excavations on the East Shore of Lake Oahe, Emmons County, North Dakota. Metcalf Archaeological Consultants, Inc., Eagle, Colorado. Submitted to the Omaha District, U.S. Army Corps of Engineers.

#### Michlovic, Michael G. and Fern E. Swenson

1998 Northeastern Plains Village Pottery. *North Dakota History, Journal of the Northern Plains* 65(2&3):11-25. State Historical Society of North Dakota, Bismarck.

#### Neuman, Robert W.

1975 *The Sonota Complex and Associated Sites on the Northern Great Plains*. Publications in Anthropology, No. 6. Nebraska State Historical Society, Lincoln.

#### Nickel, Robert K.

2003 Identifiable Seeds and Related Botanical Remains. In *Archaeology at Menoken Village, A Fortified Late Plains Woodland Community in Central North Dakota*, edited by S. A. Ahler, pp. 255-276. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.

# NPS

1999 National Register Bulletin. How to Prepare National Historic Landmark Nominations. U.S. Department of the Interior, U.S. National Park Service, Washington, D.C.

#### Picha, Paul R.

- 2003a Modified and Fossil Shell Artifacts. In *Archaeology at Menoken Village, A Fortified Late Plains Woodland Community in Central North Dakota*, edited by S. A. Ahler, pp. 487-504. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.
- 2003b Unmodified Shell Remains. In *Archaeology at Menoken Village, A Fortified Late Plains Woodland Community in Central North Dakota*, edited by S. A. Ahler, pp. 315-324. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.

#### Picha, Paul R., and Fern E. Swenson

1996 Recent Investigations at Menoken (32BL2) and Ward Village (32BL3) Sites, Burleigh County, North Dakota. Paper presented at the 54<sup>th</sup> Annual Plains Anthropological Conference, Iowa City, Iowa.

#### Powell, Walter D.

1936 Mandan Village Visited by Verendrye in 1738. Minnesota Archaeologist II(10):4-6.

#### Steinacher, Terry L.

1990 Settlement and Ceramic Variability at the Sommers Site (39ST56) Stanley County, South Dakota. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Oklahoma, Norman.

#### Stuiver, Mintze and P. J. Reimer

1993 Extended <sup>14</sup>C Data Base and Revised CALIB 3.0 <sup>14</sup>C Age Calibration Program. *Radiocarbon* 35:215-230.

#### Strong, William Duncan

1940 From History to Prehistory on the Northern Great Plains. Smithsonian Miscellaneous Collections 100.

#### Swenson, Fern E.

2003 Analysis of Prehistoric Ceramics. In *Archaeology at Menoken Village, A Fortified Late Plains Woodland Community in Central North Dakota*, edited by S. A. Ahler, pp. 327-356. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.

# Toom, Dennis L.

1992 Early Village Formation in the Middle Missouri Subarea of the Plains. *Research in Economic Anthropology, Supplement 6*, pp. 131-191. JAI Press, Inc.

# Tiffany, Joseph A.

- 1982 *Chan-Ya-Ta: A Mill Creek Village*. Office of the State Archaeologist, Report 15. University of Iowa, Iowa City.
- 1983 An Overview of the Middle Missouri Tradition. In *Prairie Archaeology: Papers in Honor of David A. Baerreis*, edited by Guy E. Gibbon, pp. 87-108. Publications in Anthropology 3, University of Minnesota, Minneapolis.
- 2003 Mississippian Connections with Mill Creek and Cambria. Plains Anthropologist 48(184):21-34.

# Tiffany, Joseph A. and Lynn M. Alex

2001 Great Oasis Archaeology: New Perspectives from the DeCamp and West Des Moines Burial Sites in Central Iowa. Plains Anthropologist, Memoir 13.

# Weiant, C. W.

1938 Exploratory Excavations at the Menoken Site, North Dakota. Handwritten manuscript dated July 1, 1938. In William Duncan Strong Papers, Box 21, National Anthropological Archives, Washington, D.C.

#### Will, George and Thad. C. Hecker

1944 Upper Missouri River Valley Aboriginal Culture in North Dakota. North Dakota Historical Quarterly 11(1&2).

# Willey, Gordon R.

1966 An Introduction to American Archaeology: Volume 1, North and Middle America. Prentice-Hall, Englewood Cliffs, New Jersey.

