



Report of Explorations (1938)

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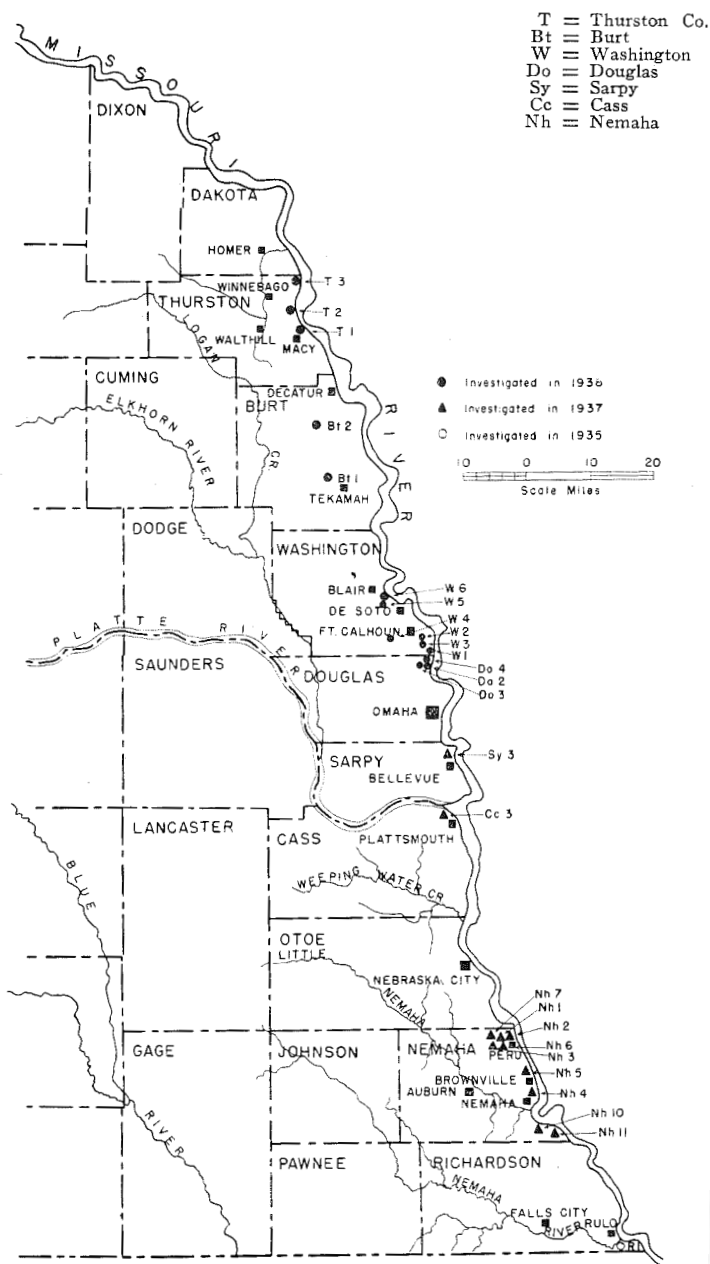
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Article Summary: This special Archeological Number of *Nebraska History* contains the report of the state survey of 1938. An [introduction by Addison Sheldon](#) precedes this article. This is the sixth issue devoted to prehistoric life along the Missouri shores. Information about the sites excavated is presented in the order listed here:

Do4a
Do4b
W 1
Do 2
Do 3
W 3
W 2
W 4
W 6 and W 5
Bt 1
Bt 2
T 1
T 2

Cataloging Information:

Photographs / Images: Indian pictographs found near Blackbird Hill; Site Do 4b: burials 6, 7, 8, 10; Site W 1: restored pots; Site Do 2, house 6: restored pottery; Site Do2: house excavations 5 and 6, burial; pottery sherds; flint artifacts; Site W 4, house 1: excavations, pot *in situ*; Site W 4, house 2: pottery vessel; tobacco pipes; shell and stone artifacts; bone artifacts; pictographs carved in wall of ravine near Blackbird Hill; Site T 2, houses 1 and 2: excavations; Site T 2, houses 3 and 4: restored pots; Site T 3, house 1: restored pottery vessel; Indians excavating ancestral site



Map of eastern Nebraska showing the Indian sites excavated along the Missouri River by Historical Society archeological surveys. The site numbers (T3, W5, Do2, etc.) are composed of one or two letters serving as a symbol for the county, combined with consecutive numbers assigned within each county.

Report of Explorations

By PAUL COOPER

Introduction

For the work of the Historical Society Archeological Survey of 1938, A. T. Hill, its director, together with the writer, mapped out a program of excavation for a section of the state which had not before been systematically surveyed. This section comprised the Nebraska bank of the Missouri River between Omaha and Sioux City. While both Frederick H. Sterns and Robert F. Gilder had conducted investigations within this area, published accounts of their work are limited. Furthermore, their explorations appear to have been confined to a restricted area in the vicinity of Omaha. The environs of the Missouri River both above Sioux City and below Omaha had been previously surveyed, the former by the University of Nebraska and the latter by the Historical Society, but the intervening territory was virtually unknown archeologically. It was to sketch in the outlines of the aboriginal occupation in this important area that the season's program was laid out.

Work on a larger scale than that of previous years was made possible by the assistance of the Works Progress Administration. A project sponsored by the Historical Society made possible the employment throughout the summer of from fifteen to thirty-five workers in the various counties in which sites were excavated. The field headquarters was established April 1. On April 18 the project began operation, to continue in the field until the middle of October. After that time the work of the project was continued in the laboratory—cleaning, cataloging, and repairing the specimens recovered.

During the spring of 1939 a new project was approved to provide for both field and laboratory activities. With the aid of the latter the large quantities of specimens recovered during this and previous years have been completely cataloged

and their analysis is now under way. Such analysis will make possible, in the near future, detailed reports on the various cultural manifestations investigated. In the meantime, this report is presented in order to inform members of the Nebraska Historical Society and other interested individuals of the accomplishments of the 1938 field season, and to give a general picture of the nature of Indian remains in the area covered by the survey. The field work was under the direction of A. T. Hill, Director of Field Archeology for the Historical Society, and Paul Cooper, Project Supervisor. Two workers, George F. Lamb and Harvey Walker of Lincoln, completed the permanent staff which was associated with the work throughout the season.

The Archeological Survey is indebted to many for its success during the 1938 field season. The Historical Society continued its policy of contributing to the recovery and preservation of this important phase of Nebraska's history. Without the material aid given by the Works Progress Administration, and the unfailing consideration and cooperation given by every one of its officials with whom we were privileged to have dealings, much less success would have been achieved. Especial mention is due Mrs. Ethel May Sanmann, State Director of the Professional and Service Division, and Mr. E. O. Raasch, her assistant, for their enthusiastic interest and unceasing efforts to insure the successful operation of the project. The owners of the land on which sites were located willingly gave permission to excavate and almost invariably demonstrated friendly interest in the work. Especially extensive excavation was done on land owned by Mr. Frank Parker of Florence and on the farm of Mr. D. D. Ross of Winnebago. Invaluable assistance of diverse nature was given by Mr. and Mrs. John L. Champe of Lincoln and Mr. D. Roy Glanton of Omaha. Mr. Lamb and Mr. Walker contributed much to the success of the survey by their enthusiasm and interest in the work and its problems. Many others extended various courtesies which expedited the work and made it more pleasant. To these also we express our gratitude.

Geography of the Field of Exploration

The eastern tier of counties, to which the survey was limited during this season, lies within the relatively narrow strip extending across Nebraska (just west of the Missouri River) which has been subject to glaciation. In general the glacial tills are deeply covered by deposits of windblown soil and appear only in deeply dissected ravines. Away from the river the land is, in general, gently rolling; but the bluffs along the river are rough, with steep and frequently precipitous slopes. The bottoms vary in extent from place to place, depending on the present location of the river channel, and in the past have varied from time to time—as evidenced by the number of old channels and cut-off lakes. At present the river flows relatively close to the Nebraska bluffs throughout the entire extent of its course in this area. Numerous tributaries, most of which are small and are now dry for at least a part of the year, flow into the river from the west.

Timber is naturally abundant on the bottom lands and in the ravines, while the bluffs, though more open, are also frequently timbered. At the present time, at least, the timber is almost exclusively of deciduous varieties.

This strip along the river must have been an ideal habitat for the early inhabitants of Nebraska, who were directly dependent on the local products of nature for their subsistence. Timber for the construction of their earth lodges was easily obtained and abundant water was available. The raising and gathering of food, too, was favored by the immediate environment. The river bottoms and the valleys of the tributary streams must have made excellent corn fields, and many varieties of wild plant foods grew in abundance. Fish and other water forms were taken from the river and smaller streams, and both the wooded ravines and the prairie away from the river were excellent hunting grounds.

The Survey's camp was set up on the wind-swept bluffs of the Missouri River, about three miles north of Florence, on April 1. The first few days thereafter were devoted mainly to keeping warm, for the winter's final effort brought snow and low temperatures. However, by the time the first six Douglas County workers reported on April 18 and the project

went into operation, excavation was well under way. By May 1 thirteen certified WPA workers were in the employ of the project, and subsequent additions swelled the ranks to a maximum of twenty-four in Douglas County. During the latter part of May and early in June ten Washington County workers were assigned for duty in the southern portion of that county, bringing the total number of the crew to thirty-four for June and July.

Investigations began on the ridge adjacent to the Missouri River bottom lands and paralleling the course of the river. The southernmost spur of this ridge, which extends from Ponca Creek on the south to Rock Creek on the north, a distance of slightly more than a mile, is known as Long's Hill and is the site of the noted Gilder Mound where the "Nebraska Loess Man" was found in 1906. Several elevations, varying considerably in size and distinctness, lie scattered along the axis of this narrow steep-sided ridge. From a surface examination the artificial nature of these elevations was frequently uncertain; in all instances it was difficult and in most instances it was impossible to determine the height of the mounds, for all appeared to be on natural eminences.

Site Do 4a

On the land of John Gordon, at the north end of the ridge, were six elevations which we suspected were man-made. Three of them were given numbers and were excavated. The southernmost, designated as Mound 1, was in the farmyard. Mounds 2 and 3, so closely adjacent that their contiguous borders could not be distinguished, were in a woodlot approximately 100 feet to the north. Mound 1 was the most conspicuous of the three, the fact of its being on a natural point emphasizing its size. Reports that human bones were encountered during excavation of the basement of the Gordon residence confirmed the belief that this ridge was an Indian burial site, so the investigation of the mounds was determined upon.

Because a cistern occupied a considerable portion of Mound 1, only the eastern section of it could be removed. A north-south trench was sunk outside the eastern edge, and

a vertical face from the surface into undisturbed soil was carried west through the mound until progress was halted by the cistern. The only soil lines which could be distinguished with certainty were the sides of a pit about 30 inches square and 40 inches deep which had been dug in recent years, and no definite line marking the base of the mound was observable.

Extremely fragmentary human bones, belonging to infants as well as adults, were widely distributed throughout the fill. These frequently were burned, although no effects of fire could be observed in the mound soil itself. In only one instance (described below) were bones found in association, indicating the burial of an individual. This burial probably lay on the floor of the mound, for no other materials were found at a greater depth except under conditions suggesting their displacement by burrowing animals or the roots of a large tree which formerly grew on the mound. It was at a depth of thirty-one inches below the surface of the mound. Although the skeleton, situated somewhat east of the center of the mound, was in extremely poor condition (many of the bones being absent and those present being invariably fragmentary), there seems little question that the body was deposited while the bones were still covered with flesh, for what remained were in correct relationship to each other and the articular surfaces, where present, were in contact. The condition of the bones and the lack of many of them probably may be explained in the main by the burrowing of animals, for which much evidence was present. The body lay on its right side with legs tightly flexed in front. The original position of the arms could not be determined, for all that remained of these was a fragment of the upper bone lying parallel with the vertebral column.

No artifacts were associated with the burial. Such objects were, in fact, extremely rare throughout the mound, and consisted of a very few minute fragments of pottery; a single heavy, stemmed projectile point; a fragment of pumice, and several unworked flint pieces. The pottery, partially because of its small size, is of a rather nondescript nature. Surfaces

are both smooth and cord-roughened, and the paste varies from relatively compact to very coarse.

Mound 2 was cut across by a work road and its southern edge was encroached upon by a stock pen and a corn crib, as a consequence of which its outline was rather obscured. A five-foot trench was first cut from north to south across its apparent center and down to what appeared to be entirely undisturbed soil, after which the excavations were carried both to the east and west. Bone fragments were scattered throughout the fill, which included occasional lenses of burned earth. In only two instances were groups of bones found, both of them in the western side of the mound.

Twelve inches beneath the surface of the mound lay a group of bones apparently belonging to a single adult individual. The bones were in no order, indicating that burial was made after the body had been exposed sufficiently long to be completely dismembered. Furthermore, many of the bones appeared to have been broken before their deposition in the mound, which suggests that a considerable amount of time may have elapsed between the death of the individual and his burial here.

Slightly to the west and at a depth of 14 inches beneath the surface of the mound was a bundle burial. Few small bones were present, and the arms and leg bones were laid parallel in a pile with the skull immediately to the west.

