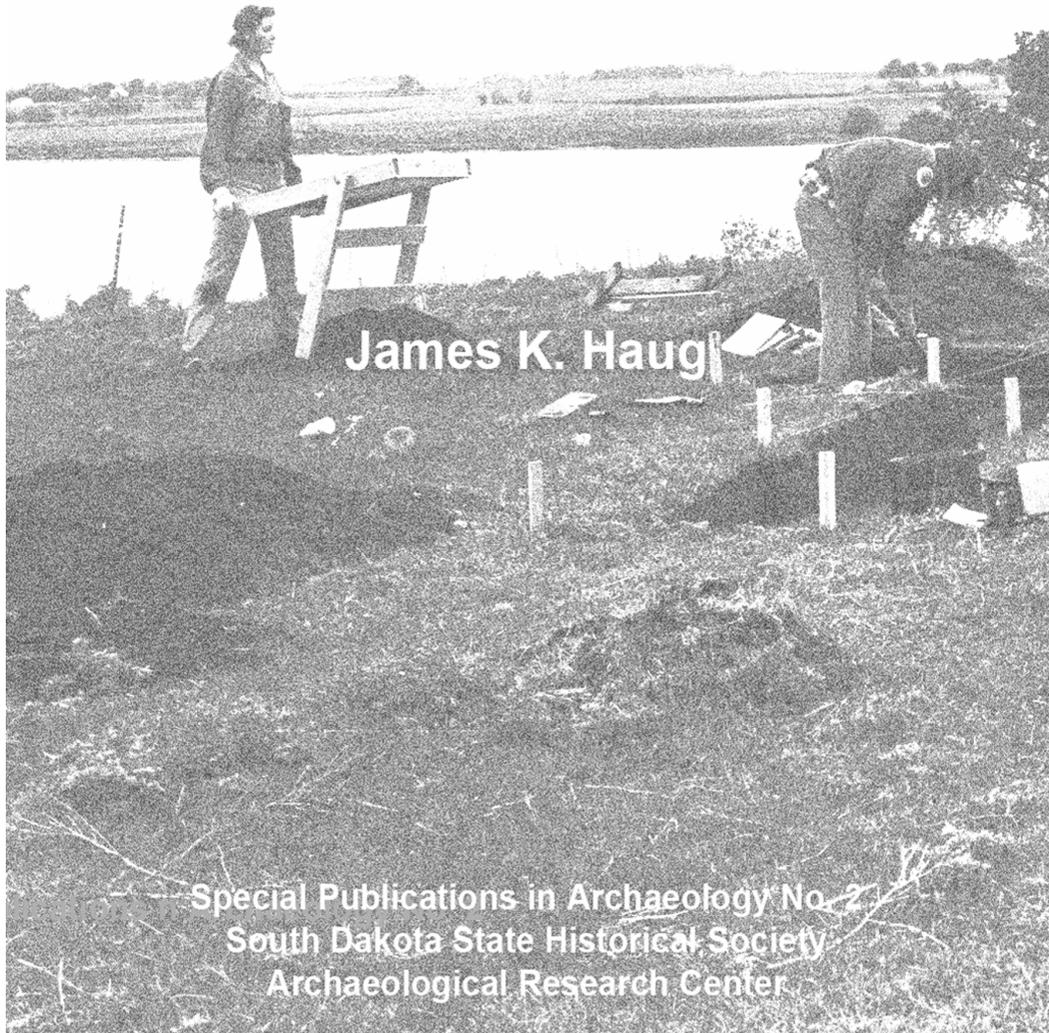


EXCAVATIONS AT THE WINTER SITE AND AT HARTFORD BEACH VILLAGE 1980–1981



James K. Haug

Special Publications in Archaeology No. 2
South Dakota State Historical Society
Archaeological Research Center

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EXCAVATIONS AT THE WINTER
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Second Edition

by
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Editor's Note

This report was first printed in 1982 following the 1980 and 1981 field seasons at the Winter site (39DE5) and Hartford Beach Village (39RO5). Very few copies of the original report were made. The original typed manuscript disappeared over the following years. In the years since 1981 considerable new work has been done at the Hartford Beach site. It seemed appropriate to have the original report retyped and issued as a second edition; surviving copies of the original were of too poor quality to scan for reproduction. The text of the report is substantially identical to the original. The major change was including the photos with the line art as figures. In the original, photos were numbered separately as plates.

Abstract

Excavations were conducted by the South Dakota Archaeological Research Center during 1980–1981 at the Winter site and at Hartford Beach Village under a grant from the Historical Preservation Center at the South Dakota Office of Cultural Preservation. The purpose of the excavations was to test and evaluate each site for possible nomination to the National Register of Historic Places and to promote public participation in archaeology and cultural preservation.

The excavation at the Winter site produced data from almost every stage of the prehistory of the northeastern part of the state, especially the Middle and late Woodland periods, and it must therefore be considered to be a significant site in the reconstruction and understanding of the prehistory of the region.

The Hartford Beach Village is also a significant site. The features and artifacts recovered indicate an occupation by peoples related to the initial variant of the Middle Missouri Tradition, although there are significant differences between the Hartford Beach site and the latter sites.

Acknowledgments

The crew of the Coteau Project consisted of myself as principal investigator, Pat Malone as senior field assistant, and Lynet Dagele and Shannon Fie as field aides. Lynet doubled as illustrator for the artifact illustrations in this report.

Emery and Margo Winter are the owners of the Winter site. They kindly allowed the project team to camp on their land and dig many large holes in their pasture. Their patience and generosity are deeply appreciated. Jeff Emmel is the park manager at Hartford Beach State Park. He and his staff offered every assistance during the field work at the site, and they deserve an overdue acknowledgement for their efforts. Successful completion of the work at the Winter site and Hartford Beach Village would not have been possible without the aid of many volunteers from the South Dakota Archaeological Society and interested members of the public. The crew attempted to keep track of the names of everyone who helped out on the project, and it is hoped that anyone that was overlooked will understand. The staff of the Coteau Project extends its appreciation to Gisela Bergman, Art Borgen, Lyle and Wyn Cheever, Deanne Dumpke, Virginia Erickson, Carol Fischer, Dave Fischer, Dean Fischer, Karen Gross, Dave Hovde, Sylvia, Dane and Bret Johnson, Joanita Kant, Ed Lueck, Lori MacDonald, Craig Miller, Carla Osness, Lloyd Parker, Lyle, Margie, Mike and Kris Parks, Dave Roehrich, Albert Sample, Dennis Skatson, August Stackelhouse, Betty Sterner, Kermit Torgerson, Tod Torgerson, Alice Tratebas, B.J. Vick, and Dick And Elaine Wismer.

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Introduction

The excavations carried out at the Winter site (39DE5) during 1980–81 and the Hartford Beach Village (39R05) in 1981 by the South Dakota Archaeological research Center were jointly referred to as the Coteau or Northeast Lakes Project. The field work was made possible by a matching grant through the South Dakota Office of Cultural Preservations Historical Preservation Center.

The initial scope of work in the 1980 grant application called for a sampling survey to be carried out at selected plots of land in several northeastern South Dakota counties, followed by test excavations at several sites, either previously or newly recorded, to determine National Register eligibility. The testing phase was to be limited to sites of Late Woodland or Plains Village affiliation as part of a research objective concerning cultural interaction in northeastern South Dakota during the time period of A.D. 800 to 1300.

Circumstances prevented carrying out the planned field work during the 1980 federal fiscal year. The Archaeological Research Center was involved at that time in a large archaeological contract project which limited available time and manpower. Consequently, only limited excavations were initiated at the Winter site over a period of several weekends in the fall of 1980.

During the spring of 1981, an extension was granted on the project. The new work plan submitted for it was considerably altered from the previous year. It was to consist of a reconnaissance level survey of archaeological properties in Deuel, Grant, Roberts, Marshall and Day Counties, as time permitted. The program of planned test excavations at several sites was retained. It was also planned to employ the volunteer services of as many amateur archaeologists as wished to help. This would serve the purpose of augmenting the labor force and providing a “hands on” experience with field archaeology to the public at large.

The field work began in late May 1981, under the principal investigator with one field assistant. Two additional field aides joined the crew in June. Excavation began at the Winter site and continued until early July. A total of 11 excavation units were opened or worked on. Four features and a large sample of artifacts were recovered during the course of the field work. Several volunteers augmented the work force on weekends, providing over 100 man hours of contributed labor. In early July, we moved camp to Hartford Beach State park and began excavation at site 39R05. Fifteen excavation units were opened up. Eleven features and a large sample of artifacts were found during the excavation. About 500 man hours of contributed labor came from numerous volunteers, in

addition to which we were hosts to large numbers of visitors. The field work was closed down in late August, at which time we returned to the Archaeological Research Center. The remainder of the grant was utilized to carry out the laboratory processing of the data.