# Wood, W. Raymond

1982 Review of Meyer (1977) The Village Indians of the Upper Missouri: The Mandans, Hidatsas, and Arikaras. In Plains Anthropologist 27(98):330-331.

- 2001 Plains Village Tradition: Middle Missouri. In *Handbook of North American Indians: Plains, Vol. 13, Part 1 of 2*, edited by Raymond J. DeMallie, pp. 186-195. Smithsonian Institution, Washington, DC.
- 2003 Natural Environment and Resource Availability at Menoken Village. In Archaeology at Menoken Village, A Fortified Late Plains Woodland Community in Central North Dakota, edited by S. A. Ahler, pp. 9-16. PaleoCultural Research Group, Flagstaff, Arizona. Submitted to the State Historical Society of North Dakota, Bismarck.

Wood, W. Raymond, editor

1976 Fay Tolton and the Initial Middle Missouri Variant. Missouri Archaeological Society Research Series No. 13, Columbia.

Previous documentation on file (NPS):

\_\_\_\_ Preliminary Determination of Individual Listing (36 CFR 67) has been requested.

- <u>X</u> Previously Listed in the National Register.
- \_\_\_ Previously Determined Eligible by the National Register.
- <u>X</u> Designated a National Historic Landmark.
- \_\_\_ Recorded by Historic American Buildings Survey: #
- \_\_\_\_ Recorded by Historic American Engineering Record: #

Primary Location of Additional Data:

- X State Historic Preservation Office
- \_\_\_Other State Agency
- X Federal Agency NHL related documents on file at the Midwest Archeological Center, USNPS, Lincoln Nebraska
- \_\_\_Local Government
- \_\_\_ University
- \_\_\_ Other (Specify Repository):

Collections of all known excavated and surface collected archeological materials from Menoken Village are housed at the Heritage Center, State Historical Society of North Dakota, Bismarck.

#### **10. GEOGRAPHICAL DATA**

Acreage of Property: The archeological resource comprises 13.7 acres (5.5 ha).

**UTM References:** The property boundary is defined by the following five UTM reference points, starting at the northwestern-most point of the polygon:

	Zone	Easting	Northing
A.	14	384130	5188596
B.	14	384388	5188586
C.	14	384381	5188415
D.	14	384259	5188417
E.	14	384121	5188203

#### **Verbal Boundary Description:**

The boundary of the property was certified in 1979 in the landmark nomination form prepared by Corbyn and updated by McKithan (1975/1979). No change is proposed in the existing property boundary. The landmark property boundary as certified in 1979 conforms to the boundary of the Menoken Indian Village State Historic Site owned by the State of North Dakota. According to the property map for the State Historic Site on file at the State Historical Society of North Dakota, the State Historic Site and Menoken Indian Village NHL has the following verbal description, with reference to points A-E above inserted in brackets (see inset in Figure 2):

Beginning at a point 650 feet due north of the southwest corner of Section 22, Township 139N, Range 78W [point E], thence north 31 degrees-30 minutes east for 853.8 feet [point D], thence due east 400 feet [point C], thence due north 561.1 feet [point B], thence due west 846.2 feet [point A], thence due south 1290.29 feet back to the starting point [point E].

#### **Boundary Justification:**

The boundary as described and certified encompasses the entirety of the terrace surface containing all visible and known village site features and the cutbanks that bound the village on its north and west margins. This is the most significant part of the property, and it is bordered by the lines for the right angle B-C and C-D identified above. This most significant part of the property is shown in detail on the maps in Figures 2 and 3. The property boundary also contains a portion of the wooded floodplain of Apple Creek that lies north and west of the village, as well as a narrow strip of terrace margin extending southwest of the village that serves as an access route for vehicle traffic to the village. These are less significant parts of the property. The property boundary coincides with the State Historic Site that is managed and protected by the state of North Dakota. It makes sense for these boundaries to coincide, for purposes of long term site preservation and management.

The boundary described here fully encompasses the known buried cultural resources associated with the Late Plains Woodland occupation of Menoken Village. The location of buried cultural materials has been confirmed by a combination of geophysical survey, systematic coring, microtopographic mapping, cutbank profiling, excavation, and surface survey. The southern and eastern landmark boundaries (B-C-D) lie well south and east of known and visible features such as the fortification ditch and house depressions that identify major structural components of the Menoken Village site. Other Native American cultural materials have been found on the surface beyond these boundaries, particularly to the south and east, but these materials are clearly associated with use of this locality that postdates the Late Plains Woodland occupation of Menoken Village. Systematic subsurface evaluation by geophysics, hand coring, or test pits has not been conducted south and east of the property boundary, so the possibility remains that the current boundary may not encompass the entirety of evidence for Terminal Late Woodland occupation in the area. If such occupation does extend beyond the property boundary, it is not detectable on the present ground surface, meaning that it would have to be either much more deeply buried than the Late Woodland occupation within the fortified area (unlikely, given the prevailing natural stratigraphy) or extremely ephemeral in nature.