No materials of a non-perishable nature had been placed with either of these burials, but occasionally these were found in the fill of the mound. They were probably unintentionally included in the soil gathered up to form the mounds. They comprised a few unworked flint chips and stones and a small number of pottery fragments. Both smooth and cord-roughened surfaces, as well as considerable variation in the structure, are represented. Three sherds are thick and coarse with heavily roughened surfaces, thus departing from the characteristics generally found in ceramics of the Nebraska Culture. On the other hand, one small rim fragment with a notched narrowed lip appears to be from a vessel whose occurrence in a village of that culture would occasion no surprise.

Mound 3 was, as stated above, situated immediately to the north of Mound 2. Although various factors made the determination of soil lines difficult, the greatest elevation of the mound above the undisturbed soil appeared to be about thirty-six inches. Fragments of human bone, frequently burned, were found in the soil from top to bottom, although the lower portions contained them in lesser numbers.

Burial 1 was an adolescent individual lying flexed on its left side with head to the south. The bones of this, as well as of all other burials in this mound, were in an extremely poor state of preservation.

Just to the east lay part of the bones of what was (originally at least) a partially articulated burial. Its head was also to the south. Although the vertebrae and pelvis were in articulation, the arm and leg bones were absent. To the west of these, at depths of twenty and twenty-seven inches, were two individuals lying flexed on their right sides; while to the south another, similarly placed, was covered by only six inches of soil.

Several skulls, occasionally accompanied by the lower jaw but by no other bones, were found at various points within the mound, none of them deeper than twenty inches beneath the surface and frequently just beneath the sod.

Again no burial offerings were found and recovered artifacts were confined to a few pieces of pottery. In every instance these are such as might be found in a house site occupied by Indians bearing the Nebraska Culture.

Site Do 4b

To the south of these mounds on the Haylicek farm this same ridge had yielded human bones in a road cut. A trench ten feet wide was cut for one hundred forty feet along the narrow axis of the ridge, with a short extension to the west at the south end of this trench. No evidence of any artificial mounds was encountered, but a number of burials were uncovered. Furthermore, although the circumstances of their occurrence indicated that the burials were evidently in pits, no soil lines could be observed. The absence of now discernible pit outlines where pits had certainly been dug is a phe-

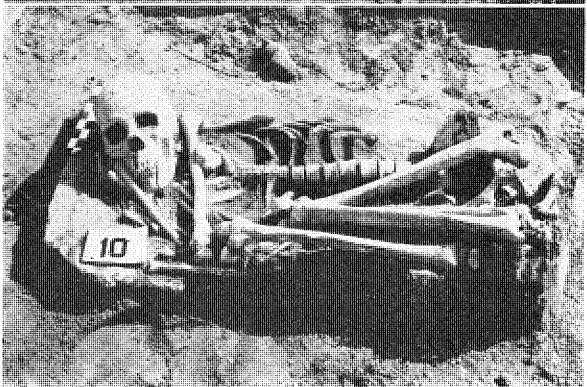
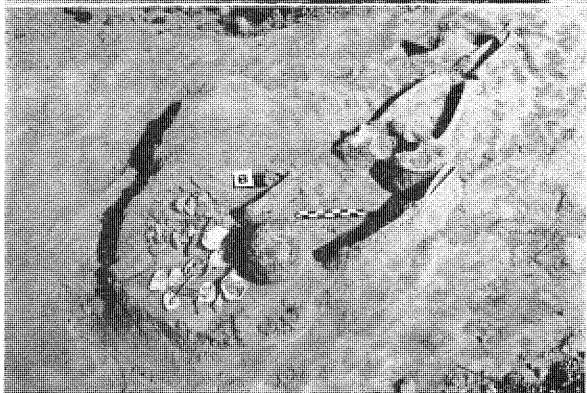
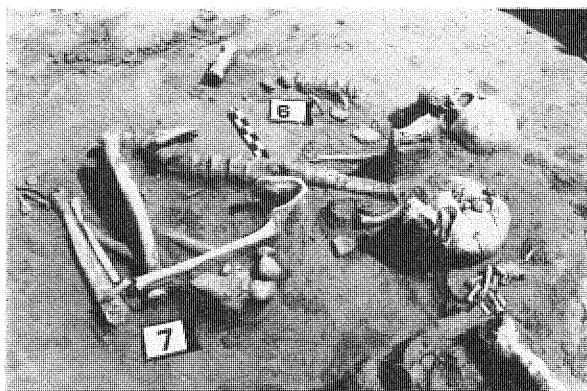


Plate II. Site Do 4b

nomenon of frequent occurrence in Nebraska, which fact might be explained in a number of ways. Among other possible explanations, we suspect that at the time the pits were dug there was little dark top soil to be mixed with the material with which the pit was filled. Even at the present time, in fact, the humus zone is poorly developed in most of the locations in which we have excavated, and recent pits dug by collectors are not infrequently distinguished with some difficulty.

Eighteen individual burials were located in this trench. The work of uncovering and preserving the remains was facilitated by the fact that, unlike so many deposits of human bones in this part of the state, the burials had apparently been made while the bones were still covered with flesh so that the individual skeletons could be readily distinguished. This fact, too, makes it possible to give a clearer description of the methods involved in the recovery of data regarding the burial customs of the people who interred their dead on this hilltop.

Because we feel that many of our readers would be interested in the way in which the burial sites are unearthed, we will attempt to give a brief description of our work at this place. We are making our side excursion at this particular point because it will be easier to give a clear picture of our methods by describing the work on a specific site than by making it a general exposition of techniques. We have chosen to explain in detail the digging done on this particular site for two reasons: the methods described in relation to the work here are those in use on all of our excavations, and may be borne in mind by the reader whenever work on any site is mentioned; and this site which we are about to uncover for you is one of the most interesting encountered during the summer's work.

PLATE II. These burials were found on Site Do 4b. Top: The bodies had been laid in pits. Either they were incomplete when buried or have been disturbed since then.

Center: Burial 8 lay extended on the back with arms to the sides. Note objects near the head. These include four arrow points, a bone awl, four small spoons and many flint chips. The object seen in center is a scale.

Bottom: Burial 10 is typical of the commonest burial form. It lay on the right side with arms and legs flexed against the body.

Before the first shovelful of earth was moved, the whole area to be excavated was staked in such a manner as to form five-foot squares, each of which was given a number. The horizontal location of any find could then be readily described in a notebook, and could also be plotted on a map on which similarly numbered squares were drawn to scale. Thus a glance at the map will show where each find was made and what its position was in relation to all other finds. The depth at which materials are found is also important, so the elevation of each stake was measured with a level before excavation was begun in order that measurements of depth could be made from them. The elevations thus obtained have additional value in that they serve as a record of the surface contours.

It is important for us to remember that the sole reason for our excavation is to gain information. Consequently it is essential that the utmost care be exercised during the digging, in order that no evidence be destroyed or go unobserved and that all evidence be carefully and completely recorded. Careful excavation has no value unless the results are set down in such a way that at any time in the future it is possible to reconstruct the situation as it was found by the excavators. For this reason photographs are made and maps are drawn of all significant features, and a full account is kept of the work and its results.

To return to the actual excavation of the ridge in question: After the staking system was established, the soil in the squares selected was carefully removed in six-inch layers. The workers were instructed to shovel with extreme care and to stop immediately and report whenever an object of any sort was touched, so that it could be observed, measured and recorded in the notebook. As each layer was removed, the floor of the trench was scraped clean and examined for any soil lines which might indicate a pit or any other feature. The soil throughout was remarkably uniform and we were unable to find any pits or evidence other than the burials themselves and occasional specimens. Nevertheless, the cleaning and scrutinizing of the trench floor with the removal of

each layer was not neglected, for it is as important to know that nothing is to be seen as it is to observe features which are present.

The work on most of the trench progressed rather rapidly, for except in a restricted area near its south end very few finds were made. However, occasional bone fragments and small pieces of pottery were found at intervals along its length, and two skeletons were uncovered outside the main burial area. When any bones were encountered, work was immediately slowed down. A block of earth was left around the bones while the shovel-work continued elsewhere. Then small tools—a trowel, whisk broom, grapefruit knives, orange-wood sticks and camel-hair brushes—were used to clean the earth away from the bones, taking care that no bones or any objects accompanying them were dislodged from their original positions. When the complete skeleton was exposed photographs were taken, a drawing was made showing the exact manner in which it was laid, and complete descriptive notes were written. After all information had been recorded the bones were removed. Because of their fragile condition it was necessary to handle them with care. A bone was never pulled out of the earth but was freed by removing all the earth about it. Where the bones were in poor condition they were saturated with either shellac or celluloid cement before they were removed.

Each skeleton was assigned a number when first found, and when the bones were removed they were placed in sacks with this number written on them. Pottery and other artifacts were also placed in sacks labeled with identifying numbers. Only by this means is it possible to relate later laboratory study of the materials with the information gathered in the field.

As previously suggested, most of the burials found were concentrated in a relatively small area in the southern end of our trench—an area roughly twenty feet long by fifteen feet wide. However, two burials and a small number of scattered bones were encountered elsewhere. About fifty feet from the south end of the trench were the remains of an adult male who had been placed flat on his back at a depth of

fourteen inches beneath the surface. Although the bones of the upper half of the body were in fair condition, those below the waist were either missing or displaced. Lying in a similar position with head to the northwest, but at a distance of almost one hundred twenty-five feet north of the south end of the trench, was the skeleton of another adult male. This was the only individual found during our exploration here which had had imperishable objects buried with the body. Six inches left of the head were a number of small articles, including four arrow points, a few bone and shell objects, and a quantity of unworked flint fragments. Of the arrow points, two were heavy, coarsely chipped and stemmed, while the other two were small and finely chipped with side notches. The worked bone consisted of an awl and a piece which had been cut but whose shape could not be determined because of its broken condition. Four roughly square objects had been cut from mussel shells and may have served as spoons, although this is uncertain.

In the more densely occupied area in the southern end of our excavations there were sixteen burials, each of which (where the position could be ascertained) lay flexed on one side or the other. That is, the legs were bent, usually to such an extent that they lay close to the body. No uniform orientation of the body was practiced by the people who buried these dead. On the contrary, the heads were found to be toward all points of the compass. Individuals of both sexes and various ages, from infancy to senility, were represented. The skeletons lay at depths of from nineteen to forty inches beneath the surface, but a large proportion lay not less than twenty nor more than twenty-four inches deep. In two instances two or more individuals lay in close contact, suggesting that they had been placed in the same grave at the same time.

Occasional isolated bones were also found scattered at various points and at various depths in the trench, while a few artifacts were encountered under similar circumstances. The few pottery sherds appear to be divisible into two types, one similar to the pottery commonly found in Nebraska Culture villages and the other quite distinct. This latter pot-

tery is thick, black and coarse, with the exterior surfaces heavily impressed with parallel cords. The one rim of this type found has a flat lip and a row of nodes around the outer rim, effected by punching holes partially through the clay from the interior of the vessel. These pieces are similar to pottery found in certain Woodland manifestations, and their presence probably indicates that people bearing such a culture were residents of this part of Nebraska. It is perhaps significant that only pottery of this type was found in the vicinity of the burials at the south end of our trench (with the exception of one sherd which appears to fall into the Nebraska Culture pattern but which was found in a small pit evidently dug fairly recently, presumably by a collector), while the other pottery occurred well to the north.

During our work near Omaha, and especially during the time the burials were being excavated, a great deal of public interest was aroused, as evidenced by the number of visitors to the survey camp and to the scene of operations. On some Sundays hundreds of people viewed the sites, and even on week days visitors were numerous. Furthermore, the work was the subject of frequent newspaper stories, and on one occasion the mobile unit of a broadcasting station visited the site on the Gordon farm and put an account of our activities on the air.

Site W1

Before the excavation of the burials was completed, a part of the crew of men moved to a village site a short distance northeast on the Douglas-Washington county line. A terrace remnant (now almost washed by the river) is apparently covered by a village of considerable size, although only three depressions still remain in an uncultivated area. Each of these depressions was supposed to mark the location of a former pit-house and became the subject of excavation. A brief description of the results follows.

The first house, situated at the very edge of the terrace, proved to have been subjected to much previous digging. Large irregular pits were found to extend for as much as six feet below the lodge floor, and as a result many features had



Plate III. Site W 1

Actual size of all specimens illustrated in this magazine is shown at base of cut by a scale of heavy black lines alternating with equal blank spaces, each representing one inch.

been either wholly or partially obliterated. Judging from what evidence could be observed in the soil, this structure conformed on the whole with the usual Nebraska Culture house type, several descriptions of which are available. The one unusual feature was the absence of the centrally located fireplace and the substitution of two fireplaces, one in the east half and one in the west half of the floor, approximately ten feet apart. The positions of the original posts were well defined and formed a rectangular pattern somewhat longer from east to west than from north to south. The structure was forty feet long by thirty-four feet wide. Instead of the usual four posts supporting the center beams, six were used in this case. The two extra supports were placed midway between the northeast and northwest posts and between the southeast and southwest posts. The covered entrance passage extended for a distance of approximately twenty-six feet to the south.

As was mentioned above, extensive digging had already been done here. A large number of the sub-floor cache-pits had been located in the course of this digging and partially destroyed. Other of these excavators' pits, in which no evidence remained, were presumably also made during the removal of disturbed soil, so that each probably marked the former position of a cache-pit. If this is true, there were originally fourteen cache-pits beneath the floor of this house, all of them relatively close to the walls on every side.