Excavations at the Winter Site, 39DE5

Site Environs

The Winter site is a large multicomponent site situated on the farm of Emery and Margo Winter at Coteau Lake, about three miles west of Altamont, S.D. Coteau Lake actually consists of four small, marshy lakes which are separated from each other by narrow causeways. The farm and site occupy a high hill which rises above the surrounding lake/marsh complex at the junction of three causeways.

The immediate site area (Figure 1) is presently occupied by the farmyard itself on the eastern third of the hill, and by pasture on the west. The southwestern two-thirds of the pasture has never been cultivated. The hill supports an open forest of oak and American elm along the wave cut cliff to the south and on the northern edge, where it slopes down to a wide area of the causeway. The forest also dominates this low area below the site. Cultural material is continuous between the high and low areas, but the lower area has come to be designated 39DE6, the Garden or Erichsen site, while the upper area has retained the name Winter site. Big bluestem and Kentucky bluegrass are the dominate grasses in the pasture and meadowlands on the "island". The same open forest and grass communities are found intermittently along the shorelines of the lakes. Goddards island, located in North Coteau Lake about 900 m northeast of the site, supports a dense oak and elm forest. The surrounding area, along with much of the causeway shoreline areas, is very shallow and dominated by marshland plant communities.

The higher land around the site provides shelter and food for a variety of prairie-adapted animals. The surrounding marshland supports a host of typical marshland fauna. Native wildfowl are abundant and the lake/marsh attracts great numbers of migratory waterfowl. The lakes themselves provide several varieties of fish.

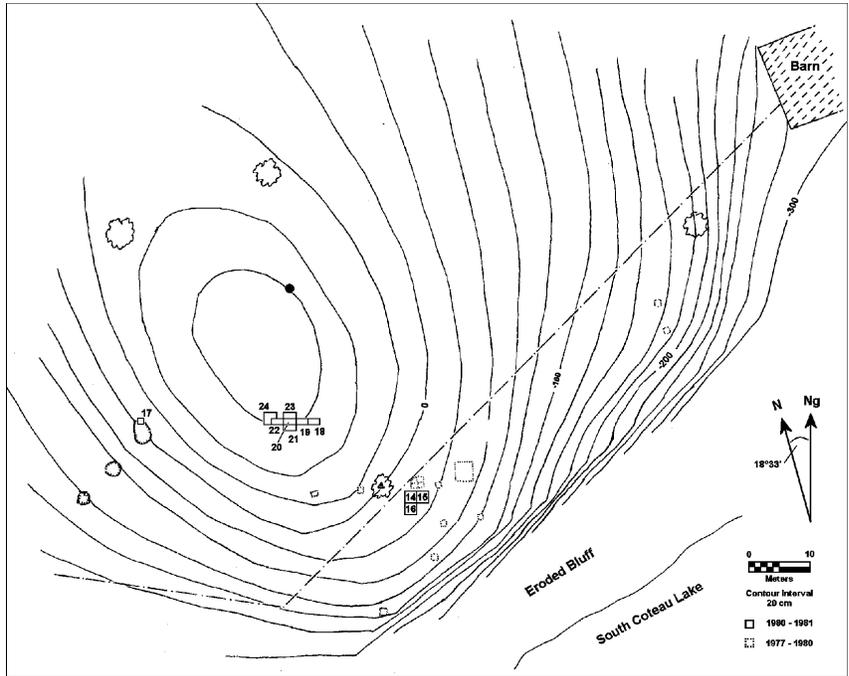


Figure 1: Map of the Winter site.

Previous Investigations at the Site

The Winter site first came to the attention of the professional archaeological community through the efforts of Betty Sterner, a high school teacher at Watertown, S.D. Ms. Sterner, while examining the Coteau Lakes area for traces of historic Indian campsites, came across the site in 1976. She excavated a small test pit that year to sample the artifact assemblage at the site. The results were promising and she returned the following year with her students. With the Winters permission, they initiated a larger excavation in the pasture measuring 10 by 10 feet. This unit was dug as four 5 by 5 foot subunits. The deepest was taken down to over four feet. The artifacts obtained indicated both Middle Woodland and Late Woodland components at the site. Artifact densities also suggested that the occupations had been numerous, leaving a sizeable volume of debris.

During the succeeding years, to the spring of 1980, she returned to the site several times with her students to carry out further excavations. In all, they excavated 13 units, not including the original small test pit. A large sample of ceramics, lithic tools, lithic debitage and bone remains was recovered during this period, along with a probable cache pit, which was designated as Feature 1. She summarized the results of her work in a series of reports presented to the state archaeologist, Robert Alex.

1980–1981 Excavations

The variety of the remains from the site offered an excellent opportunity for research in Middle and Late Woodland chronology and cultural dynamics, for which reason the site was included in the grant proposal to the Historical Preservation Center. The initial work under the grant at the site began in the fall of 1980. Work was done on several weekends between late September and early November.

Three excavation units were established. These were designated as Units 14, 15 and 16 (Units 1 through 13 were those excavated by Sterner during earlier visits to the site). Each unit measured two by two meters, with the northwest corner of each used as a reference point. They were arranged in a group just southeast of the site datum. Excavation was by skim shoveling and/or trowelling in 10-centimeter levels.

Excavations of the three units was continued until the weather became too cold in early November. Unit 14 was excavated to a depth of 50 cm. Unit 15 was dug to 50 cm on half of its floor and 40 cm on the other half, and Unit 16 was excavated to 30 cm. At this point, they were lined with plastic and partially backfilled for the winter.

Betty Sterner returned to the site over the Easter break with her students in the spring of 1981. They continued the excavation of Unit 15 to 50 cm and carried Unit 16 to 50 cm. One feature was located at about 40 cm in the latter unit, which was subsequently designated Feature 2. It consisted of a concentration of fire-cracked rock and a faint, poorly defined stain. Sterner and her students left it in situ for the Archaeological Research Center crew to remove at a later date.

Work continued at the site beginning in late May of 1981, when the author and the senior field assistant arrived. The reference grid, which had been initially laid out in 1980, following Sterners original reference line between the datum and 20S0E, was extended to the north and west. Stakes were pounded in for future use in excavations (Figures 2 and 3).

Unit 17 was established at 11N5OW in order to test one of several shallow depressions located on the west edge of the pasture. It measured one by one meter and was excavated in 10-centimeter arbitrary levels. Very little cultural material was found in the unit, and it was determined that the depression was not a cultural phenomenon.

Following the excavation of Unit 17, Units 18, 19 and 20 were set up. These were situated at the top of the hill about 10 m northwest of the site datum. All three units measured one by two meters. Excavations in these pits yielded a fairly dense sample of artifacts. Feature 3 was found in Unit 20 at a depth of about 45 cm. It consisted of a concentration of fire-cracked rocks and a faint soil stain, not unlike Feature 2.

Units 21, 22 and 23 were set up around Unit 20 in order to expose the remainder of Feature 3. These were also one by two meter units. In the corner of the westernmost of these, Unit 22, a dark stain was observed at the 40 cm floor. This was designated Feature 4. Unit 24 was established at this point to

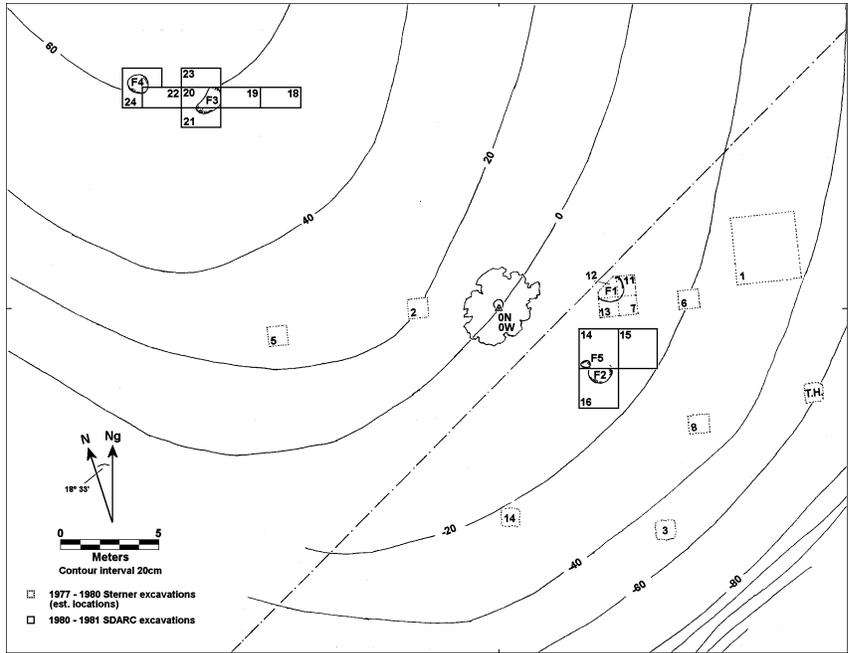


Figure 2: Excavations at the Winter site, 1976–1981.