#### **<u>11. FORM PREPARED BY</u>**

Name/Title:Stanley A. Ahler<br/>George T. CrawfordAddress:PaleoCultural Research Group<br/>PO Box EE<br/>Flagstaff, Arizona 86002Telephone:928-774-9274Date:April 27, 2004

- Edited by: Erika K. Martin Seibert National Park Service National Historic Landmarks Survey 1849 C St., N.W. Washington, DC 20240
- Telephone: (202)354-2217

### DESIGNATED A NATIONAL HISTORIC LANDMARK July 19, 1964 (REVISED DOCUMENTATION APPROVED APRIL 05, 2005)

Menoken	Cat.	Lab Date	Date		Calendar	Calendar Range
Date No.	No.	Number	RCYBP	$\delta^{13}/_{12}C$	Crosspoint	at 1 $\sigma$
1 (H2)	440	ETH-19573	$825\pm55$	$-24.8 \pm 1.2$		
2 (H2)	500	ETH-19574	$905 \pm 55$	$-22.1 \pm 1.2$		
H2 Mean	n=2	mean of 2	$865 \pm 40$		AD 1211	AD 1163-1227
3 (H17)	85	ETH-19575	$845 \pm 55$	$-22.3\pm1.2$		
4 (H17)	550	ETH-19576	$870 \pm 55$	$-23.2 \pm 1.2$		
H17 Mean	n=2	mean of 2	$861 \pm 29$		AD 1213	AD 1168-1225
H2/H17	n=4	mean of 4	861 ± 28		AD 1213	AD 1168-1225
5 (Ditch)	666	ETH-19577	$955\pm55$	$-24.3 \pm 1.2$	AD 1039	AD 1019-1165
Mean of 5	<i>n</i> =5	mean of 5	$880 \pm 25$		AD 1175	AD 1163-1217

Table 1. Results of radiocarbon dating for Menoken Village, 32BL2.

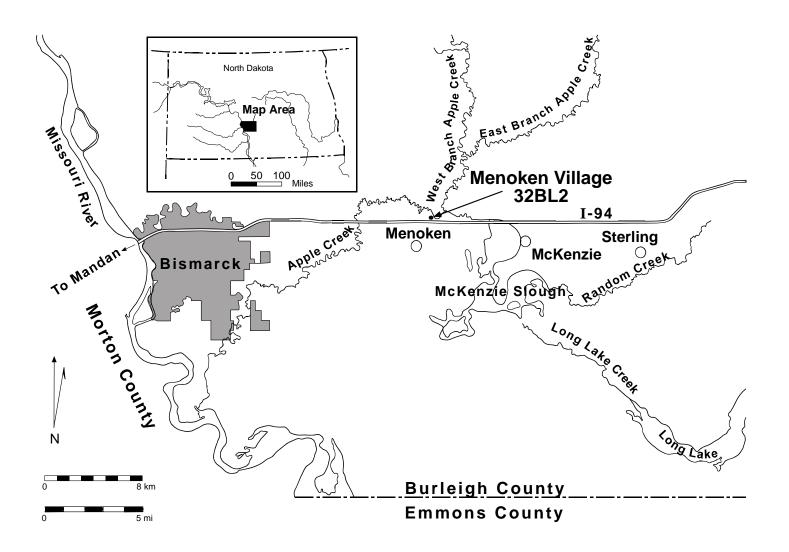


Figure 1. Location of Menoken Village within south-central North Dakota showing surrounding topographic and geographic features.