A second depression, marking the location of House 2, was situated a short distance to the north. This structure (which had also suffered a considerable amount of previous digging) was, according to the standards developed by our excavations of previous years, more conventional. The fireplace lay in the center of the floor and four posts at equal

PLATE III. The moderately large restored vessel at top of page illustrates characteristics common to the pottery found in Nebraska Culture sites. These include a rounded body, and a rim which curves outward from a constricted neck. Note the roughened surface and the lack of ornamentation.

The lower photograph shows the restored upper portion of an unusual vessel, so constructed that one pot appears to rest within the opening of a larger one. Each has two oppositely placed handles.

distances from the center supported the center of the roof at each corner. The outer posts formed a square wall plan, with corners somewhat rounded, and the entrance extended to the east. The approximate dimensions of the house were thirty-three by thirty-three feet, and the length of the entrance passage was twenty-seven feet.

A third depression, still farther north, was next excavated. The work revealed a roughly square pit, the floor of which was at a depth of sixty inches beneath the average surface. No post holes or other evidences of disturbance below the floor could be observed, and the only evidence of any occupation was a lightly burned area on the floor. It seems probable that the Indian occupants of this village had excavated the pit intending to construct a lodge within it, but that for some reason their work was interrupted and the building was never begun.

The artifact materials found in this site are in general similar to those previously found in Nebraska Culture sites. In the main the pottery is rather well made of clay to which crushed stone and sand had been added to prevent cracking during the drying and firing processes. The vessels are almost invariably globular with a constricted neck separating the body from the rim. Near the lip of the vessel there are frequently handles, most often fashioned somewhat like the handle of a teacup. The pottery is usually not highly decorated; the main decoration consists of straight lines cut across the lip. The body of the pot is usually either smooth or roughened by the application of cords or grass, but rarely incised line designs are present. These are usually on bowls rather than on the conventionally shaped vessels. Three small modeled heads (one of a human being, one which looks much like that of a bear and one of some other animal form) have been attached to pottery vessels. A few of the rims are shaped to look like a collar and these often are decorated, either with incised lines or by pressing a twisted cord into the wet clay.

Other artifacts consist of small triangular arrow points, both notched and unnotched, scrapers, drills, bone implements and pipes. With one exception the pipes are of pottery and

are elbow-shaped. One of these is decorated with incised lines. The exception is made of stone. The bone objects include a large fishhook with a shank grooved to hold the line, a large flat perforated needle and two deer toe bones—cut probably for use in a game.

Remains indicating the food eaten by the inhabitants are typical of those found in almost every village of this culture. Animal foods are represented by the bones of bison, deer and small animals, as well as by fish and turtle bones and the shells of mussels. Our record of vegetable foods is much more incomplete, for under normal conditions these decay very rapidly, leaving no trace in the soil. Occasionally, however, such materials are partially burned, and their charred remains stay intact indefinitely. In such instances the original form of the corn, beans, seeds or pits is preserved in charcoal. These demonstrate both the cultivation of corn and beans and the gathering of berries and such fruits as plums.

Site Do 2

Somewhat more than a mile to the southwest is a broad ridge which slopes gently from the highlands above to the Ponca Creek valley on the south. Well timbered with hardwood trees, providing good drainage as well as a relatively level surface, and well sheltered from the north winds, it also has a beauty which would make it an ideal home site for anyone. Apparently the Indians appreciated this fact, for the surface here was dotted with depressions indicating the existence at one time of a village of some size. During the course of the Survey's work here, ten lodge-sites were excavated. These ranged from small structures as little as sixteen feet across to a large centrally located lodge which measured forty by forty-three feet between the walls. In most of them some digging had already been done, and in a few instances this had been so extensive that almost no information could be obtained regarding their original character. In one case excavation was finally abandoned after it became apparent that nearly all the earth had already been moved. In other cases, however, the previous digging had

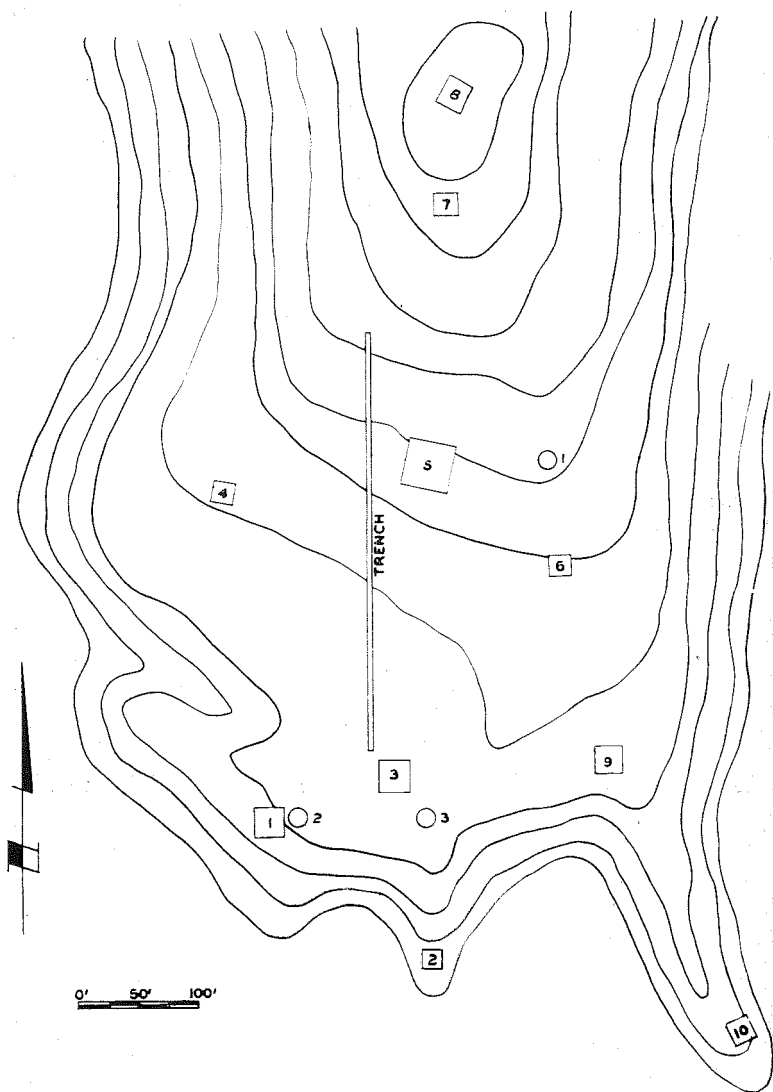


Fig. 1. Map of Site Do 2 showing contour of ridge and location of features excavated. The long trench was excavated to determine whether cultural materials were to be found outside the houses.

Key to Symbols: □ = Houses. O = Mounds. Contour interval = 5 feet.

resulted in very little damage and it was possible to recover almost complete information.

The usual structure here conformed to the general pattern of Nebraska Culture houses, and variations were rare. In every instance in which the shape could be determined the walls formed a square outline. Each was built in a pit, although the pits varied from a few inches to several feet in depth. Usually a row of posts was found just within the earth walls to form the upper walls and to support the outer ends of the roof poles, but occasionally no posts so located could be found, indicating either that the holes had been filled with earth identical to that surrounding them or that no posts stood in those positions. If the latter were true, the outer ends of the roof poles must have rested on the edge of the pit. The inner supports for the roof were in each instance between the center and the corners of the house. Additional posts near both the outer row and the larger inside posts were common. They probably functioned (at least in some cases) as braces for original posts which had become weakened with the passage of time. The fireplace was invariably in the center of the floor, which usually sloped up to the walls. The covered entrances of all except one (to be noted later) were in the approximate center of the south wall and of varying lengths, although nearly all were rather long. Where the cache-pits were not disturbed they were either straight-sided or of the common jug-shaped variety.

At least one of the structures, House 4, apparently had been burned, for in some places the earth was intensely burned and charred timbers lay on the floor and across the walls. Evidences of burning were occasionally found in the other houses, but most frequently they appear to have been destroyed by the slower process of decay.

House 3 departed from the normal in the position of its entrance. Because of the method employed in the excavation and the presence of several trees which confused the evidence, a persistent search failed for some time to reveal the presence of a doorway. Finally, however, a trench was cut outside the southwest corner and here post-holes were found. Further

trenching revealed that an entrance passage of the usual type was present, but that it was located at the corner rather than in the conventional position along one wall. This and a similar occurrence in a village in Washington County, excavated at approximately the same time, are the only instances of corner entrances in this area of which we know.

The artifacts from these houses are similar (except that some of the less common objects are not found in every dwelling) and are of Nebraska Culture type. The pottery does not differ from that of Site W1; in fact, even the same unusual features are present, including bowls, incised body decoration and handles made to represent animal forms.

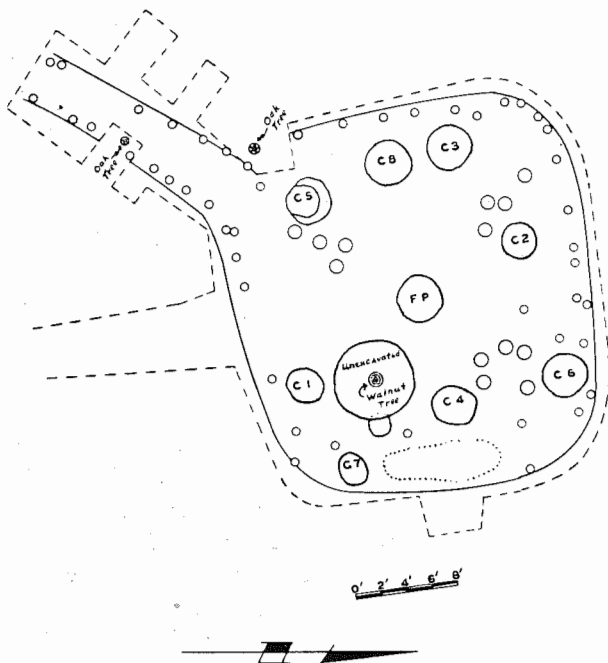


Fig. 2. Ground Plan of House 3, Site Do2. Note the entrance at corner.

Meaning of Characters: O = post moulds; C1 to C8 = cache-pits; — = edge of house pit; - - - = boundary of excavation; . . . = area previously excavated; Fp = fireplace.

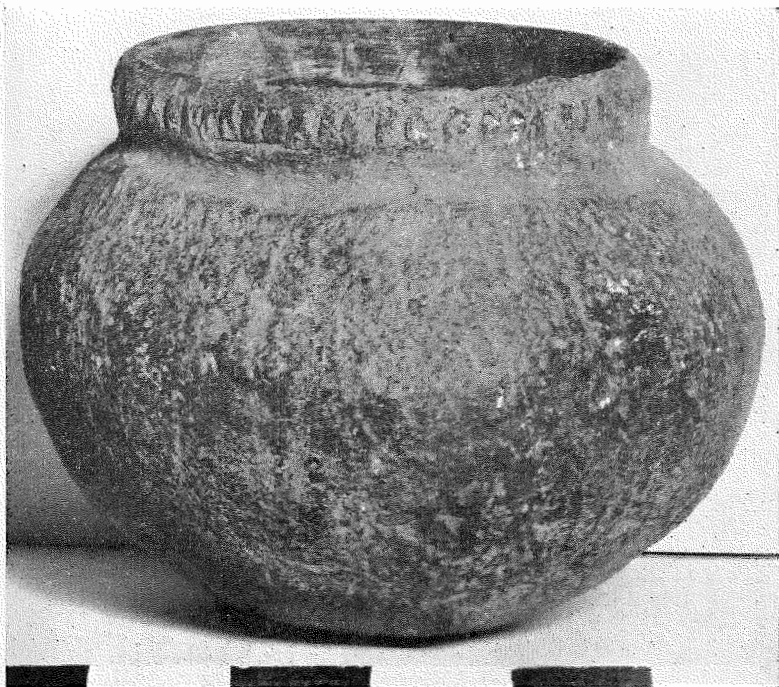


PLATE IV. Restored pottery vessel from a cache-pit in House 6. Site Do 2. It is somewhat unusual both in its shape and its extremely rough surface. The rim has been decorated by indenting with a fingernail.

Among the stone implements are ungrooved axes ground into shape from a hard stone. Others include a bone with holes through it, used as a wrench in straightening arrow shafts; a harpoon head made from the tip of an antler, with a hole bored through it for the attachment of a line; and spoons made of mussel shells.