Figure 3: Excavations at the Winter site.

facilitate exposure and removal of the feature. The unit was set up in an L-shape around the corner of Unit 22 and excavated to 40 cm. Feature 4 appeared by this means as a large circular stain, apparently a cache pit, measuring about 120 cm across.

Features 3 and 4 were removed and the excavation units around them leveled off to a final depth of about 50–60 cm by mid-June. At this depth, the units were in the subsoil, in which no further traces of features could be seen. Following this, the efforts of the crew shifted to the completion of Units 14, 15 and 16, which had been left uncompleted by Sterners group.

Feature 2 was mapped and removed. No trace of the soil stain noted by Sterner could be observed, although this may have been due to the soil conditions at the time of excavation. The feature was taken out in a single level from about 50 to 63 cm depth. Besides numerous fire-cracked rocks, it contained a sizeable amount of bone and ceramic debitage, but little charcoal.

Another feature turned up at a depth of about 60 cm in the southwest corner of Unit 14, about 50 cm west of Feature 2. It was designated Feature 5. It consisted of a concentration of large potsherds, evidently from the same vessel. Intermixed in the ceramics was a concentration of fish and turtle bones. It appears to have been the remains of a single vessel and its contents.

Units 14, 15 and 16 were excavated to a depth of 80 cm, at which point the subsoil was encountered. No features were visible in the subsoil and artifact density was virtually nil, so the work was stopped at that point.

Feature Descriptions

Feature 1

Betty Sterner originally recorded this feature in 1979. It was found during the excavation of Unit 7 at a depth of about 50 to 60 cm at which point a faint stain was noticed along with a marked difference in soil texture and artifact density. Sterner returned in May 1980 to complete excavation of the feature. Three additional units were set up. Units 11, 12 and 13 to the north, west and northwest of Unit 7. With the exception of Unit 12, all were one meter squares. Unit 12 was truncated at an oblique angle due to the presence of a fence line through its northwest corner.

The units were excavated to the top of the feature, as it became discernable in each unit. Generally this was about 60 to 70 cm from the surface. The feature was then excavated by trowel. Large objects and selected artifacts were mapped in situ, as were two ash lenses. Charcoal was removed and bagged separately. Soil removed during the excavation was bagged for later analysis. The stain was followed into the subsoil, where definition of its boundaries proved to be much easier; hence the base of the feature is better defined than the upper portion.

Feature 1 appears to have been a cache pit. At the top it was roughly circular in cross section, measuring about 100 cm across. For the first 20 cm or so it sloped gradually in from the top, after which its sides converged more and more

rapidly, coming more or less to a rather pointed bottom at about 115 cm below the surface. The cultural materials from the feature have not been analyzed at the time of this writing, so its cultural affiliation remains unresolved.

Feature 2

Feature 2 was also located by Sterner and her students. This occurred in April 1981 as they worked on Units 14, 15 and 16, as described above. They exposed it down to the 50-centimeter level, leaving a concentration of fire-cracked rocks. The remainder of the feature was removed by the Archaeological Research Center crew during the succeeding summer (Figure 4).



Figure 4: Feature 2 at the Winter site.

The exposed feature measured about 180 cm along the north wall of Unit 16 by 100 cm north-to-south. It was never visible in the adjacent section of Unit 14. It was excavated in a single level from 50 to 63 cm in a semicircular shape which approximated the stain noted by Sterner. The fill consisted of numerous fire-cracked rocks, bone fragments and many large potsherds. It may have been a shallow hearth, of which little trace remained of any charcoal or ash. The ceramics from it are Middle Woodland. Feature 5, in the south west corner of Unit 14, appears to be associated with this feature.

Feature 3

This feature was located largely in Unit 20, overlapping somewhat into Units 21 and 23 on the south and north, respectively. It appeared at a depth

of about 40 to 45 cm from the surface and was defined by a concentration of fire-cracked rock and a faint dark stain in the soil. It was excavated in three 10-centimeter levels by trowel. All rocks and other cultural remains were left in situ for mapping purposes (Figure 5).



Figure 5: Feature 3 at the Winter site.

Upon excavation, Feature 3 was seen to consist of a shallow, kidney-shaped basin partially filled with fire-cracked rock. The basin measured about 150 cm north to south by 140 cm east to west. Charcoal was present, although not in any great amount. Several potsherds were found within the feature, along with several small bone scraps. The diagnostic sherds from the feature indicate that it belongs with the Middle Woodland component of the site.

Feature 4

Feature 4 was first noticed in the extreme northwest corner of Unit 22 on the 50-centimeter floor. A dark stain about 30 by 30 cm was apparent at this point. It was quite clearly defined and appeared to be part of a larger, rather circular stain. Unit 24 was set up around Unit 22 in order to expose the feature. At 40 cm, the stain became faintly visible as a large, more or less circular feature. The soil at this depth was still rather dark, so exact definition of the feature boundaries was difficult. However, concentrations of charcoal had appeared within the later defined stain boundaries, beginning at about 30 cm. The top of the feature was subsequently defined as 40 cm depth, but the appearance of the charcoal above that indicates that it was actually somewhat shallower.

Upon excavation, the feature appears to have been a cache pit (Figure 6). The pit opening was roughly circular, with a diameter measuring about 120 cm. It was rather straight walled with an abrupt transition to a flat floor about 45 cm beneath the opening. The dark fill contained abundant charcoal and scattered debris consisting of a few rim and bodysherds, bone scraps and firecracked rock. Analysis of the contents has not been completed at present, but the rim sherds indicate a Late Woodland affiliation.



Figure 6: Feature 4, Winter site.

Feature 5

This feature was found in the southwest corner of Unit 14 at a depth of 50 to 60 cm. It consisted of a concentration of potsherds and small animal bones deposited in such a fashion as to suggest the remains of a single ceramic vessel which had been broken and left relatively undisturbed (Figure 7). The bone concentration was localized between layers of pottery, which leads to the conclusion that it represents the contents of the vessel at the time it was broken. The sherds found in the feature do not comprise the complete vessel. The reassembly carried out to date is that of the better part of one side of the pot; the remainder was presumably scattered round the surrounding area. Fragments with identical surface treatment were found in Units 14 and 16 and in the associated Feature 2; most likely they can be fitted into the reconstructed portion at some future date. Further information on the shape and size of the vessel will have to await final reconstruction. The bone concentration consisted of many small fish bones, turtle shell and minor scraps of bison or other large animal

bones. These have yet to be analyzed. A rim sherd from the feature appears to be of Middle Woodland affiliation.



Figure 7: Detail of Feature 5 at the Winter site, showing the in situ remains of the ceramic vessel.

Artifact Assemblage

Analysis of the materials collected at the site has only just begun. The Winter site produced a large quantity of cultural debris in a relatively small excavation area. The assemblage was not collected in any statistically valid sampling technique, which would not have been practical given the funds and time available and the great size of the entire site. It is probably safe to say, however, that the collection provides a good indication of the range of cultural materials and activities from the site.

Ceramics

A very large ceramic sample was recovered from the Winter site. The sheer volume of data, which is only in the initial analytic stages, prohibits more than a very brief summary. Pottery from four major cultural/taxonomic groupings is present at the site: Middle Woodland, Late Woodland, Initial Middle Missouri and Great Oasis. The latter is often included with Initial Middle Missouri, but for the present it will be treated as a somewhat unique ceramic series.

The Middle Woodland pottery is fairly well represented at the site (Figure 8). The sample includes a wide variety of body and rim sherds, many of which are

distinctly similar to what is known as Fox Lake in Minnesota (Anfinson 1979: 79-80). Other sherds include trailed-over-cord-roughened designs which are also affiliated with Middle Woodland ceramic series in the region.