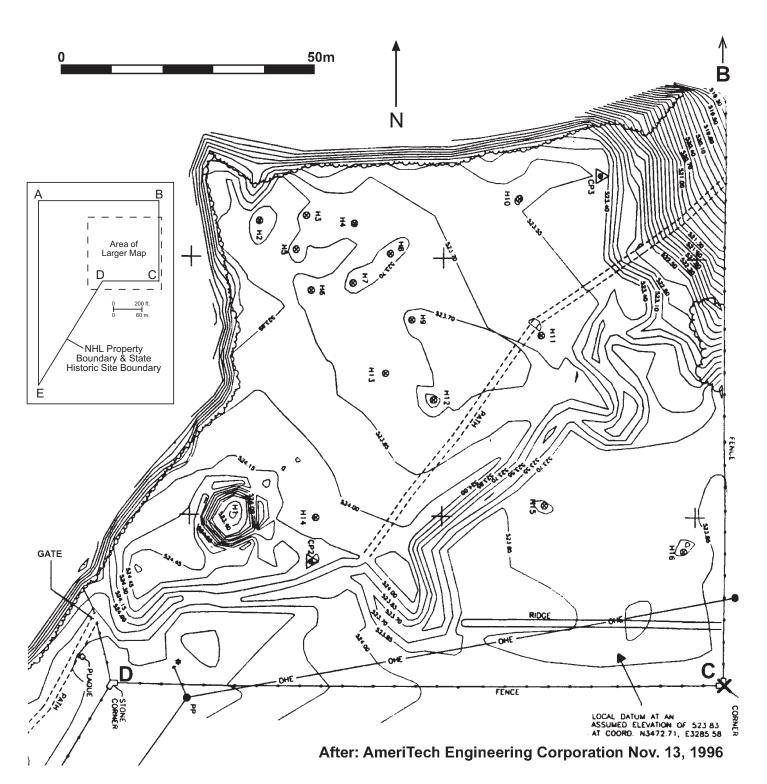


Figure 2. Engineering map of Menoken Village also showing a portion of the National Historic Landmark boundary indicated by points B, C, and D. The inset shows the entire National Historic Landmark boundary demarcated by Points A, B, C, D, and E discussed in Section 10 in the text that also coincides with the State Historic Site property boundary. Long fence lines coincide with state property lines and the NHL boundary. Contour interval is 15 cm.

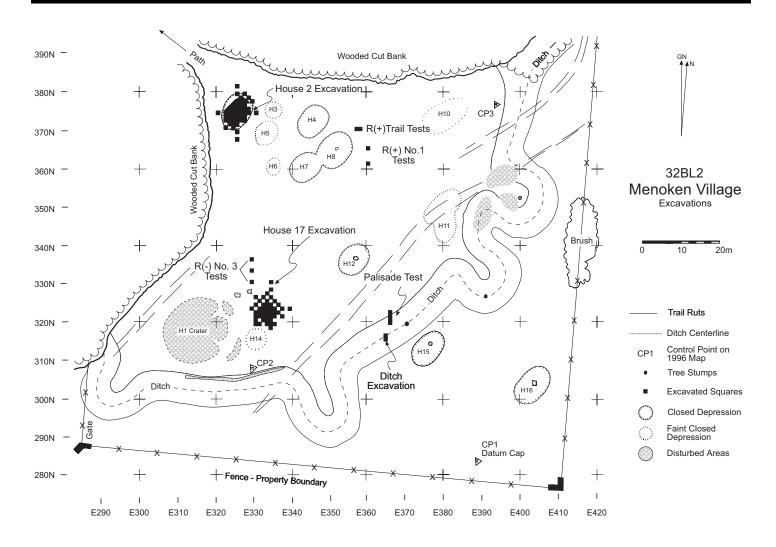


Figure 3. Plan map of Menoken Village showing all visible surface features, areas of visible surface disturbance, and locations of 1998 and 1999 excavations.