Three low and inconspicuous elevations occurred at scattered points on the ridge, and these too were investigated. In Mound 1 the situation was not at all clear, but a few scattered bones were found. Mound 2, adjacent to House 1, was richer in information. On what was apparently the mound floor there was an area of concentrated human bones, which represented the simultaneous burial of many individuals. The

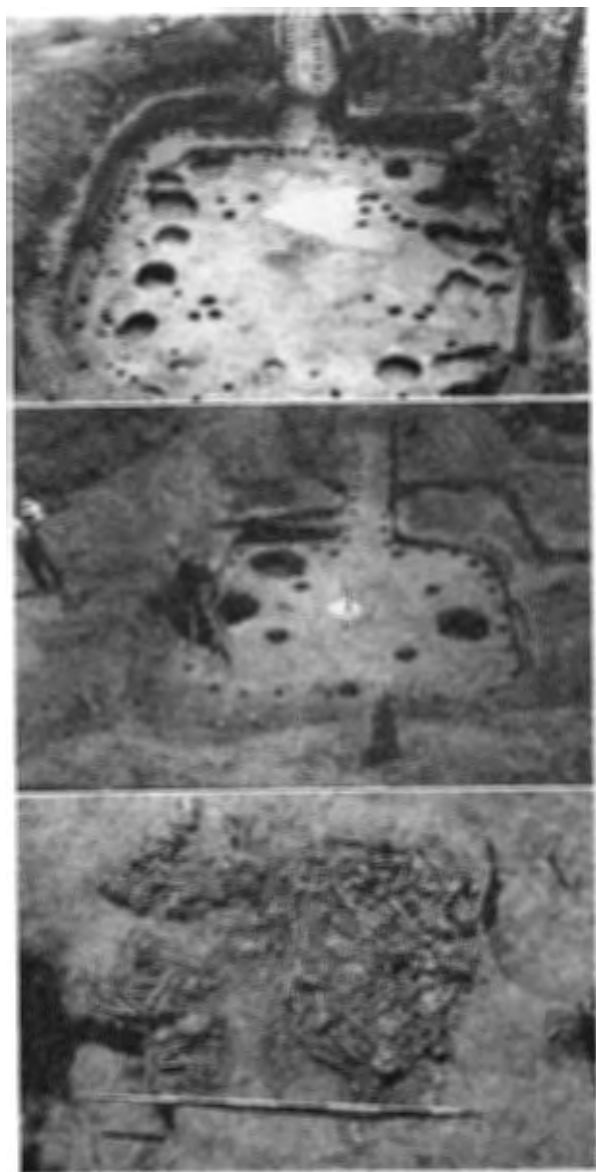


Plate V. Site Do 2

bones were in a completely haphazard pile, indicating that the bodies had been exposed until no flesh remained and then the bones had been gathered up and deposited here. Over the bones lay a deposit of reddish brown earth which appeared to have been burned. Its mixed character bore evidence of the fact that the burning had occurred, not in the mound, but before its construction. Mound 3 was a slight elevation near House 3. In it were a few scattered bones and other specimens.

A few fragments of pottery from the mounds (and, in one instance, from just beneath the surface near one of the houses) are distinctly different from the pottery found in the houses. The sherds are thick and made with a coarse stone-tempered paste. The body, which lacks a neck, is usually roughened with cords and ends in a flat lip. Just beneath the rim in each instance a series of holes is punched part way through the vessel wall from the outside, forming a row of small nodes on the inside. In three cases what appears to have been a small, cord-wrapped stick has been pressed into the still-wet clay near the rim. In another instance a plain stick or other object was similarly pressed into the clay.

In order to determine whether cultural materials were to be found over the general surface outside the house sites and whether storage pits or refuse deposits occurred over the site, a long trench was dug from near House 3 north to a point near House 5. This trench provided a subsurface section for almost the entire length of the site. Very few specimens were found, and clear evidence of disturbance below

PLATE V. Top: This photograph on Site Do 2 shows House 5, which was about forty feet square. The smaller holes are excavated moulds marking the original locations of vertical posts, while the larger holes were pits used for storage purposes. The entrance passage can be seen in background.

Center: House 6 was similar to House 5 except that it was much smaller and shallower.

Bottom: Burials in Mound 2. These bones were deposited here after the bodies had been exposed so that the flesh had decayed. The bones were then covered with a low mound of earth. Archeologist's scale appears in foreground.

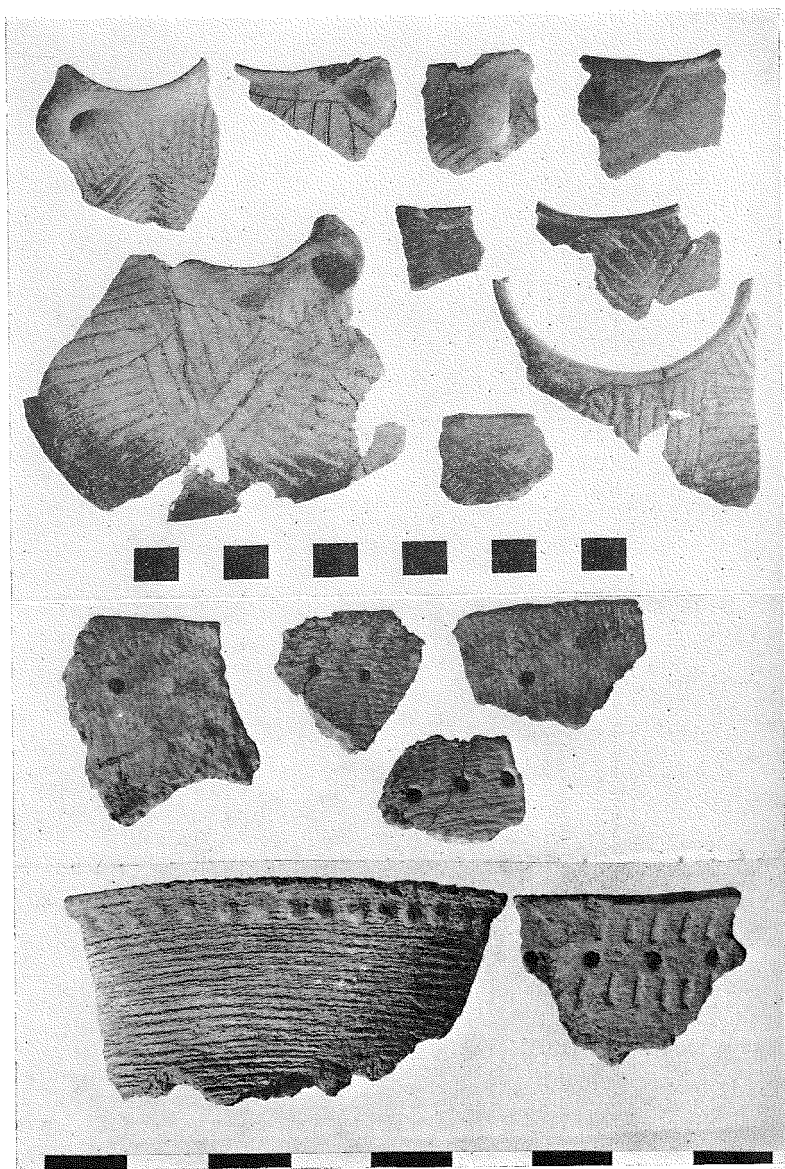


Plate VI.

the humus zone was not observed. Occasional fragments of pottery and stone were recovered from immediately beneath the surface and, in extremely rare instances, from greater depths. These latter are probably to be explained on the basis of rodent runs or some similar factor. No refuse deposits were encountered and the whole area was remarkably clean. It is possible that refuse was carried to the edges of the village and thrown down the slopes, although test pits along the sides of the ridge proved sterile.

Site Do 3

Before the work in this vicinity was finished a small house site some distance up Ponca Creek was opened. This was marked by a small depression well down on the north slope of the valley. The lodge, which was built in a relatively deep pit, was of a generally square shape with very rounding corners. The positions of the posts were easily discernible and composed a fairly regular pattern. The fireplace was located centrally on the floor and the entrance was in the southeast. Although some earlier digging was in evidence, three cache-pits (one in the southwest corner, one in the southeast corner and one near the east wall) remained to be excavated.

Specimens recovered in this excavation are not abundant, but their similarity to those from Site Do 2 is so marked that members of the same group might have lived here. Among the objects found are the usual type of pottery, celts of ground stone, fragments of pumice which have been used for grinding, a shaft straightener, and a jaw of a deer which is highly polished—probably from being used.

PLATE VI. Pottery from various sites. That in the upper group exhibits a characteristic found in almost all Nebraska Culture sites, although rarely. This is the decoration of the body of the vessel with lines cut into the wet clay before firing.

The fragments from Sites Do 2 and Do 4 (lower group) are from pottery vessels characteristic of certain variants of the Woodland Culture. They are thick and coarse, and their surfaces are heavily marked by cords pressed into the wet clay. The rims are decorated with punch marks or with the impression of cord-wrapped sticks.

Site W 3

While work in Douglas County was in progress ten men were also assigned in Washington County and the investigation of sites in the southern part of that county was begun. The first few days were spent on a small burial pit on the slopes overlooking a terrace of the Missouri River, a short distance east of the little station of Nashville on the Chicago, St. Paul, Minneapolis & Omaha Railway. Unlike many of the pits found in this section, the fill was darker than the surrounding soil so that the outlines were easily distinguished. On the pit floor, at a depth of twenty inches, lay part of the bones of three individuals. It was evident that the three bodies had either been buried elsewhere or had been left above ground until most of the flesh had decayed before their final interment here, for, with rare exceptions, the bones were not in proper relationship.

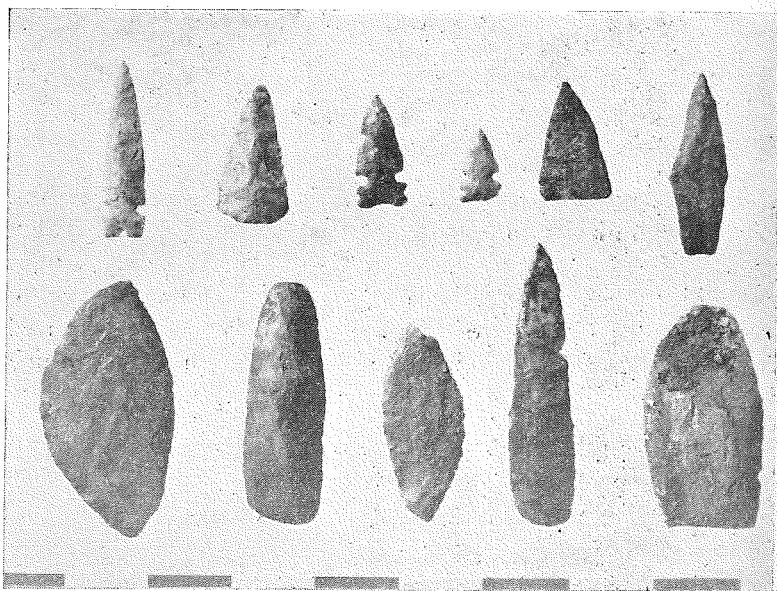


PLATE VII. Flint Artifacts from Various Sites of the Nebraska Culture: These are some of the commonest found in Nebraska Culture sites: The first five objects in the top row are types of arrow points, both notched and unnotched. The remainder are knives and scrapers of various kinds.

Site W 2

On the very edge of the terrace below these burials, and overlooking the Missouri River bottom lands, an Indian village once stood. Probably the river at that time flowed directly against the foot of the slope although today its channel is far to the north. Two shallow depressions were found in the farmyard of James Fitzgerald and their investigation was decided upon.

A north-south trench was first cut across House 1 to determine the positions of the north and south walls, so that the extent of the excavation to be made could be determined. Then the soil within the pit was removed to the floor, which was well cleaned to reveal the positions of the posts and any sub-floor pits. The fireplace, which stood in the center of the floor, was a shallow depression thirty-five inches in diameter. It contained no ashes, but that fires had been maintained in it for a considerable length of time was proven by the fact that the earth beneath it was burned to a depth of as much as five inches. The house was square with rounding corners; the entrance was long and narrow, extending to the south for a distance of twenty-two feet but measuring only two feet in width. The floor of the house was nearly level, unlike the many which slope from the center upward to the walls. Three cache-pits had been dug beneath the floor of the dwelling, one in the southeast corner, one in the northwest corner and one midway between the northwest and northeast corners near the north wall. All of these expanded from a small opening to a large bottom, giving them a cistern-like form. From the nature of the contents it was possible to determine that all of these pits were still open when the structure was destroyed. This destruction was the result of fire, as judged by the amount of burned material within the house pit. Such material was especially profuse for a few inches above the floor and on the bottoms of the cache-pits. It consisted of burned earth and large quantities of charcoal, in addition to a charred timber lying near the fireplace. It is almost certain that the fire occurred at some time after the occupants had left, for specimens were extremely rare throughout the soil. The almost virtual absence even of broken

objects may also indicate that the lodge was inhabited only briefly.

A long trench was cut across the depression of House 2 from east to west and was carried to within almost a foot of the floor before the outlines of the walls could be ascertained. The reason for this was that the walls, which were doubtless originally vertical, had broken down and clean soil had washed into the pit. After the extent of the pit was thus determined, the trench was widened until the north and south walls appeared in the floor of the excavation. We were then able to determine the exact outline of the entire pit. We were surprised to find that the entrance passage, instead of occupying its conventional position at the center of one of the walls, joined the house at the southeast corner. In no previous case had such a phenomenon ever been observed, and it had been assumed that the center entrance was a fixed element in the general plains house pattern. However, a short time later a

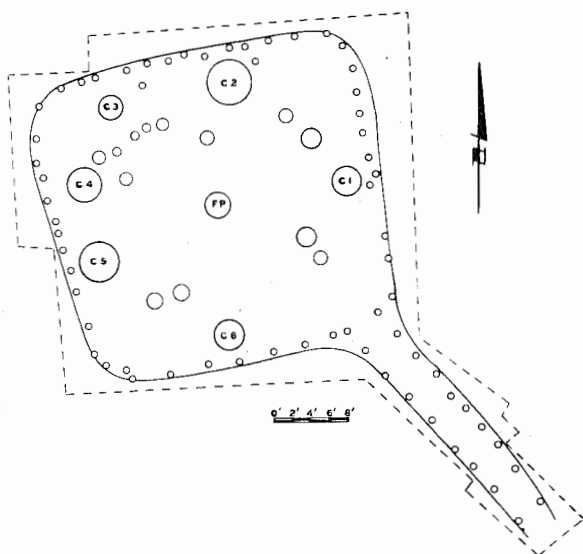


Fig. 3. Ground Plan of House 2, Site W2. This house was unusual in having the entrance at a corner.