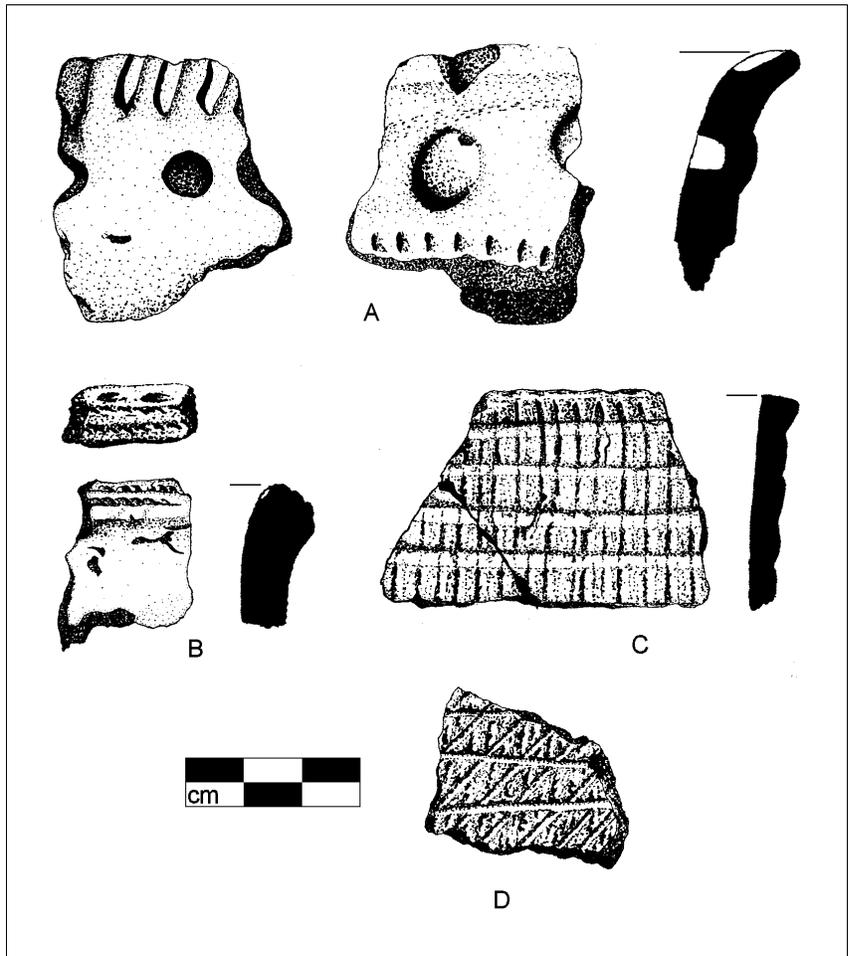


Figure 8: Middle Woodland ceramics from the Winter site. A, tool-impressed rim with bosses; B, rim with cord impressions on lip; C, trailed-over-cord-roughened rim; D, incised-over-cord-roughened bodysherd.

The Late Woodland sample is the largest from the site (Figure 9A, B). Most of the pottery in this group is very similar to Lake Benton phase pottery in Minnesota (cf Anfinson 1979:109–110). A fairly large sample of rim sherds is available for this group for later taxonomic comparisons.

The Initial Middle Missouri variant is represented mainly by one very large rim/shoulder sherd (Figure 9D). The rim is too fragmentary to identify by form; what is left is high and flared with and apparently rounded lip. The shoulder

is rather flat and smooth, with a broad trailed “bear paw” design. Several fragmentary body sherds were found at the site which are plain with broad trailed designs on them.

Two Great Oasis rim sherds were found on the surface at the site. One is of the Wedge Lip variety, and the other is a High Rim variety. The latter exhibits a very finely incised characteristic Great Oasis design (Figure 9C).

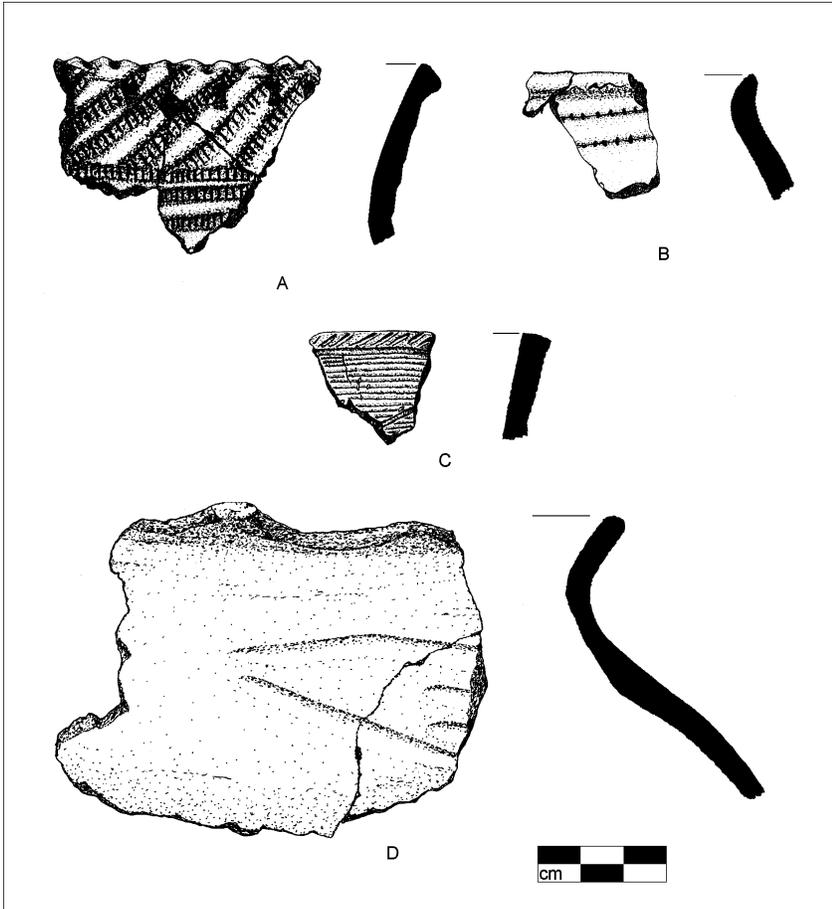


Figure 9: Late Woodland and Plains Village ceramics from the Winter site. A–B, rimsherd with cord-wrapped stick impressions; C, Great Oasis High Rim; D, rimsherd with trailed bear paw design.

Chipped Stone

As with the ceramics, a large sample of chipped stone artifacts and lithic debitage was recovered from the site. The assemblage includes projectile points,

endscrapers, scrapers, bifaces and both modified and utilized flakes, as well as abundant waste flakes.

The projectile points represent several taxonomic types. The earliest was found in the 1930s by Albert Sample. It has since been lost, but from its description, it was a Folsom point, dating to about 8000 B.C. Another Paleoindian point was found by Emery Winter during the summer. Stylistically, it appears to be more recent than the Folsom point, dating perhaps to circa 5000 to 6000 B.C. At least one Archaic point was found this summer. The specimen at hand is basally notched and is similar to McKean Lanceolate points from the western Plains. A variety of stemmed and corner notched points of Late Archaic and Middle Woodland type was also found at the site. These would have a time range from about 1500 B.C. to A.D. 500. Several side-notched specimens may also fall into this general grouping and time range. Other rather small, side-notched and corner-notched specimens are probably of Late Woodland affiliation, post-A.D. 800 or so. Small, deeply side-notched triangular and unnotched arrow points were also found, which probably postdate A.D. 800 or 900. It is too early in the analysis to make any further statements regarding the cultural significance of the point styles.

The other tools and artifacts from the site can receive no further attention at this point. The variety in the sample is remarkable, and it reflects a wide range of activities. Further study will be required before any specific conclusions can be reached. The same is true of the lithic raw materials. Trade for lithic material is indicated by two or three obsidian flakes found in the site, and perhaps at least some of the Knife River flint artifacts, which is a common lithic type at the site, were obtained through trade. Most of the other lithic types at the site appear to be of local, glacially derived origin.

Other Stone Artifacts

Two other stone artifacts are worth mentioning at this point. A grooved maul was found in Unit 16, just south of Features 2 and 5 (Figure 10). It is made from a granite cobble about 15 cm in diameter, around which a groove has been pecked for about 3/4 of its circumference. The second item is a small Catlinite pendant from Unit 24. It is triangular, very thin, with a hole drilled at one corner of the triangle.

Faunal Remains

Faunal remains were also very abundant at the Winter site. Most of the bone was crushed into very small fragments, which makes further analysis of these specimens difficult. Presumably, the bone was crushed to prepare bone grease and extract the marrow. The remaining identifiable bone appears to be largely bison, although elk, turtle, bird and fish are also present. Further analysis is required for a better understanding of the use of animal resources at the site. Almost none of the bone, with the exception of one of two bone beads, appears to have been worked or used as tools. Three elk antler tips from Unit 15 are



Figure 10: Level 7 floor, Unit 16, Winter site (note grooved maul below north arrow).

noteworthy. They have all been cut to a length of about 4 cm, and the tips show signs of use. They may have been used for flint knapping.