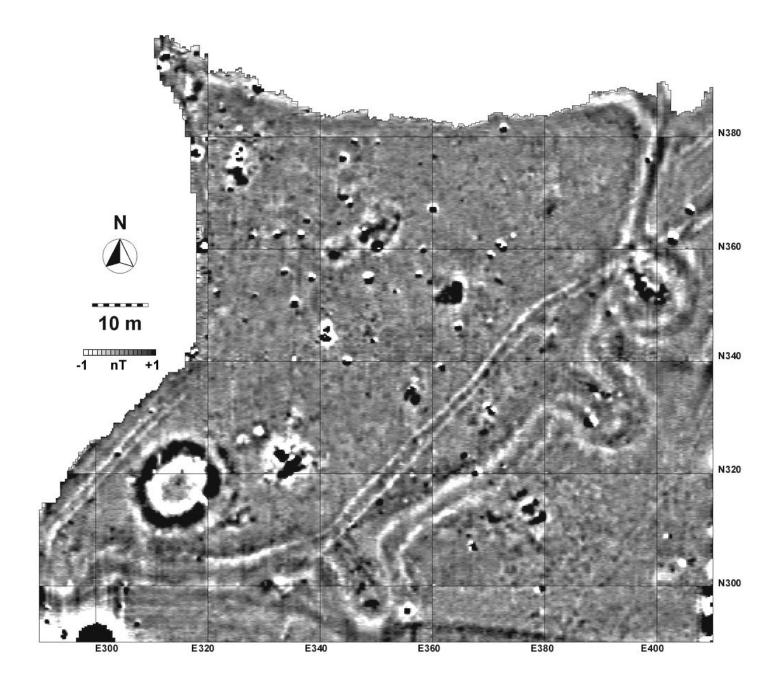


Figure 4. Magnetic gradiometry map of Menoken Village. Black indicates the highest magnetic signature and white the lowest magnetic signature. After Kvamme 2001:Figure 8.

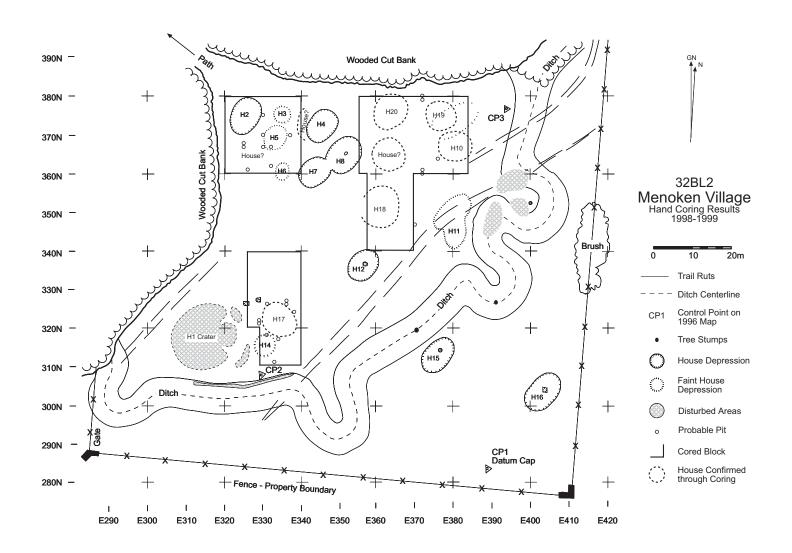


Figure 5. Plan map of Menoken Village showing areas where coring occurred as well as definite and possible house structures detected by hand coring.

NPS Form 10-900 USDI/NPS NRHP Registration Form (Rev. 8-86) MENOKEN INDIAN VILLAGE SITE

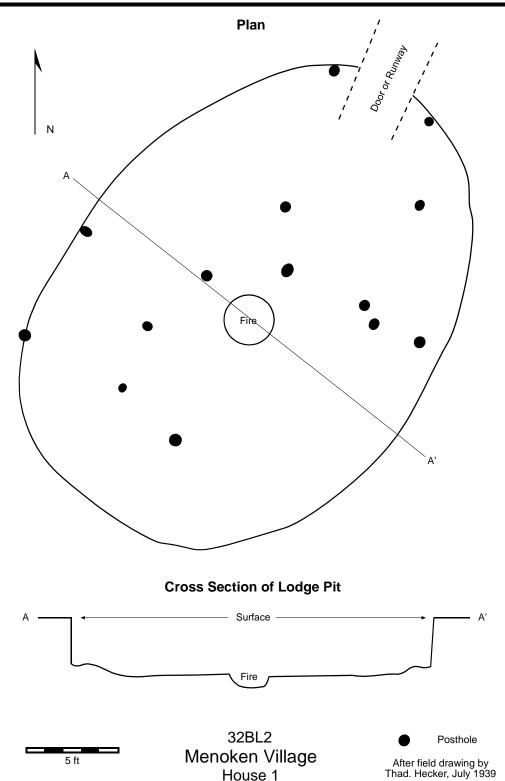


Figure 6. Sketch plan and profile drawing of House 1 at Menoken Village excavated by Columbia University in 1938 and Thad. Hecker in 1939. After a field drawing by Thad. Hecker, July 1939. Also see Will and Hecker 1944:Plate 7.