Meaning of Characters: O = post moulds; C1 to C6 = cache-pits; FP = fireplace; — = edge of house pit; - - - = boundary of excavation.

similar occurrence was discovered in Site Do 2 described previously in this text. Removal of the disturbed soil within the pit to the floor revealed the wall posts following rather closely the square pit outline. Posts between this outer row and the central fireplace were rather numerous, but it is probable that four of them between the center and the corners of the structure were the main supports for the inner ends of the roof poles. The house proper was approximately thirty-four feet square, while the entrance passage was thirty feet long and averaged three feet wide. Six cache-pits had been excavated beneath the floor. Every one appears to have been open when the house was destroyed, which in this instance also was the result of fire. The soil within each pit is free of debris to within a few inches of the bottom, while that below is filled with charred wood and grass. Here, too, objects used by the occupants were exceedingly rare.

The specimens from both these houses number only a few dozen. Nothing was found in most of the cache-pits and there was very little material in the general fill of the house pits. Pottery comprised a large proportion of the specimens; in fact, other specimens included only a few crude flint scrapers, a part of a bone tool of some sort, two fragments of pumice, a few unworked mussel shells, and three rough stones which may have been slightly used. All the pottery fragments appear to be from vessels with round bodies, constricted necks and flaring or straight rims. The rims are occasionally plain, but usually decorated with notches or short incised lines. There is one loop handle. The clay from which the pottery is made contains crushed stone or sand, and the surfaces of the pots are either smooth or cord-roughened. The few specimens indicate that the people who lived here carried the Nebraska Culture.

Site W 4

In the hills west of Nashville and well away from the river was abundant evidence of numerous scattered lodge sites. Here the people had not lived in compact villages, but had erected their dwellings at many points on the hilltops and



PLATE VIII. Site W₄

on the slopes along small valleys. On the Peterson farm two deep depressions occupied the top of a broad prominent hill which afforded an excellent view of the surrounding countryside. These were both excavated. House 1 was a square structure with dimensions of approximately thirty feet and an entrance to the east twenty-six feet long. Two small pits had been dug in it by previous excavators, but practically no damage had been done. Two cache-pits, one near the northwest corner and one near the south wall, contained very few specimens.

House 2 was in some respects disappointing. The soil which had filled the original pit was so light-colored and clean that wall lines could not be determined. A satisfactory series of post moulds forming a square pattern was worked out, the central fireplace was clearly apparent, and three cache-pits were located and excavated, but no entrance passage could be found. Because of the unfavorable conditions prevailing here, we should hesitate to aver that no such feature existed, as very possibly it may have been overlooked. The excavation was carried sufficiently far outside all four walls to convince us that it could not be found.

The disturbed soil in this site was so nearly sterile that the finding of an artifact was an exciting event. The few specimens included a small number of pottery fragments (some of which showed the presence of incised body decoration although the majority were plain); sandstone awl sharpeners; pottery pipe fragments; and pumice which showed

PLATE VIII. Top: View of Site W 4 to the southeast. House 1 may be seen dimly in the left background and House 2 is in the right foreground. Other lodge sites were scattered along this and similar ridges in the vicinity.

Center: View of the excavation in House 1. Digging has been completed except for sub-floor features, and workers are scraping the lodge floor in a search for post moulds and evidences of pits. The wall of earth in the center of the photograph was left to show the types of soil which had filled the pit after abandonment of the house. It also shows clearly the depth at which these lodge floors are frequently found.

Bottom: This small complete pot was found standing on the floor of House 2, near north wall. Apparently it had been overlooked when the house was abandoned, for it was unbroken and still usable.

marks resulting, probably, from sharpening the points of awls or other implements of bone or wood. The monotony of hours of excavating without encountering a single specimen was at least partially compensated for by finding one unusually fine object—a small pottery vessel, complete and unbroken. It has a slightly collared effect on the rim and a design made with incised lines on the upper part of the body.

After the completion of work near Omaha, camp was broken and the survey party started north to halt within three miles of Blair, where a new camp was set up on a wooded portion of a terrace bordering the Missouri River bottoms. Earlier reconnaissance had resulted in information that the Indians had made this region also their home. On a prominent hill just back of our camp a number of human bones lay exposed on the surface, disturbed by the plow (Site W 6). To the south, on the U. S. Renne farm, several depressions occupied a hilltop bordering the river plain (Site W 5). Mr.



PLATE IX. Small complete pot found on the floor of House 2. Site W 4. The incised design on the body and the general shape vary from those of the usual pottery found in this and related sites.

Renne kindly gave permission for the excavation of any of them, including those in fields which were in crops.

Site W 6

The situation in this burial was difficult to define with certainty, because a number of the bones had been disturbed by the plow and rodents had made many excavations through them. The bones were all relatively close to the surface, so that the number which have been removed may have been fairly large. Three flexed burials, complete except for the skulls, were among the bones, and there were several instances of partial bodies in articulation. Otherwise the bones appeared to have been piled in after they had been disarticulated. It is not certain, however, whether the situation here is to be explained on this basis or whether rodents and other factors might account for the condition of the bones.* It is possible that earlier burials may have been disturbed by the digging of graves for later ones. The lack of soil distinctions prevented our learning exactly what had happened at this place. Furthermore, the almost complete lack of cultural material with the burials makes it impossible to relate the burials with any of our known cultures.

The bones were accompanied by no cultural materials except a number of shell beads. All but one of the beads are very small discs; the exception is large and of barrel-shape. These beads were found scattered in the soil about the burials.

Site W 5

The village site on the Renne farm was ideally located. Besides standing adjacent to the flat land bordering the river, it overlooks a rich little tributary valley where timber is abundant and springs still exist. Thus excellent sources of

* In our work in Nebraska we have seen much evidence of the extent to which burrowing animals can disturb materials lying beneath the surface. In some localities their old filled-in runs form such close networks that little soil remains undisturbed. When these runs penetrated areas containing bones or other materials, these were scattered and frequently carried for distances of several feet. In some instances the marks of teeth are found on the bones, further confirming the effect animals have had on their present condition and position.

both wood and water were at hand, and the valley bottom would have provided excellent corn land.

House 1 was a small, almost perfectly square subsurface earth-lodge with dimensions of twenty feet. The wall lines were very distinct by reason of the darker soil within the pit, and the post moulds and cache-pits were clearly visible. The fireplace occupied the center of the floor and the straight entrance passage extended for sixteen feet slightly east of south. A single well-defined post mould occupied a position midway between the fireplace and each of the corners, and helped to support the roof.

Seven pits were found beneath the floor. Pits 1 and 7 were mere basins, flanking the inner end of the entrance. Pit 6 was a small straight-sided hole between the fireplace and the entrance, while the others had the usual cache-pit form.



PLATE X. Tobacco Pipes from Various Nebraska Culture Sites: (1) Pipe made from pottery with rattlesnake in relief. From Site W 5 (2) Miniature pottery pipe. (3) Unfinished stone pipe from Site Bt 1. Note that the boring for the bowl has barely begun. (4, 5, 6) Pottery pipes of various shapes. (7) Pipe of red stone with animal head projecting beyond the bowl. Small pieces of shell set into shallow sockets form the eyes. Found at Site W 5.

House 2 was much larger, measuring forty-two by thirty-eight feet. The entrance passage, which was at the south, was twenty-three feet long by four feet wide. Post-moulds were distributed rather evenly just inside the walls, and four larger posts between the corners and the center of the floor supported horizontal beams—part of the roof structure. Four pits were beneath the floor, one of them being small, the others of the usual cache-pit type.

Above the floor of this house, against the south wall east of the entrance, were a number of scattered human bones. Because a sterile layer intervened between them and the floor, it is suspected that they were placed here after the abandonment of the house. Had the house fallen by that time, the bones were probably laid in the resulting depression and covered with the earth which must have lain about in heaps.

Site W 5 was unusually rich in cultural materials, but on the whole no objects were found which were not also found in other sites excavated during the summer. The pottery falls into the same types, as do the bone, stone and shell artifacts. The main difference is in the greater variety present here. Among the artifacts which usually occur in small numbers (or are altogether lacking from sites in which specimens are less abundant) are a fragment of bracelet made from antler, large fishhooks, perforated bone needles, bone beads, and a catlinite bead. More unusual are two effigy pipes, one made of pottery and one of a red stone which is probably catlinite. The former has a rattlesnake modelled in relief spiralling about the bowl, the latter is an elbow pipe with the head of some animal projecting forward. The eyes are shell fragments set into shallow sockets in the stone.

After only a short time spent in the vicinity of Blair, the scene of operations was established in the tourist park at Decatur where such unaccustomed luxuries as running water in the front yard and a grocery store just around the corner were enjoyed. Our two trailers, three tents and four cars, increased at times by the trailers and cars of friends who visited us, gave the park the appearance of a populous suburb of the town. During the time we were here Mr. and Mrs. John Champe spent several days with us, and we also had

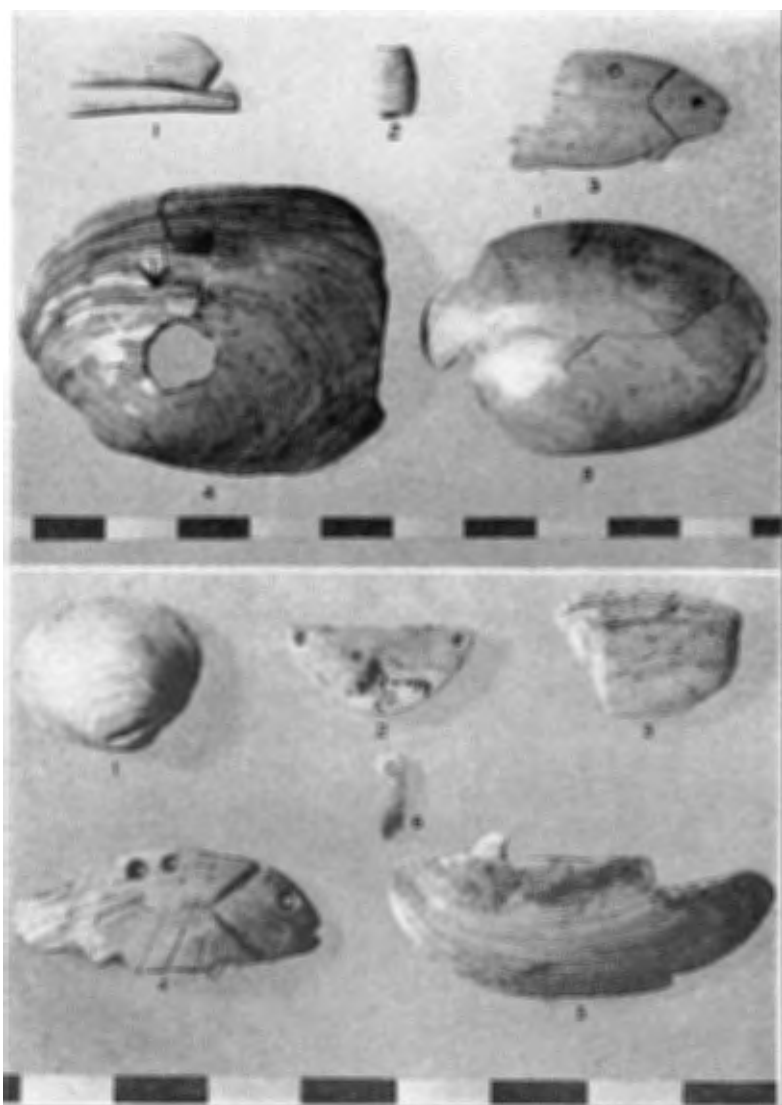


Plate XI.

as guests Dr. W. D. Strong and members of his Columbia University field party. While this place was our headquarters the excavations were at rather distant sites. A new crew of workers from Burt County was assigned.

Site Bt 1

The first site worked from this camp was on the land of E. C. Houston about three miles northwest of Tekamah and on a knoll on the north side of a valley opening from the west onto the Missouri River bottoms. The land here had been cultivated for years, so that the depressions were filled and specimens were found scattered on the surface. The first excavation resulted in the unearthing of a fireplace, a number of post moulds and three pits. Because these features were encountered just beneath the plow line, no pit walls remained. This fact, and the failure of the moulds to fall into a recognizable pattern, prevented definition of the outline of what was presumably a structure.

The second excavation was more successful, for the pit apparently had been considerably deeper. The excavation was hampered, however, by the dry, hard condition of the soil, which at least partially accounted for our failure to obtain satisfactory evidence regarding the entrance. Although our observations led us to believe that the doorway was in the west

PLATE XI. Shell and Stone Objects from Various Sites of the Nebraska Culture.