Summary of the Winter Site Excavations

The Winter site is a very productive site, judging from both the work done there by both Betty Sterner and the SDARC crew. Evidence for several components is present at the site, although rodent disturbances and the thick, black topsoil have obscured stratigraphic relationships to a marked degree. The components noted to date range from Paleoindian to Late Prehistoric, spanning nearly every cultural entity known from the general region. The presence of all these at the same site offers an excellent opportunity to explore the use of the same resource base by varied cultural groups over a very broad time range. Information on season of occupation, resources available and resources utilized, should supply vital data regarding prehistoric lifestyles in the Coteau Lakes region. The site also presents an excellent variety of lithic and ceramic assemblages for comparative purposes, along with a variety of cultural features for dating purposes. Further work and analysis will allow the site to supply, virtually by itself, a basic cultural sequence for the area.

Excavations at Hartford Beach Village, 39R05

Introduction

The Hartford Beach Village is located on the western shore of Big Stone Lake in the extreme northeastern corner of South Dakota. The lake itself forms the boundary between South Dakota on the west and Minnesota on the east. The lake is a striking feature of the regional topography. It sits in a deep, narrow valley formed when glacial Lake Agassiz drained to the south at the end of the last glaciation. The valley is thus a remnant of the ancestral Minnesota River, which now has its source at the southern end of the lake.

The bluffsides along the lake margins are fairly heavily forested with oak, cottonwood and elm, with a dense understory of numerous forbs and tall grasses. The surrounding land consists of generally low, rolling hills of glacial till. It was historically tall grass prairie, dominated by big bluestem, little bluestem and porcupine grasses. Deep stream valleys have been cut back far into the prairie from the lake. These valleys support dense forests of oak, elm and cottonwood. About ten miles west of the lake is the eastern flank of the Coteau des Prairies, which at that point rises about two thousand feet above the land to the east and is the most prominent feature of the local landscape.

The resources of the Hartford Beach area reflect three major biomes. Big Stone Lake provided a variety of fish, shellfish and other aquatic lifeforms such as turtles and frogs. Migratory waterfowl would have also been seasonally available. The forested bluff slopes and tributary stream valleys supported white tail deer, raccoon and beaver, and the open prairies were the habitat of bison and wapiti.

Site Description

The Hartford Beach Village is unique to the area, so far as is known, in that it possesses a distinct fortification ditch (Figure 11). The site itself is situated on the edge of the steep bluffs overlooking Hartford Beach and Big Stone Lake at the mouth of what is alternately called Spring Creek by the locals or Hartford

Beach Creek by mapmakers. The edge of the lake-facing bluff and the bluff of the north on the north side of the creek meet at a sharp angle, rising over 30 m above the lake. The site occupies this point of land and is contained within a semicircular ditch. The ditch encloses an area of about 0.12 ha (0.3 acres).

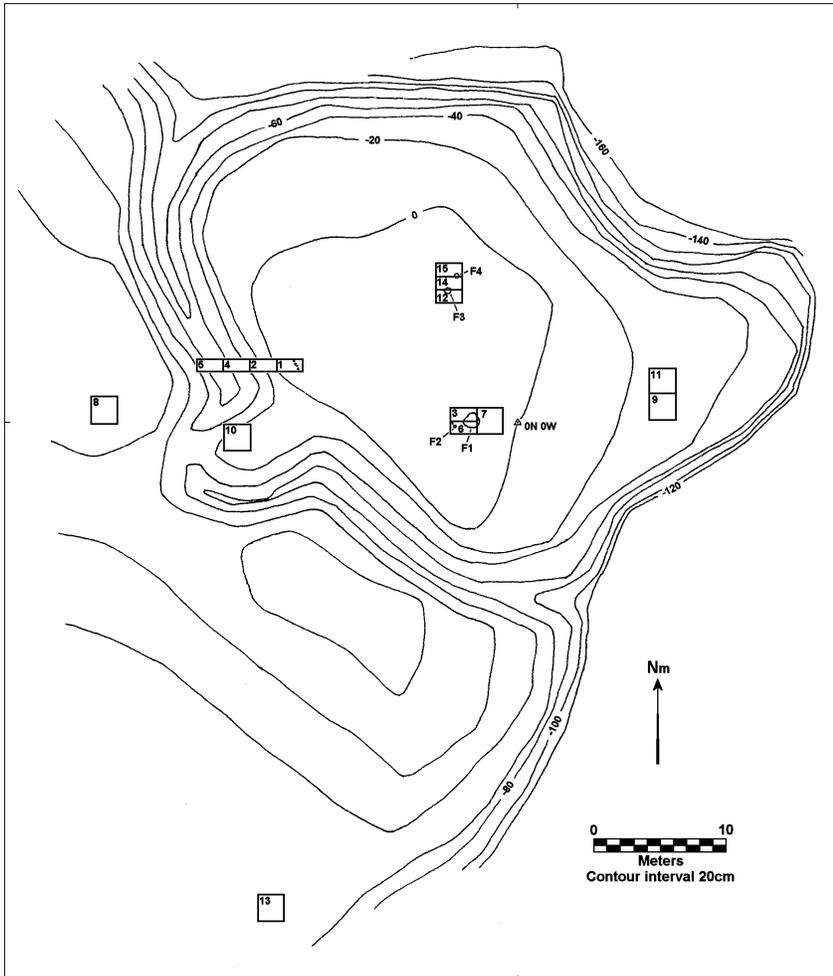


Figure 11: Map of the Hartford Beach Village.

The ditch is approximately V-shaped in cross section, 6 to 8 m wide and 60 to 80 cm deep. Its most notable feature is a large bastion or loop located about halfway in its circumference (Figure 12). It projects out to the southwest about 8 or 10 meters from the ditch. The ditch bottom is somewhat shallower along the edge of the bastion, rising nearly flush to the surrounding ground at the tip.

Other than the ditch and bastion, no surface traces of the site, such as house depressions, are visible. Rodent burrows are present over the site area, and some



Figure 12: The bastion at Hartford Beach Village and Unit 10.

traces of cultural debris can be found in these. This proved to be the only means of demarcating the total site area. Bits of fire-cracked rock, potsherds, shell and lithic debitage were found over a fairly wide area, both within and outside of the ditch. A shelter belt immediately west of the ditch partially obliterates the site area outside of the ditch, but cultural remains were found to the west of this, so the site appears to extend over a considerably wider area than indicated by surface features. At a guess, the total site area extends about 50 to 75 m west of the ditch, covering an area of about 4 ha (10 acres).

One other possible surface feature has been noted in the literature, consisting of a low earthwork to the west of the site proper. W.H. Over (Sigstad and Sigstad 1973:229) described it from his 1922 field work:

About 70 paces west of the village site, there is a well defined ridge extending northwest and southeast. This ridge is 440 paces in length and connects at the southeast end with the deep ravine of the southwest branch of Spring Creek. This ridge is about 15 feet across and twenty inches high. It is evidently of the same age as the fortified village

No definite trace remains of any low ridge at the present time. The ground surface is somewhat higher to the west of the site, but this appears to be due more to a natural swell or rise to the prairie.

Several other sites are located in the vicinity of 39RO5. About 250 m west of the site, along the bluffs overlooking the lake, is an unnamed, intact burial mound. It does not seem to be associated with the village, but its proximity is noteworthy. Another mound, known as the Hartford Beach Mound (39RO4), is

situated directly opposite the village at the mouth of Spring Creek at the edge of the bluff. Adjacent to the mound are an aboriginal occupation site and a historic site, which have been codesignated 39RO13. Numerous other sites are located in the general vicinity of the village, but generally these would seem to have little bearing on interpreting the site itself.

Previous Investigations

W.H. Over investigated the Hartford Beach Village briefly in 1922, as part of a field expedition for the Museum of the University of South Dakota. During this and the following year, Over visited the northeastern corner of the state recording prehistoric sites and excavating at several of them. He excavated the Hartford Beach Mound at the same time as he carried out the field work at the Hartford Beach Village.

He paced off a map of the village, including the bluff edges and ditch outline, and excavated in several areas. The records of exactly where his excavations were in the site area have apparently been lost over the years. The existing notes are not very detailed; they provide only a vague indication of where the 1922 field party excavated, and almost no information on what was found (Sigstad and Sigstad:226–229). Five general excavation areas are noted on Overs site map with an “X” in the ditch area. The text of the notes states that “excavations were made in the trench and along the inside ridge of the trench...” (Sigstad and Sigstad 1973:228), so the “X”s must be assumed to represent his excavation areas. These are located as follows: one at the eastern end of the southern arm of the trench where it joins the bluff edge, one at the junction of the southern ditch and the bastion, one at the outermost edge of the bastion, one at the point where the northern arm of the trench meets the bluff, and one at the northeast edge of the site where the bluff edge is altered by an easterly extension of the ditch. No surface trace remains of these excavations. Excavations were apparently also carried out at the “ridge” west of the fortification ditch, but the existing sketch map does not cover that part of the site.