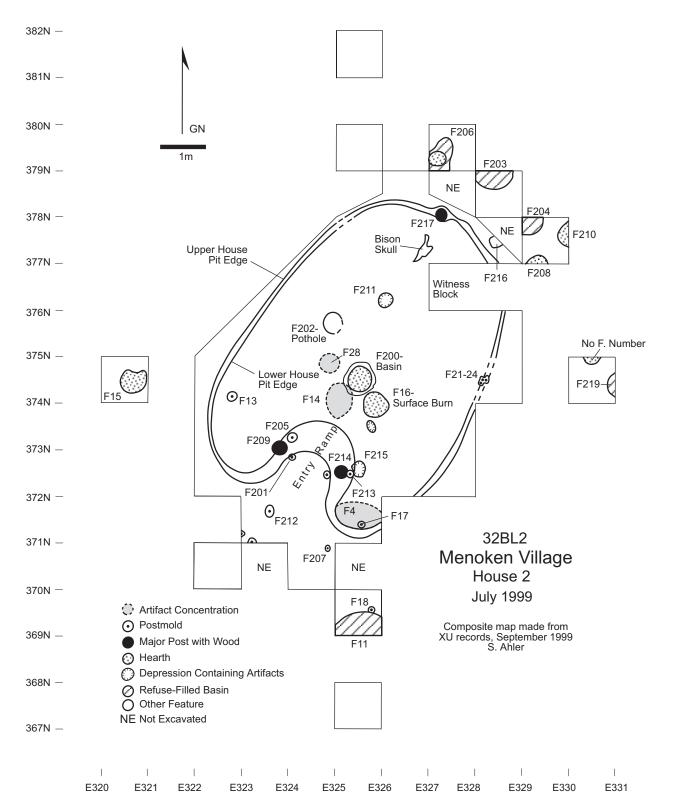


Figure 7. Plan map of excavations in House 2 at Menoken Village showing all features documented by the end of the 1999 field season.

United States Department of the Interior, National Park Service

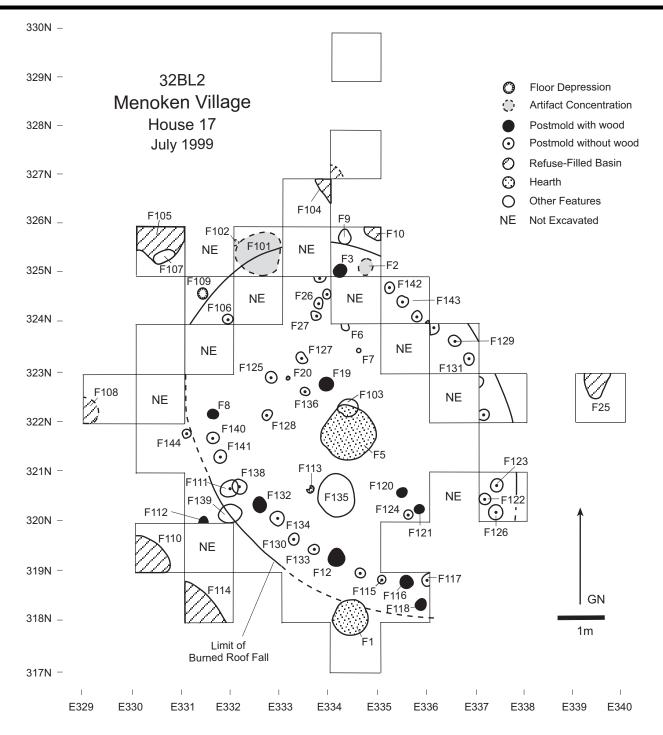


Figure 8. Plan map of excavations in House 17 at Menoken Village showing all features documented by the end of the 1999 field season.

NPS Form 10-900	USDI/NPS NRHP Registration Form (Rev. 8-86)
MENOKEN INDIAN VILLAGE SITE	