Top: (1) Cut mussel shell from T2. This is probably a piece intended for fashioning into a pendant or similar object. (2) Bead made of shell from Site T 1. Such beads occur, though in very small numbers, in many Nebraska Culture sites. (3) A broken shell effigy, probably representing a fish. The perforation was presumably for suspending it on a cord. These effigies are found in almost every Nebraska Culture site, although never abundantly. (4) A hoe from Site W 1, made of a large mussel shell perforated for a handle. These have a wide distribution and are common to the east in the Mississippi River valley. (5) A spoon with one end fashioned probably for attachment to a handle. From Site Do 2.

Bottom: (1) Pendant made from a shell which is unmodified except for the groove cut for suspension by a cord. From Site W 1. (2) A fragment of stone pendant from Site T 1. Such objects are not characteristic of the Nebraska Culture to which this site belongs. (3) Fragment of cut shell from Site T 1. (4) A fish effigy of shell, from Site Bt 2. (5) An unfinished fish effigy of shell from Site Bt 2. (6) Broken shell pendant from Site Bt 2.

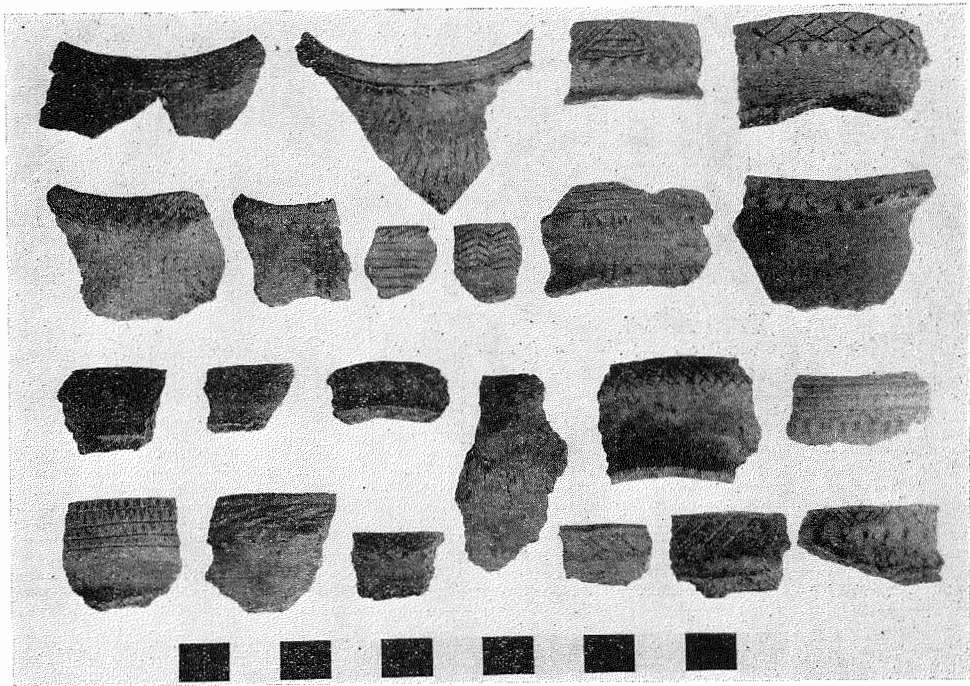


PLATE XII. This is a photograph of pottery from various Nebraska Culture sites. It shows fragments from vessels with collared rims, characteristic of the Upper Republican Culture, but occurring less commonly in Nebraska Culture villages. Note the variety of designs on the rims.

side, the soil was so flint-like that it was impossible so to dig that post-holes or other soil distinctions could be detected. The pit proper was approximately square with rounding corners. The outer posts stood near the walls in a fairly regular pattern, with larger posts between the corners and the center serving as inner supports. The five pits distributed irregularly over the floor were relatively small.

Although specimens from these houses were not numerous, a large enough sample was found to indicate that here was another village of Nebraska Culture peoples. The only unusual trait which appeared was the decoration of the relatively small numbers of collared rims. This decoration consisted almost solely of a series of zigzag lines around the rim. An interesting specimen was an unfinished pipe of red stone which had been completely shaped but on which the boring for the bowl and the stem-hole had been barely begun. This was an elbow pipe with a stem projecting forward beyond the bowl. Charred corn was found in fair quantities in this site, affirming our opinion that agriculture provided at least a part of the subsistence of these people.

Site Bt 2

Several miles north, in the rugged hills away from the river, were found a number of depressions believed to mark the sites of Indian dwellings. These stood along a high, well-timbered ridge, the sides of which sloped down into steep ravines. Only one unit of excavation was undertaken here, and this was in a depression of moderate size which appeared never to have been disturbed. Soil lines were very evident here so that the pit could be outlined at a point several inches above the floor. Upon the removal of the soil from within the walls all features beneath the floor were revealed distinctly outlined by reason of the dark soil within them, and the fireplace appeared as a round shallow basin. The outer post-moulds closely followed the walls, which were straight with round corners and formed a pit twenty-eight feet square. The long, narrow entrance ran slightly north of east from the house wall. This was an unusual situation, as the doorways of such houses almost never are to the north of the east

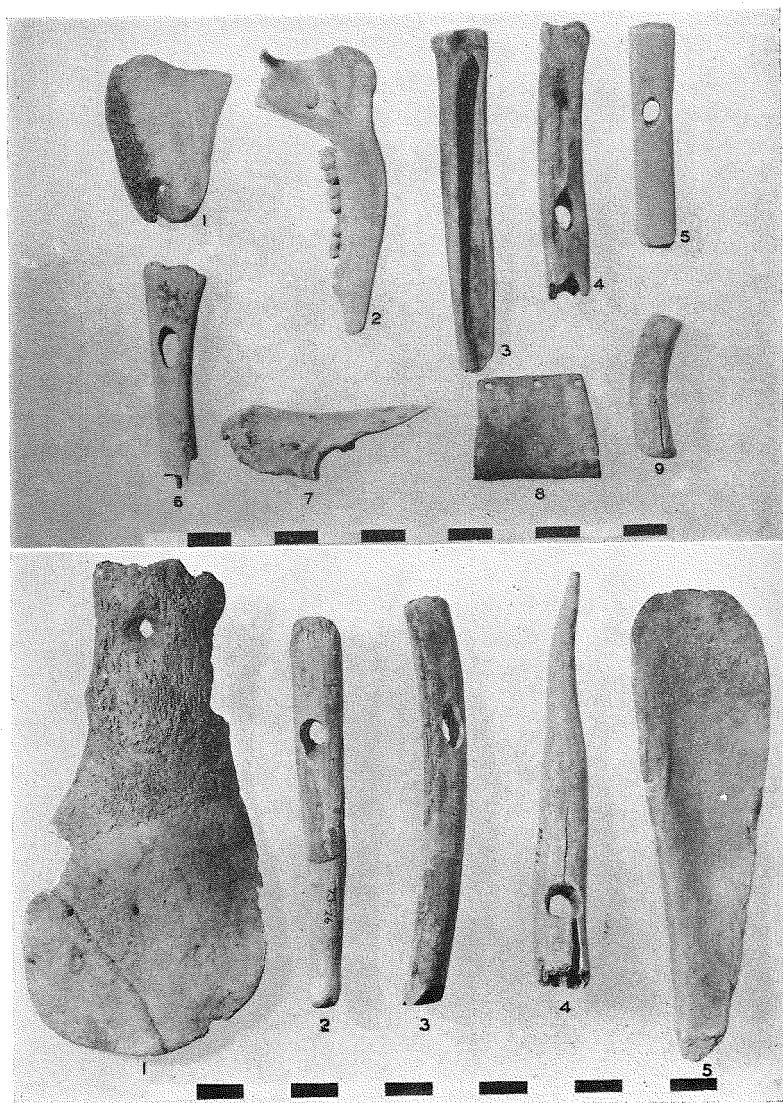


Plate XIII.

or west point of the compass. Six pits conforming to the usual cache-pit shape were found and excavated, all of them near the front and side walls. None was found near the wall opposite the entrance.

Specimens are of the usual Nebraska Culture types. Among the more common pottery specimens are to be found several collared rims and body fragments with incised decoration. The flint industry is represented by the usual notched and unnotched triangular points, end scrapers, side scrapers, and a single drill. Bone artifacts are of common types, while work in shell consists of a broken fish effigy and a single barrel-shaped bead.

With the completion of work here our camp was moved again to the north, to the vicinity of Macy on the Omaha Indian reservation. From this point north, for a distance of several miles, an enormous Indian population must have dwelt, for on almost every suitable spot there is now a depression where an earth lodge stood at one time. In the days when these lodges were inhabited the region must have looked much as it does today, for the myriad ravines and bluffs are still densely overgrown with vegetation for miles along the river and the unwary traveller can easily become lost.

This region has long been the home of the Omaha Indians, and various natural features are vested with special significance in their traditions. It is recounted, for example, that on Holy Fireplace Point—a prominent bluff affording a breathtaking panorama of the river—the young men of the tribe fasted in their quest for dreams. To other localities are attributed sacredness or evil.

PLATE XIII. Bone Artifacts from Various Sites of the Nebraska Culture.

Top: (1) An edged object made from a fragment of a shoulder blade, and probably used as a scraper. (2) A polished deer jaw whose use is uncertain. It has been suggested that such objects were corn-shellers. (3) Split bone with polished edges which may have been used in working hides. (4, 5, 6) Bone objects used in the straightening of arrow shafts. (7) An awl, made from a front leg bone of dog or wolf. Such objects were used for perforating skins in sewing. (8) Part of bracelet made from a section of antler. (9) A worked section of antler. The use of such objects is unknown, although they have been variously called handles, tapping tools, and fleshers.

Bottom: (1) A digging tool made from a portion of the skull and horn of a bison. (2, 3, 4) Shaft straighteners made from bone and antler. (5) Knife or scraper made from part of a bison shoulder blade. This may have been used in the preparation of hides for clothing.

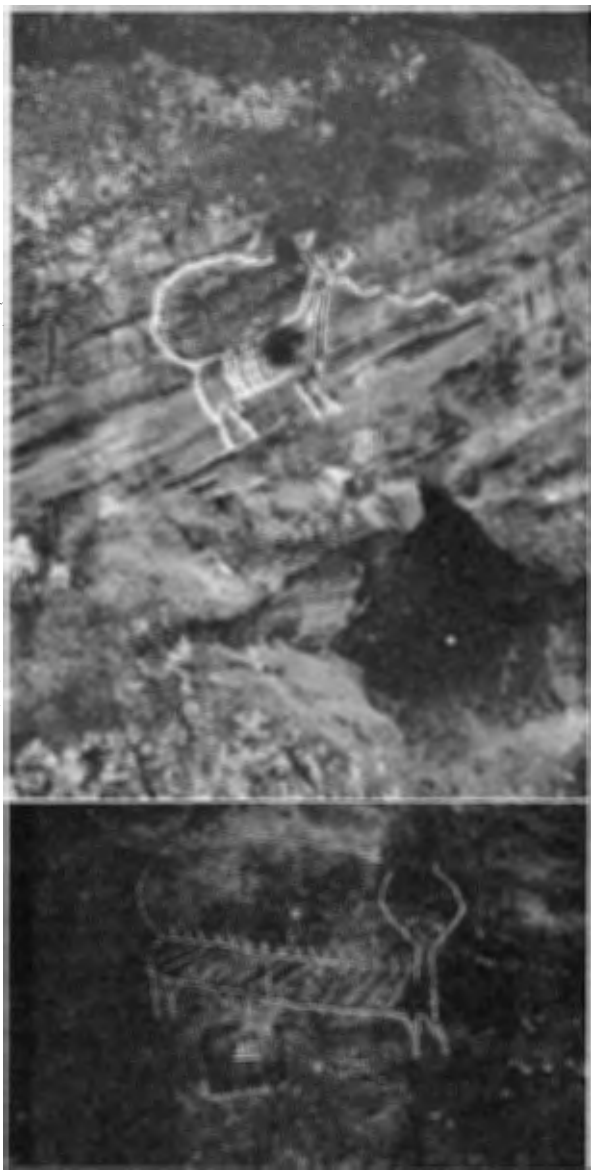


PLATE XIV. Indian pictographs found carved in the rock walls of a ravine near Blackbird Hill. White chalk has been rubbed into the incised lines for purposes of photographing.

Site T 1

A small crew of Omaha Indians was assigned to us for excavation in the vicinity of Macy. Within a few yards of camp were several depressions along the ridge and two slight elevations on an east slope. Trenches put through the mounds revealed debris, which indicated that they were doubtless built up by the dumping of refuse from the houses. The one depression investigated proved to have been the site of a small house approximately twenty-four feet square with a long entrance passage to the southeast. Although the disturbed soil was rather light in color, the post-moulds and pits could be seen on close examination. Besides the posts around the walls, four posts stood between the center and the corners and an additional post was found between the fireplace and the doorway. The three cache-pits were all situated near the walls of the house.

With a single exception, the artifacts found here were not unusual. The exception was part of a disc made from white stone, with two perforations presumably for suspending the object on a cord. Perforated stone objects are not ordinarily found in Nebraska Culture sites. Three specimens, interesting because of their extremely small size, were a minute pottery pipe with bowl no larger than a match-stick, and two tiny bone objects—a fishhook and a double-pointed awl.