The excavations in the ditch were not productive except at the southeastern excavation. This unit came upon a refuse heap or midden of clam shells. No mention is made of any artifacts. Excavation on the “ridge” produced a small sample of ceramics, which Over described as being “of the same type and very similar to the pottery found in the fortified village, southwest of Brandon (39MH1).” (Sigstad and Sigstad 1973:229).

The 1981 Field Work

Work commenced at the site on 9 July 1981 with a crew composed of the author and three assistants. A reference grid was laid out over the site, oriented to magnetic north (8 degrees east of true north). The site datum, 0N0W, was established and reference stakes were pounded in at 10-meter intervals along

the east-west and north-south baselines. Transit mapping of the site was begun at the same time.

Four excavation units were staked out along a cross section of the fortification ditch just north of the bastion. These were oriented east to west and all were one by two-meter units. Excavation of the easternmost two of these commenced immediately; they were designated Units 1 and 2. The two western units in the cross section trench were opened later and designated Units 4 and 5. Excavation in these units was done by shovel skimming in arbitrary levels measured from the unit corners; the size of the levels varied from unit to unit.

The excavation of Unit 1 revealed, at a depth of about 40 cm, traces of a row of postholes visible in the transition to lighter subsoil (Plate 13). The four postholes were aligned more or less parallel to the axis of the ditch; about 2 m back from its inner edge. Preservation of the stains was generally poor, which made descriptive measurements difficult.

Excavation in Units 4 and 5 revealed the stratigraphic cross section of the fortification ditch in detail (Figure 14). The north walls of the units showed a U-shaped ditch about 80 cm deep. It had been cut through the old subsoil into the underlying glacial outwash gravels and clays. The cut was not easily visible in the former, but highly so in the latter. Slopewash had filled the ditch in visible layers of alternating dark and light soil layers. The other side of the unit walls, on the south, exhibited a totally different stratigraphy, which caused no small amount of confusion for a time. Here the gravels visible only at the bottom of the ditch on the north side constituted the bulk of the profile, with little trace of backfilling by slopewash. Close examination revealed that a pile of gravel was left on the trench floor by the makers after they had dug through the glacial gravels. The excavation units had directly bisected the old spoils pile. It was also notable that very little back dirt or spoil had been deposited on the inside of the ditch. A thin layer of gravelly soil in Unit 2 testified to this.

Meanwhile, a soil probe was used to examine the subsoil at the site in an attempt to locate traces of subsurface features. This effort concentrated on a 10-meter square to the immediate northwest of the site datum. The ground was probed over this area in a grid with intervals at approximately 50 cm to 100 cm. The normal topsoil depth over most of this area was about 20 cm. at which point a yellowish, clay subsoil was encountered. At about 0N4W, the topsoil appeared to be considerably deeper and darker, which indicated the possible presence of a feature. Probing was halted at that point and an excavation unit was established over this area. It was designated Unit 3; its northwest or reference corner was located at 1N5W, and it measured 1 m north to south by 2 m east to west.

Unit 3 yielded a hearth at a depth of about 20 cm from the surface. It was designated Feature 1. Two more excavation units, Units 6 and 7 were opened to fully expose the feature. The hearth, upon excavation, turned out to be a shallow, basin shaped firepit filled with fine charcoal particles and fire cracked rock. No diagnostic artifacts were found within it, but a corner notched point and a bone awl was found at about the same depth near the feature.



Figure 13: Row of postholes inside the fortification ditch, Hartford Beach Village.

Further excavation revealed two postholes at the same depth adjacent to the hearth to the west. These were designated Feature 2 and were excavated. A Dark stain was also discovered under Feature 1. This consisted, on excavation,

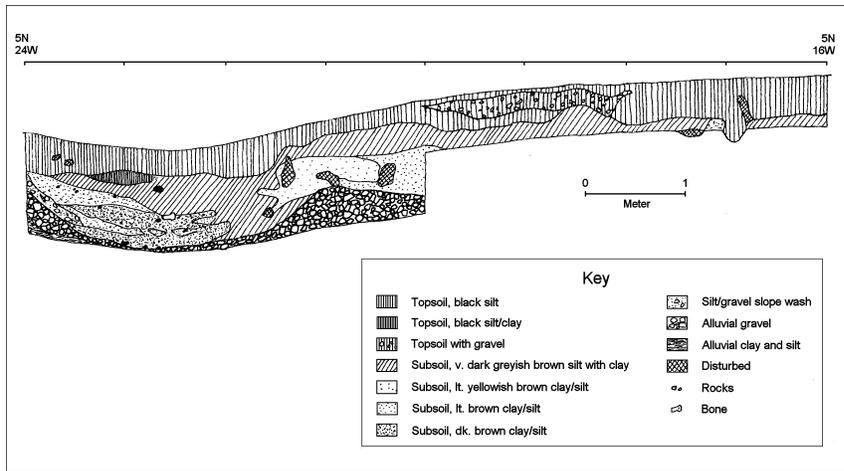


Figure 14: Profile of the fortification ditch at the Hartford Beach Village.

of a deep, broad pit filled with sterile soil. It was designated Feature 1a. A single fragmentary bison scapula was found in the bottom of this feature.

Further work with the soil probe to the east of the site datum revealed another area of deeper topsoil. Two excavation units, Units 9 and 11 were set up at 2N10E and 4N10E, respectively, to investigate this. No features were found, but several bone tools, stone artifacts and a large quantity of potsherds were recovered. The deeper topsoil seems to have been a natural phenomenon.

Another surface anomaly at the site was an area of dead grass northwest of the datum. Unit 12 was set up at 10N6W to examine this area. Many potsherds, lithic items and clam shells were found at a rather shallow depth in this unit. At about 20 cm, a dark stain was observed in the soil. This proved to be a cache pit, designated Feature 3. It was bell-shaped and reached a maximum depth of 120 cm below the surface. Its contents included charcoal, bone, shellfish, ceramics, lithic tools and debitage, and a section of a clay pipe. Two more units were set up to the north of Unit 12. These were Units 14 and 15. A second cache pit, somewhat smaller than Feature 3 was found on the border line between the two units. It was designated Feature 4. It contained a similar inventory to that of Feature 3, including another segment of the clay pipe found in the latter feature.

Several other units were set up around the site area. Unit 10 was established in the bastion at 0N22W to examine the stratigraphy at that point. No sign of a palisade was observable in the unit, although it seems highly likely that the abundant tree roots and rodent disturbances may have obliterated any trace of postholes. Units 8 and 13 were set up outside the fortification ditch. The former unit was situated just outside the bastion. Due to time limitations, it could not be completed, but it indicated that much of the spoil dirt and gravel from the ditch excavation had been dumped to the outside of the ditch. Its inverted

stratigraphy of loose gravel overlying topsoil and subsoil led to this conclusion. Unit 13 was placed well to the southwest of the main site area in a shall low area near the bluff edge. Like Unit 8, time limitations prevented complete excavation. It was closed up at a depth of 30 cm and had been relatively sterile to that point.

Feature Descriptions

Feature 1

Feature 1 was a shallow, irregularly circular basin-shaped hearth measuring about 160 cm east to west by 160 cm north to south (Figure 15). Its top was about 20 to 23 cm below the surface, and it bottomed out at a depth of about 36 cm. It was defined primarily by a concentration of fire cracked rocks and a dark-stain in the soil; further definition was provided intermittently around its periphery by the presence of a gravelly soil zone.



Figure 15: Feature 1 at Hartford Beach Village.

While occasional charcoal flecks were recovered, and a dark charcoal stain was noted in the immediate center of the hearth, very little charcoal was actually recoverable. This could make a radiocarbon date impossible. Other contents included several bone scraps, two or three fragmentary charred corn kernels and a few nondiagnostic sherds and lithic debitage. The lack of diagnostic artifacts and sufficient charcoal for a carbon date makes a cultural/temporal identification of this feature difficult.

Feature 1a

Feature 1a was situated directly beneath Feature 1; in fact it appears that the latter was built on top of the former (Figure 16). Feature 1a was a large ovoid to roughly circular pit about 160 cm across. Its top was defined as being at 40 cm, although it more probably was not initially separate from Feature 1. The pit walls were roughly straight extending to a depth of 95 cm from the ground surface, where it intruded into the underlying glacial outwash gravels. The fill consisted of sterile gravels and mixed subsoils, which made definition of the feature walls and floor virtually impossible. After the initial attempt to follow it down by soil texture and color, the soil was trenched across Units 3 and 6 to expose its profile. This revealed the cross section of a cylindrically shaped pit only slightly larger than that excavated. It was sterile except for one badly shattered bison scapula located at the very bottom (Figure 17). Its function and cultural affiliations cannot be determined on the evidence available.



Figure 16: Feature 1a at Hartford Beach Village. Sectioned north to south to expose profile.