United States Department of the Interior, National Park Service

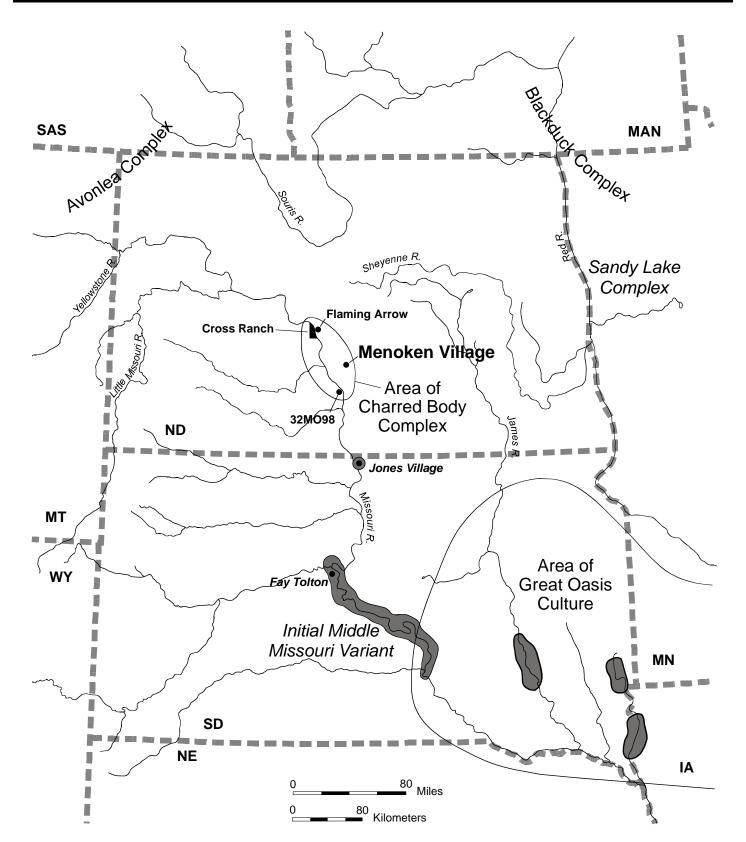


Figure 9. Map of the Northern Plains showing the location of Menoken Village and other sites and complexes discussed in the text. The area occupied by the earliest Plains Village horticulturalists identified as the Initial variant of the Middle Missouri tradition is shaded.

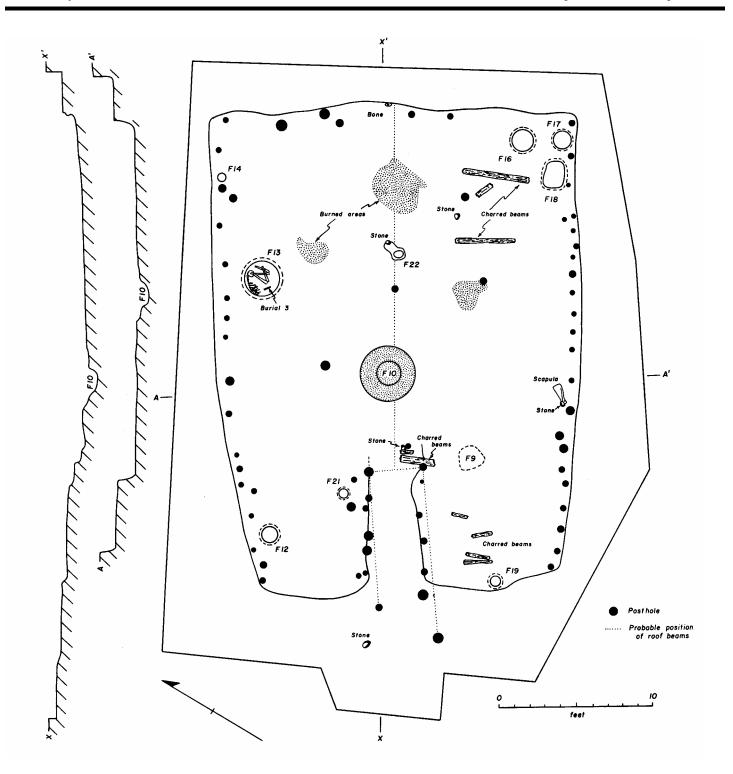


Figure 10. Plan of House 2 at the Fay Tolton site, an Initial Middle Missouri village in South Dakota. Compare with Figure 7, House 2 at Menoken Village. After Cottier and Cottier 1976:Figure 4.

List of Photos and Photo Identification Information.

All Photos 1-13 are Menoken Village, Burleigh County, North Dakota.