Among the points of interest to the student of Indian culture in this vicinity is a small ravine near Blackbird Hill, on the summit of which the famous Omaha chief is supposed to have been buried. One wall of this ravine, consisting of a nearly vertical outcropping of sandstone, is covered by numerous carvings in the stone. The nature of these designs, which include geometric figures and figures of men and animals, can best be understood by referring to the accompanying photographs. At least some of the work is probably of Omaha authorship.*

* The pictographs on the rock walls in the Blackbird Hill region were first discovered and photographed by Dr. A. E. Sheldon of the Nebraska State Historical Society in July, 1903. Prints and lantern slides made from the negatives then taken have been in frequent use since that time.

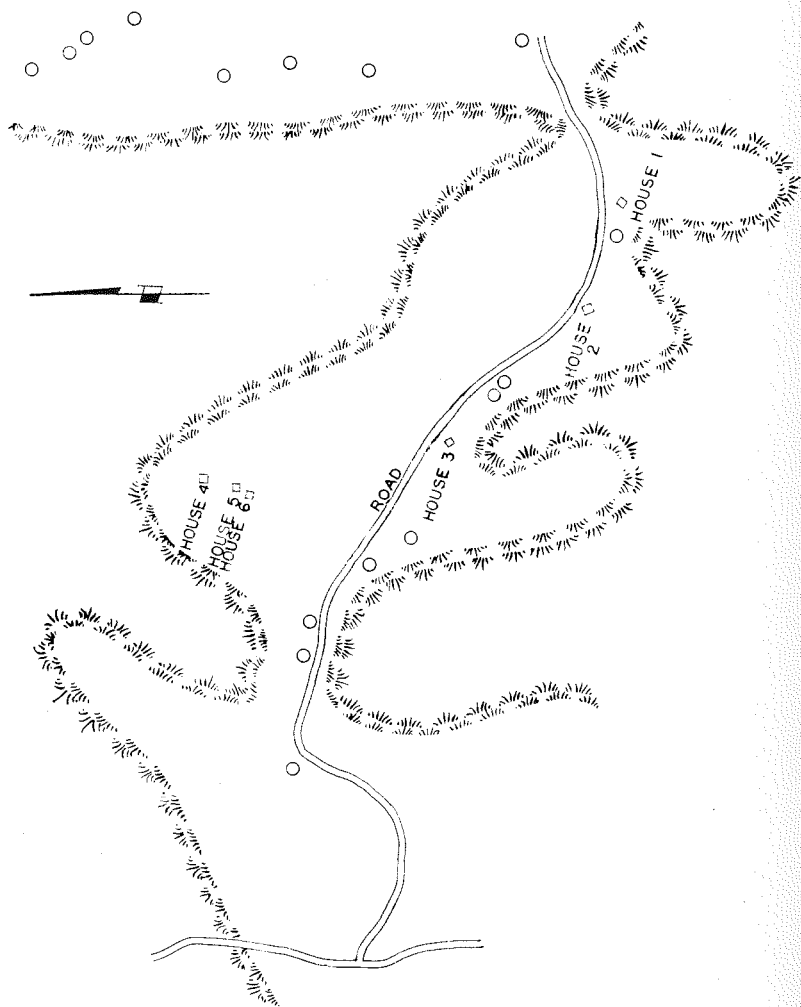


Fig. 4. Map of Site T2 showing the distribution of house sites along the ridge.

Key to Symbols: \square = Excavated houses. \circ = Unexcavated depressions.

Site T 2

On the D. D. Ross farm, southeast of Winnebago, a number of distinct depressions were present along a ridge on land which was not in crop and was devoid of timber. Although the neighboring ridges also bore these evidences of Indian occupation, this particular site was selected for investigation partly because conditions for work were ideal. The only disadvantage of this location was the fact that it was reached from Macy and Winnebago (the towns from which the crew was drawn) only by dirt roads. At the times of the rains which fell frequently during our stay, the roads were nearly impassable. Nevertheless the crew of nearly twenty-five men appeared almost every day, some of them having made the trip on foot when the roads were especially bad. Our camp was pitched on the same ridge and within twenty feet of the remains of one of the prehistoric dwellings.

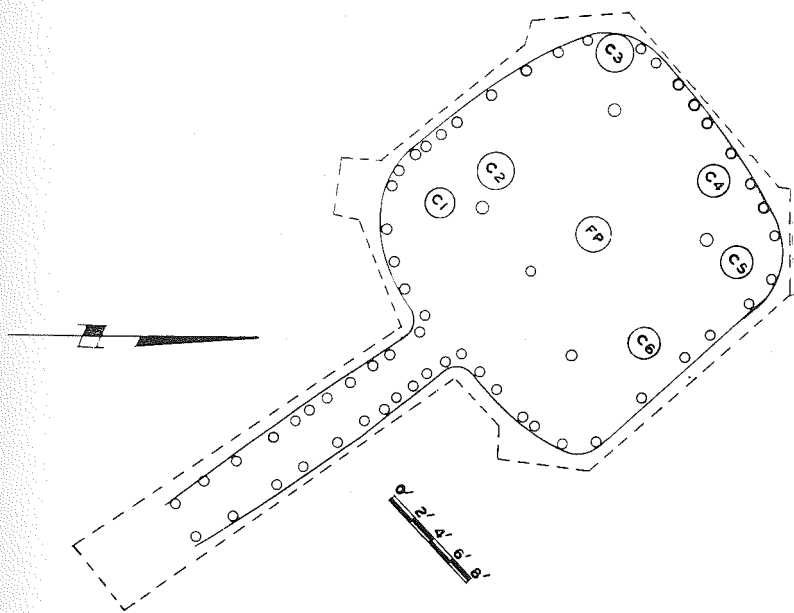


Fig. 5. Ground Plan of House 1, Site T 2. Houses of the Nebraska Culture are usually closely similar to this one.

Meaning of Characters: O = post moulds; C1 to C6 = cache-pits; FP = fireplace; — = edge of house pit; - - - = boundary of excavation.

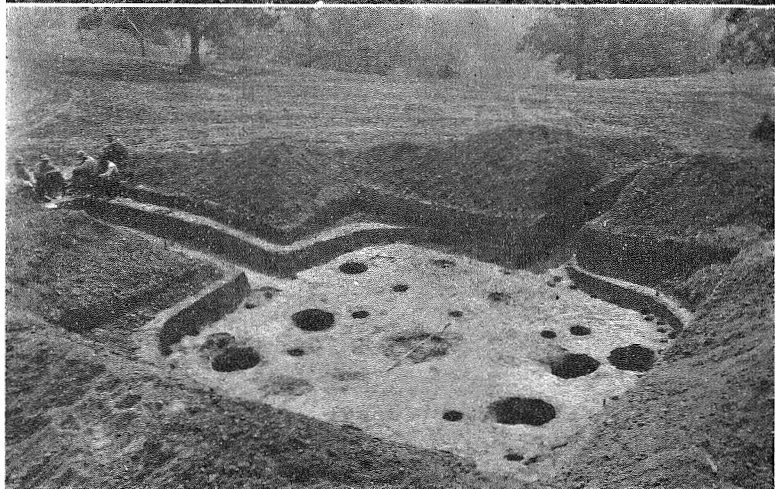
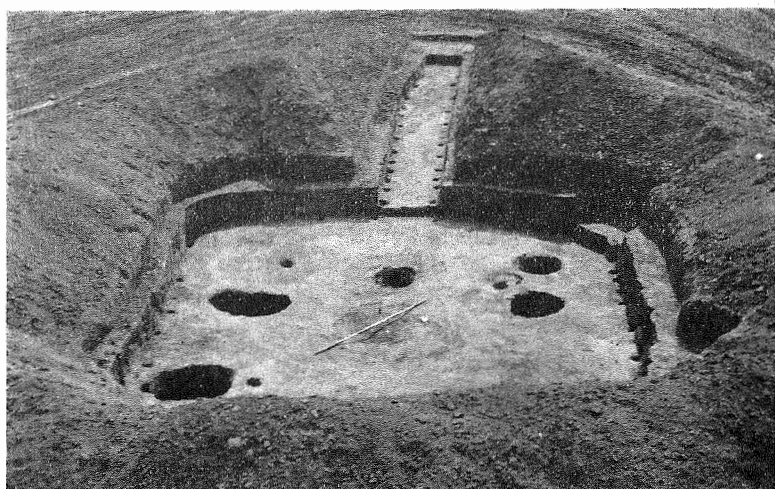


PLATE XV. House 1 on Site T 2 (top) was conventional in form, having a square outline, rather small posts to form the walls, four larger posts as inner supports for the roof, and the long entrance passage. This house had been burned so that the reddened walls could be observed a few inches beneath the surface.

House 2 (at bottom) was unusual in having two entrances into adjacent sides of the structure. Otherwise it was of usual type. This structure had also been burned, and charred material was found abundantly in the entrance at the right.

The north-south and east-west trenches projected across House 1, the southeasternmost of the group, cut all four corners. The walls of this structure had remained nearly intact and could be detected in the trench floors only a few inches beneath the surface. Because the walls had been intensely burned they showed clearly as a red or black line when a horizontal section was cut across them. When the soil over a large area had been removed to a depth at which this line could be seen in the two trenches, the entire outline of the pit was revealed. The soil inside this outline was then removed down to the floor, which was also easily distinguished; and the post-moulds and cache-pits were excavated. The posts stood against the wall, in a few instances being set slightly into it. The four inner support-posts were somewhat irregularly placed, and an extra hole was situated between the fireplace and the entrance, which extended twenty-two feet southeast. The house pit proper measured twenty-five feet square. The five cache-pits were located near all but the front wall.

House 2 was likewise square, with outside posts often set into the walls. The usual four inner roof supports were supplemented by several additional posts. The nine pits found beneath the floor were unevenly distributed along the north, east and west walls. The unusual feature of this house was an additional doorway. Two entrance passages, of approximately the same size and similar in other respects, were found in two adjoining walls, one at the south and one at the east. This house, too, showed the effects of firing, the south entrance especially containing quantities of burned material. A number of charred posts stood several inches above the floor in the passage, and the earth walls were red from the burning.

House 3 was similar in having an entrance passage attached to each of two adjoining walls. Although the house proper was only approximately twenty-two feet square, the southeast passage measured more than twenty-five feet in length. The length of the passage at the northwest could not be determined, for it was interrupted by a road at a distance of ten feet from the point of its juncture with the house wall. While we were confident that all or nearly all of the

posts lining the entrances were found and excavated, very few were observed around the walls of the house pit proper. On the other hand, an unusual number of post-moulds occurred beneath the floor away from the walls. In fact, sixteen were found at and inside the usual positions of the inner roof supports. Another strange feature was the presence of cache-pits scattered all over the floor. The eleven pits were found from the walls to the very center of the house, adjacent to the fireplace. Under usual conditions such pits are found only near the walls—almost never within the square formed by the large inner posts. Some burning had occurred also in this house, for charred timbers lay on the floor of the southeast passage.

House 4 was a small irregularly square structure with posts set immediately inside the walls or, occasionally, back

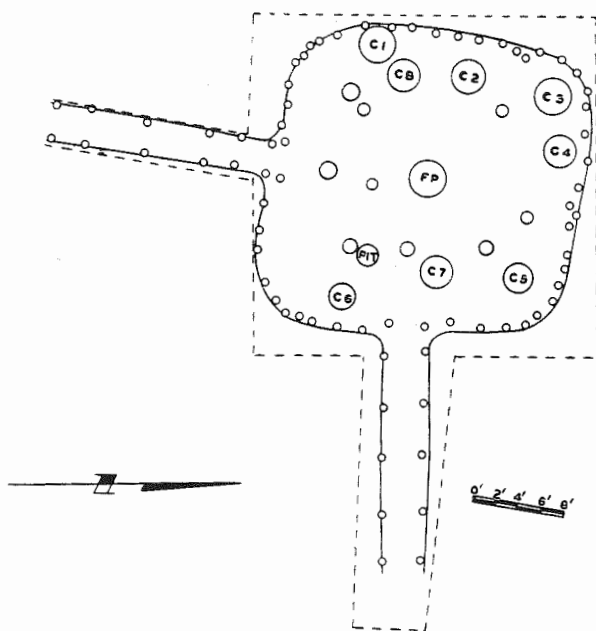


Fig. 6. Ground Plan of House 2, Site T2. This structure was unusual only in the presence of two entrances.

Meaning of Characters: O = post moulds; C 1 to C 7 = cache-pits; FP = fireplace; — = edge of house pit; - - - = boundary of excavation.

into them. The wall posts found were irregularly spaced; those lining the long entrance passage were more evenly spaced. The passage, which was about eighteen feet long, met the house wall at an angle of ninety degrees, but at a distance of about six feet it veered slightly to the south. There were three small pits—one near each of the back and side walls.

Although House 5 was beneath a very pronounced depression, it was poorly marked by soil differences so that few post-moulds could be found. The walls, while in places fairly evident, could not be completely defined. Those features which were found included the central fireplace, the four inner support posts, a few post-moulds near the walls and most of the posts lining the entrance passage, which faced northeast. In addition, there was a small pit between the fireplace and the doorway and a larger pit in one corner.

The sixth excavation was made in another well-marked depression. It was, from the standpoint of information recovered, the least satisfactory of all those made on this site. It was apparent that there had been a pit here, as evidenced by both the depression and the presence of discolored soil. However, it was impossible to determine its outline and no moulds or pits could be found. A small area of burned earth marked the site of a small fire, but there was no accumulation of ashes and no evidence of a prepared fireplace.