Feature 2

Feature 2 consisted of two probably postholes located in the northwest corner of Unit 6 (Figure 18). They first became visible at a depth of 40 cm, the point at which the subsoil became light enough for the dark stains to be evident. It is probable that the top of the postholes were actually much higher, stratigraphically speaking. Features 1 and 1a were situated about 50 cm to the east and may have been associated with Feature 2. Both postholes were roughly



Figure 17: Shattered bison scapula at bottom of Feature 1a, Hartford Beach Village.

circular, measuring about 15 to 20 cm in diameter. One hole reached a depth of about 60 cm, the other to only about 47 cm. The fill consisted of charcoal and small fragments of clamshell.

Feature 3

This feature was found in Units 12 and 14. It first appeared as a dark stain at a depth of 23 cm from the surface. Its shape was circular, measuring about 55 cm across (Figures 19, 20). Excavation revealed it to be a bell-shaped cache pit. From the top, the walls remained roughly vertical for about 20 cm. after which they belled out to a maximum width of about 80 cm at a depth of 73 cm. The walls sloped gradually in after that depth, the bottom was at a depth of 127 cm from the surface, at which point the diameter of the pit was about 45 cm.

The cache pit was filled with a gravelly dark soil mixed with abundant cultural debris in the top 20 or 30 cm. The cultural contents included a segment of a clay pipe, numerous decorated and plain bodysherds, lithic debitage, clam shells, dog, bison and fish bones, charcoal and charred corn.

Feature 4

Feature 4 was another cache pit found in the northeast corner of Unit 14 and the southeast corner of Unit 15, about 110 cm northeast of Feature 3 (Figure 21).



Figure 18: Feature 2, postholes, Hartford Beach Village.



Figure 19: Feature 3, Level 1, Hartford Beach Village.

It was located at a depth of 23 cm and had a roughly circular outline about 40 cm across. It reached a maximum depth of 64 cm from the surface, sloping gently in from the upper edge to the slightly rounded bottom. Its width at the



Figure 20: Feature 3 in foreground, Feature 4 in background, Hartford Beach Village.

bottom was about 20 to 30 cm.

The fill consisted of a dark soil mixed with cultural debris. The cultural debris included another segment of the clay pipe found in Feature 3, numerous plain and decorated bodysherds, lithic debitage, charcoal, clam shells and bone fragments. This feature is obviously contemporary with Feature 3.

Palisade Post Holes

Seven dark poorly defined stains were visible on the 50-centimeter floor of Unit 1, where the topsoil to subsoil transition made them apparent. They were all roughly circular and ranged in size from about 10 cm across to 25 cm. When excavated, depths ranged from 1 to 14 cm from the visible tops of the stains. The stains contained little cultural material. It would seem probable that at least some of these stains are the remains of post holes—most likely the deeper stains.

The Artifact Assemblage

In general, the Hartford Beach Village did not yield a large number or sample of cultural debris. Lithic and ceramic artifacts comprised the bulk of the artifact sample, along with a moderate quantity of fire cracked rock. Faunal remains were very poorly represented, probably since the site is very shallow. Soil deposition would have been very slow, for which reason most of the bone and



Figure 21: Feature 4 after excavation, Hartford Beach Village.

other faunal remains would have decomposed. The only exception was generally found in features or deeper deposits of the site.

Ceramics

The ceramic assemblage from the Hartford Beach Village is not overly large. It was augmented by the donation of a private collection made by Dave Fischer of Milbank, S.D. His collection includes several rimsherds and decorated bodysherds.

The rims from the site fall basically into two groups. The first consists of several moderately thin rims which are slightly flared with rounded lips and little or no neck or shoulder. The exteriors are cord-roughened vertically to the lip, and the interiors are smooth. These sherds are similar to what has been designated Lake Benton Vertical Cord-Marked in Minnesota (Hudak 1974). The rims in this group were all from the Fischer collection.

The second group includes several rather thin rims from at least two vessels. A number of the sherds were fitted together (Figure 22A), along with fragments of the vessel shoulder. This and the other specimens include high rims, about 25 to 35 mm; they are not flared and have flat lips. The surfaces have been smoothed while the clay was in a leather-hard state, and no decoration is present. They are vaguely reminiscent of Anderson Plain rims from Initial Middle Missouri sites.

The bodysherds are indicative of several types. The Fischer collection includes two shell tempered plain sherds and a trailed sherd which are reminiscent of Oneota, and one dentate stamped sherd which appears to be of late Woodland affiliation. The sample collected by the excavation team includes basically thin, plain, almost polished sherds, and a high percentage of broad trailed sherds (Figure 22B, C). The trailed sherds include both curvilinear and linear design elements, although they are generally too small to reconstruct the design.

A single clay pipe was also represented at the site (Figure 22D). It was found in two pieces, one in Feature 3 and one in Feature 4. It appears to have been tubular, at least 20 cm long, ovoid-rectangular in cross section with a flared, rounded mouthpiece. Incised 'x's and arrows constitute the design elements.

Chipped Stone

A considerable number of chipped stone artifacts and lithic debitage was found at the site. They have not yet been analyzed, and only the briefest impressions can be made of the assemblage at this time. The projectile points represent three broad cultural groupings. One point fragment found in the spoil of the fortification ditch appears to be an Archaic type, although no definite chronological or cultural assignment has yet been made. Several corner notched points were also found at the site. These appear to be of Woodland affiliation; presumably these are primarily Late Woodland points, although a Middle Woodland component is not impossible. The third group includes both triangular deep side notched and unnotched triangular arrow points. These are most likely Plains Village points, associated for the most part with the ditch and cache pits.

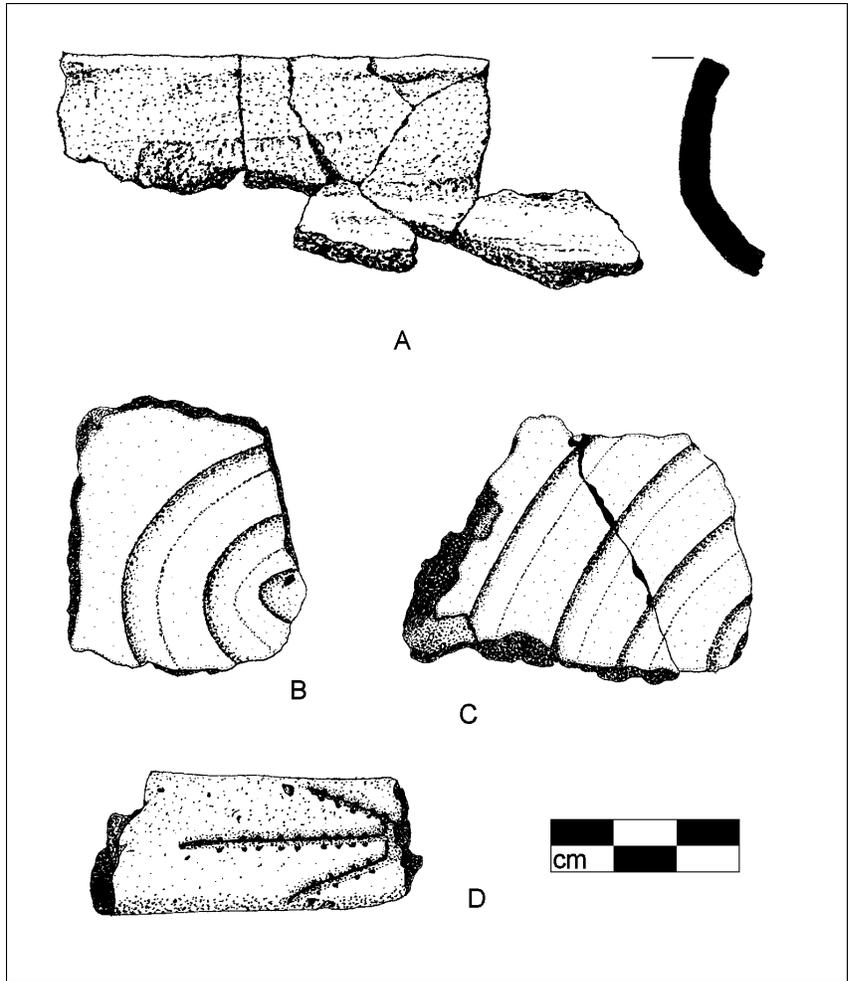


Figure 22: Ceramic artifacts from Hartford Beach Village. A, partially restored rim; B-C, trailed bodysherds; D, clay pipe fragment.

A variety of endscrapers, sidescrapers, bifaces, a drill and worked and utilized flakes were also found. These are not especially diagnostic, and little more can be said of them at this time, except that they represent a rather broad range of cultural activities.