Photo #	Description	Photo By	Date
1	Low oblique aerial photograph of Menoken Village (center), showing general site condition, fencelines that mark south and east property boundaries, fortification ditch and bastions, T. Hecker's 1939 House 1 excavation, and the timber grove primarily west of the village. View northeast.	Stanley Ahler	7/24/99
2	Fortification ditch with loop for bastion at the southern edge of the village. Lines of grid stakes run east-west and are 20 m apart. View northeast.	Stanley Ahler	ca. 6/1/98
3	Excavation in progress at House 17 in foreground and House 2 in background. View north.	Fern Swenson	7/10/99
4	House 2, oval pit house, at completion of excavation. Note entry posts and entryway behind person and hearth basin in front of person. View southwest.	Karen Smith	7/15/99
5	House 17, oval surface house, at completion of excavation. Note large wall posts to right and hearth basin at left center. View southeast.	Stanley Ahler	7/15/99
6	Feature 101, a concentration of bison bone outside House 17. View south.	Robert Gardner	6/12/99
7	Representative Late Plains Woodland, tall straight rim pottery from Menoken Village.	Stanley Ahler	3/17/03
8	Representative Late Plains Woodland, short straight rim (a-f) and S-rim pottery (g-n) from Menoken Village.	Stanley Ahler	3/17/03
9	Representative Late Plains Woodland arrowpoints from Menoken Village. (a-u) Prairie Side-Notched type; (ww-ll) unnamed notched types.	Stanley Ahler	3/17/03
10	Stone tools from Menoken Village. (a-k) burin-like removals of the working edge of end scrapers. (m-o) double-ended specialized wood-working planes.	Stanley Ahler	3/17/03
11	Stone tools from Menoken Village. (a,f) notched axes; (e) grooved ax; (b,d) grooved mauls; (c) cylindrical object.	Stanley Ahler	3/17/03
12	Worked bone and antler from Menoken Village. Note particularly (a) the L-shaped (hooked) scapula cutting tool, and (c,i) decorated antler wrist guard.	Stanley Ahler	3/17/03
13	Shell artifacts from Menoken Village. (a-e) fossil gastropods; (f-p) marine shell pendant and beads.	Stanley Ahler	3/17/03

List of Slides and Slide Identification Information.

All Slides 1-15 are Menoken Village, Burleigh County, North Dakota.

Slide #	Description	Photo By	Date
1	Low oblique aerial photograph of Menoken Village (center), showing general site condition, fencelines that mark south and east property boundaries, fortification ditch and bastions, T. Hecker's 1939 House 1 excavation, and the timber grove primarily west of the village. View northeast.	Stanley Ahler	7/24/99
2	Fortification ditch with loop for bastion at the southern edge of the village. Lines of grid stakes run east-west and are 20 m apart. View northeast.	Stanley Ahler	ca. 6/1/98
3	Excavation in progress in July 1999 at House 17 in foreground and House 2 in background. View north.	Fern Swenson	7/10/99
4	Plan map of Menoken Village showing all visible surface cultural features and areas of visible surface disturbance.	Stanley Ahler	10/18/99
5	Magnetic gradiometry map of Menoken Village, emphasizing areas with high magnetic signatures (including several prehistoric burned, earth-covered houses).	Kenneth Kvamme	October 1999
6	Slide of a photograph taken by Thad. C. Hecker of lathe placed in the holes of burned palisade posts comprising the westernmost bastion at Menoken Village, excavated in July 1938.	Stanley Ahler Thad. Hecker	Oct. 1999 July 1938
7	House 2, oval pit house, at completion of excavation in July 1999. Note entry posts and entryway behind person and hearth basin in front of person. View southwest.	Stanley Ahler	7/15/99
8	Plan map of excavations in House 2 at Menoken Village showing all features documented by the end of the 1999 field season.	Dan Boone	October 1999
9	House 17, oval surface house, at completion of excavation in July 1999. Note large wall posts to right and hearth basin at left center. View southeast.	Stanley Ahler	7/15/99
10	Plan map of excavations in House 17 at Menoken Village showing all features documented by the end of the 1999 field season.	Dan Boone	October 1999
11	Feature 101, a concentration of bison bone outside House 17. View south.	Robert Gardner	6/12/99
12	Representative Late Plains Woodland straight rim pottery from Menoken Village.	Stanley Ahler	October 1998
13	Representative Late Plains Woodland arrowpoints made of Knife River flint and from Menoken Village.	Stanley Ahler	October 1998
14	L-shaped or hooked scapula knife from Menoken Village, an unusual artifact form that also occurs in early Plains Village tradition sites.	Stanley Ahler	October 1998
15	Fossil shell (left-most) and marine shell beads and pendant from Menoken Village.	Stanley Ahler	October 1998