The lithic types from the site consist of several stone types. Most notable, upon preliminary investigation, is the high percentage of Knife River flint artifacts and debitage. The inhabitants appear to have had a ready access to this material, either through trade or periodic visits to the quarries in North Dakota. The other major stone types consist of various cherts and silicified sediments. The former are available in moderate supply in the glacial gravels

near the site. The latter are also available over a wide area in gravels. These are rather distinctive over the Northeastern Plains area, and have been called, rather erroneously, "Swan River chert" in Manitoba.

Bone Tools

Four bone tools were found at the site. A bison scapula hoe was found in the bottom of the fortification ditch (Figure 23). The dorsal process has been removed, but no hafting modifications are visible. The distal end of the artifact is extremely worn and polished. The wear has created a deep V-shaped notch in the blade. Some trace exists of a possible hole drilled through the blade about midway between proximal and dorsal ends. A fragment of a metapodial flesher and a bone awl were found at the east end of the site, in Unit 9. A second bone awl was found in Unit 6, just west of Feature 1.

Faunal Remains

Few faunal remains were found at the site. This is probably due to the fact that it is a shallow site, with the cultural material being generally no deeper than about 20 to 30 cm. With the exception of the bone tools, most of the bone from the site was extremely poorly preserved and fragmentary. Most of it appears to have been bison, although dog or badger bones were present in Feature 3. Fish bone is present in Features 3 and 5 to some extent. Clam shells constituted the bulk of the faunal remains surviving at the site, perhaps because they resist weathering better than bone. They were most numerous in the areas of Features 3 and 4, although Over reported a clam shell refuse heap in the ditch bottom on the southeast edge of the site. No surface trace of this refuse pile was visible at the time of the 1981 excavations.

Other Stone Tool

A single small fragment of what may have been a stone pipe bowl was found in Unit 7. It is made of a soft, black stone, possibly steatite.

Summary of the Hartford Beach Village Excavations

Hartford Beach Village is a rather unique site. It is clearly related to the Initial variant of the Middle Missouri Tradition, but it is different from sites in that variant in several respects. The ceramics, based on the rather small sample recovered, are similar to those from Initial Middle Missouri sites to the south, such as the Brandon Village (39MH1, although the overwhelming predominance of trailing is somewhat atypical.

The lack of house structures, which form pronounced depressions at Initial Middle Missouri sites, is noteworthy. The limited excavations carried out during



Figure 23: Bison scapula hoe in situ, Unit 5, Level 6, Hartford Beach Village.

the 1981 season were insufficient to determine whether other structural alternatives were used. The presence of the post holes near Feature 1, however suggests that structures may have been present.

The fortification ditch is also interesting. The site is quite small, only about 0.12 ha (0.3 acres) within the ditch, and it would appear that it was not intensively occupied over any great length of time. Yet the construction of the ditch would have represented a tremendous expenditure of manpower for so small a society. This leads to a host of questions about contemporary relationships between local cultural entities, questions which can only be answered by considerable further research. One final note concerning the ditch is that the bastion extending from it is not a feature of the fortifications from Initial Middle Missouri villages. The earliest occurrence of the bastioned ditch is in the later Extended variant of the Middle Missouri tradition (Lehmer 1971:70).

Conclusions and Recommendations

The excavations at the Winter site and the Hartford Beach Village have produced a significant body of data pertinent to the prehistory of northeastern South Dakota. This, coupled with the results of earlier investigations, allows a much better reconstruction of the local cultural sequence, as well as providing new directions for future research.

The Paleoindian points from the Winter site are intriguing. The Folsom point found by Albert Sample has since been lost, but if an intact Folsom component exists at the site, it is the oldest known in the region. The other point, found by Emery Winter in 1980 near where Sample collected his specimen, is much more recent in age. It appears to date to near the end of the Paleoindian period and is similar to points found at the Travis 2 site near Mobridge (Ahler et al. 1977) and at the Cherokee Sewer site in northwestern Iowa (Anderson and Semken 1980). Other projectile points collected in the area date to the intervening period between the two Winter finds. A large point, presumably associated with a burial, was found in a gravel pit at Browns Valley, Minnesota in the 1930s (Jenks 1937) its age has been estimated to about 6000 B.C. (Wormington 1957:144). A point of about the same age was found by Kermit Torgerson at the Milton site (39DE9) in recent years. It has been identified as an Alberta point. The site appears to have been very shallow and has probably been destroyed by cultivation.

The Archaic period is still poorly represented in collections from northeastern South Dakota. At the Winter site, a single projectile point was found in the excavations which is distinctly Archaic. It is a lanceolate form similar to McKean Lanceolate points from the western Plains. A single specimen was also found in the Hartford Beach excavations. It is an eared, shallow side-notched specimen similar to Oxbow types found elsewhere on the Northeast Periphery and adjacent areas. Its age would probably be similar to that found at the Winter site—circa 3000 to 1500 B.C. Other Archaic collections are known, but no work has been done on them to date in the area. Very productive research has been carried out in northwestern Iowa, however, and the reader is referred to the Simonsen site report (Agogino and Frankforter 1960) and the results of the Cherokee Sewer site excavations (Anderson and Semken 1980) for further

information about the Archaic on the Northeast Periphery.

The transition from the Archaic to the Woodland period is rather murky. Generally, the introduction of pottery making is taken to mark the boundary between the two periods, although the cultures undergoing the change appear to have remained basically oriented to a hunting and gathering economy (cf Benn 1980). This shift seems to have occurred about the end of the last millennium B.C. and early in the first millennium A.D. at several dated sites from southern South Dakota and southwestern Minnesota (cf Zimmerman 1981:29, Anfinnson 1979). Several of these cultures, which are collectively known as Middle Woodland, are represented by components at the Winter site. Analysis of the material is not complete, but several ceramic varieties are identifiable as belonging to Middle Woodland, most notably those which are similar to the Fox Lake Phase in adjacent areas of Minnesota. Additional collections that are now available, such as that from the Oakwood Lake site near Brookings (cf Hannus 1981), will enable a quantum leap in our understanding of the Middle Woodland cultural sequence and lifeways for northeastern South Dakota.

The shift to the Late Prehistoric period about A.D. 800 is also defined largely by ceramics. The Winter site has provided a very large sample of ceramics and other artifacts from this time period, as well as a body of cultural features. Additional information has been provided from several sites in the area, such as the Oakwood Lake site, which has been thoroughly analyzed (Hannus 1981), and from surface collections at sites such as Fish Lake and Hartford Beach. Further analysis of these collections will provide a more definitive statement on the Late Woodland cultural sequence.

The Plains Village cultures overlapped temporally with the Late Woodland cultures. Sites from these cultures are not apparently as common as Late Woodland sites, but several have been investigated in the area. The most striking site is, of course, the Hartford Beach Village with its fortification ditch. It is the best known of those sites which are associated with the Initial Middle Missouri Tradition in northeastern South Dakota. Others include, for instance, the Nine Mile Lake site, the Garden site (Haug 1979) and possibly the Winter site. Great Oasis occupations, which are roughly contemporary with Initial Middle Missouri, are also present in the area. The Winter site yielded indications of a Great Oasis component, and others have been investigated at the Roy Lake site in Marshall County (Haug 1977) and at site 39BK8 (Alex 1980). Much work needs to be done yet to sort out the sequence of the Late Prehistoric cultures: present evidence suggests a complicated cultural mosaic dating to period A.D. 800 to 1300.

Recommendations

Although the analyses are not yet complete, it appears that both the Winter site and the Hartford Beach Village are eligible for inclusion on the National Register of historic Places. The Winter site is significant as a major source of data in reconstructing the cultural sequence at a single locality—it seems

that virtually every prehistoric period is represented by at least one component at the site, it is made especially significant in that, with so many prehistoric occupations at the same site, studies of prehistoric resource use and adaptation to a local environment could be made especially effective.

The Hartford Beach Village is significant for somewhat different reasons. It is clearly related to the Initial Variant of the Middle Missouri Tradition, but it differs in several ways. First, it is distant from the main concentrations of Initial Variant villages on the Missouri River trench, the lower James River valley and the lower Big Sioux River valley. While it shares some assemblage similarities with the latter two areas, it is different in both technological aspects of the assemblage and in the physical makeup of the village; it lacks semi-subterranean house structures and is much smaller than any of the other documented villages to the south and west. These differences may be sufficient to warrant classifying it separately. These differences may reflect more than just a location and technological variation: the environment of the site is also atypical. It is not located on a major stream valley, where the inhabitants could have taken advantage of the alluvial conditions for garden farming. Instead it is situated on the edge of a large lake, where horticulture would have been, to say the least, difficult. In this respect, it is similar to the possibly contemporary Great Oasis occupations in the area. It is in effect a storehouse of data concerning a little known expression of Plains Village cultural variability which is both vital and irreplaceable in our understanding of the prehistory of the region.

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