Cultural materials were found here in moderate quantities. They indicate that this area is still within the range of the Nebraska Culture. The pottery (as well as objects made of other materials) is definitely assignable to this culture, and variations are few. Two rather unusual vessels, both of which have been restored, have globular bodies and are like the common Nebraska Culture ware except that the rims are collared. Both are decorated with incised lines, one with cross-hatching and the other with a more complicated design composed of parallel lines in different combinations. Also made of pottery are two large beads. An interesting object is a block of red stone on which the outline of a pipe has been scratched and on which cutting has been started. This



Plate XVI.

was apparently intended for a pipe, but its manufacture was interrupted before the work was well begun.

To the southeast of this site a small burial area was investigated. Fragments of human bone were mixed with burned earth just beneath the plowed surface, and without question were the remains of secondary burials.

Site T 3

Simultaneously with excavation on Site T 2, a single large depression deep in the hills to the north was investigated. The size of the depression proved to be mainly the result of the considerable depth of the house rather than its size, for it measured only about thirty-five feet square while the floor was at a depth of sixty-five inches beneath the surface at the back of the house. The fireplace was unusually large. It was a basin eighty inches long, sixty-eight inches wide, and ten inches deep containing six to eight inches of ashes. The small posts around the house walls were interspersed with larger posts; four posts served as inner roof supports. Eight pits, most of which were small and shallow, were dug near the walls. A small pit occurred between the fireplace and the thirty-foot entrance passage, which opened down hill to the southwest.

A long trench was cut across the slope below House 1 in order to learn whether any midden deposits were to be found. No evidence of refuse of any nature was encountered.

A sufficient amount of material was recovered from this house to establish its relationship to the Nebraska Culture. Even the rather unusual objects found are those which occur, although rarely, in other villages of this culture. These include two harpoon points made from antler tips, fragments of bracelets made from antler, a long narrow shell pendant, and a fragment of pottery pipe decorated with numerous short incised lines. The remainder of the artifact materials, includ-

PLATE XVI. These are restored pottery vessels from Site T 2. Both are unusual in that, though generally shaped like the majority of Nebraska Culture pots, they have the rim modifications common in Upper Republican Culture sites. Note the thickened rims bearing incised designs.

The top specimen was found in a cache-pit in House 4, the other on the floor of House 5.



PLATE XVII. This is a restored pottery vessel found in a cache-pit beneath the floor of House 1, Site T 3. It illustrates characteristics common in the pottery of the Nebraska Culture, namely: a round body, the surface of which is roughened and then partially smoothed; an outcurving rim; and decoration composed of cross-hatched lines cut into the lip.

ing the pottery, are such as would be found in other villages distributed up and down the Missouri river.

The filling of the excavation at T 3 was completed October 10. As the weather was becoming unpleasant, owing to frequent rains, low temperatures and heavy winds, it was decided to clean up the loose ends at Site T 2 and close work for the season. On October 12 the equipment and specimens were packed into our cars and trailers and the return trip to Lincoln was made.

Conclusion

During the summer fifteen sites were investigated in four counties. The excavation units included thirty-one house sites, eight mounds, and four burial sites other than mounds. New pages have been added to the prehistoric record of Nebraska to supply what was previously a missing chapter. The characteristics of the main occupation of the river front between Omaha and Sioux City, formerly a matter of speculation, are now outlined, and the existence of at least one other occupation is known.

The people who lived in the villages investigated built sub-surface earth-lodges made of a wooden framework covered with earth. The pits over which the lodges were constructed varied in depth from a few inches to approximately five feet. Although the pits were always filled with soil from the collapsed roof and walls and soil which had been washed and blown in, there has been little deposition over the general surface since the time the villages were occupied by their builders. Conclusions as to the age of the culture must be drawn, not from subsequent accumulation of soil, but on the basis of cultural factors alone. At present no more can be said on this subject than has been stated before—that the Nebraska Culture existed before the arrival of Europeans, but that the people who carried it were not the first horticultural, pottery-making people to inhabit Nebraska.

Within these structures cache-pits were excavated for the storage of foods. These pits were most often made with small openings and expanding walls to give them the shape of a cistern. They vary rather widely in size and depth, but a large numbers would not depart greatly from the dimensions

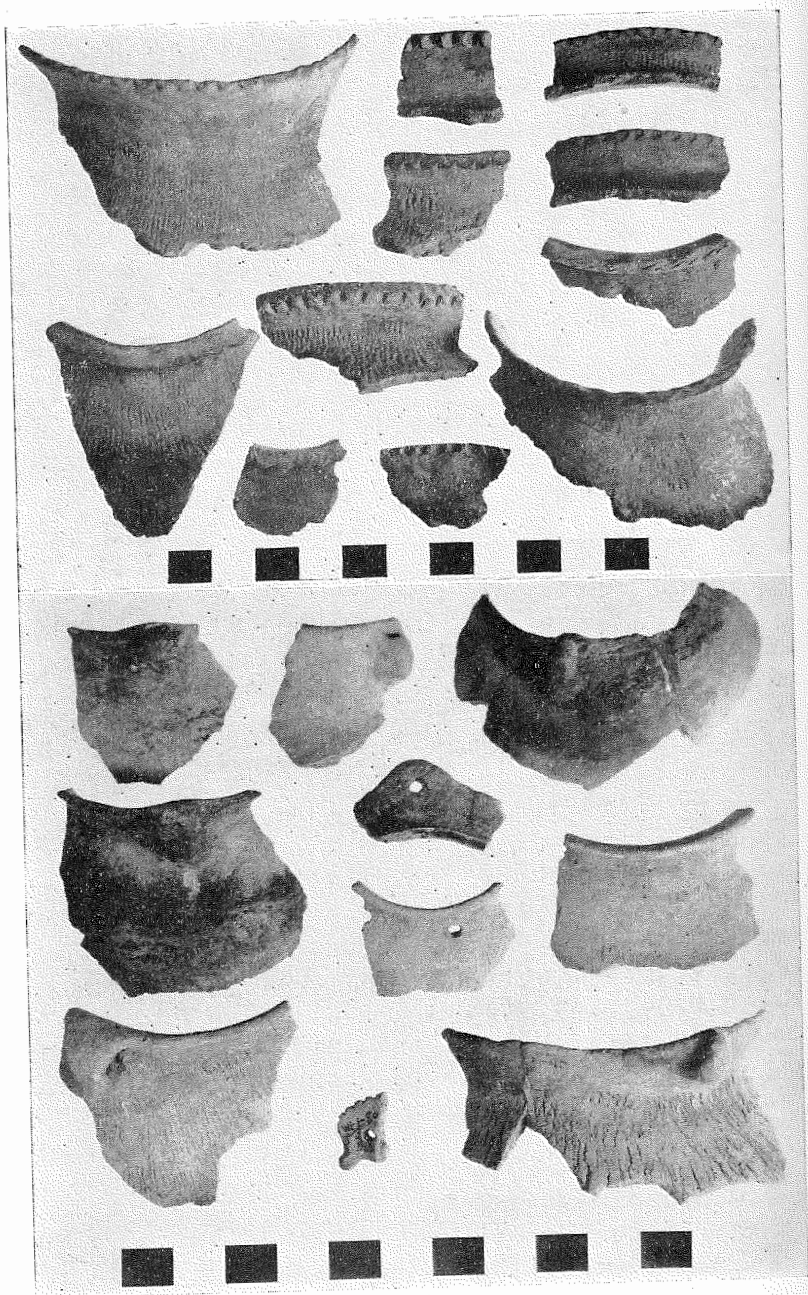


Plate XVIII.

of one pit which was fifty inches deep and thirty inches across the opening, with a maximum diameter of forty-eight inches. The walls and floors of these pits appeared not to have been hardened by firing, and evidence of any lining material was lacking.

These people raised corn, beans, and probably other crops in the valleys, and gathered other plants which grew wild in this region. Their vegetable diet was supplemented by fish and mussels from the streams and the meat of bison, deer, and other mammalian forms. For agricultural tools they used hoes made of bone and probably some wooden implements.

In the procurement and preparation of animals for both food and clothing a number of tools were required. Among the artifacts collected are many flint arrow points and a few antler harpoon points which were used in hunting. The meat was cut up with flint knives and the skins were scraped with flint and bone scrapers of various forms. Bone awls and occasionally needles were used in sewing the skins for clothing and other purposes.

Containers for cooking and storage comprised pottery vessels and possibly rawhide bags and baskets, although evidences of the first only are found. For the smoking of tobacco, pipes were made of both pottery and stone and were frequently ornamented in various ways. The Indians gave some thought to the adornment of their persons, as evidenced by the finding of beads of pottery, bone and shell, pendants of shell and bracelets of bone and antler.

Judging by the archeological data recovered, the Indians who lived along this section of the Missouri River in the villages investigated led a peaceful and rather comfortable existence. There is no evidence of inter-tribal strife nor of any desperate struggle to wrest a living from the country.

PLATE XVIII. Pottery from Various Nebraska Culture Sites: These photographs show fragments from pottery vessels with the unthickened rim most commonly present on Nebraska Culture pottery. They include both plain rims and rims which are decorated with incised lines or impressions. The lower photograph also includes various forms of handles found on Nebraska Culture vessels.

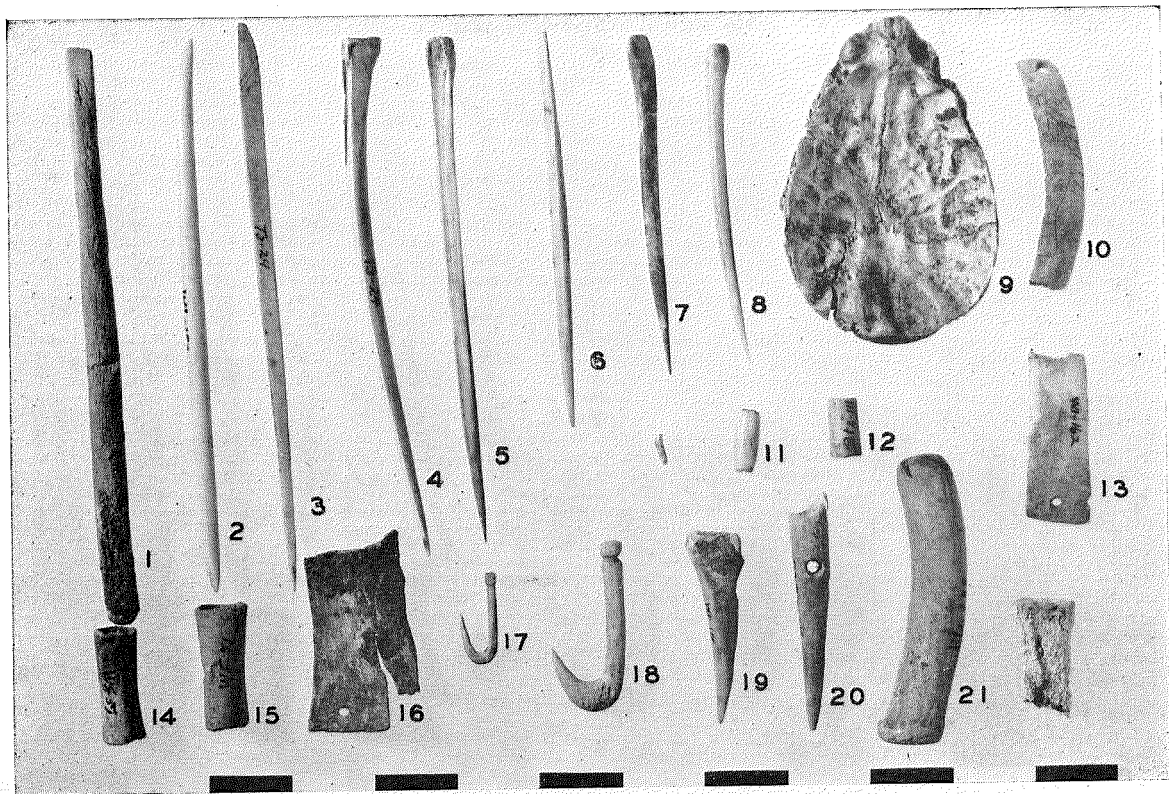


Plate XIX.

Game must have been plentiful in the wooded ravines along the river and in the open country away from the river; fish abounded in the river, and the bottom lands were favorable for raising crops.

The cultural traits manifested by the villages in this region north of Omaha are very similar to those of sites farther to the south, and are unquestionably referable also to the Nebraska Culture. This manifestation is thus demonstrated as having a wide distribution in eastern Nebraska, extending along the entire eastern border of the state and for an uncertain distance to the west. It is not represented in all sites in identical form, however, and it remains for a detailed analysis of the traits by sites to demonstrate whether several variant forms exist. It is hoped that this can be accomplished in the near future, for only thus will the full significance of our data become apparent.

PLATE XIX. Bone Artifacts from Various Nebraska Culture Sites.

(1) Cylindrical object with chisel-like edge. (2-8, 19) Awls of various forms. (9) Spoon or ladle made from the skull of a small mammal. (10, 13, 16) Fragments of bracelets made from bone and antler. (11, 12) Bone beads. (14, 15) Bone tubes which may have been beads, but may have had some other use. (17, 18) Fish hooks. (20) Harpoon point of antler. Such points have been found frequently in sites along the Missouri River. (21) Worked antler section.



Omaha Indians are shown in these pictures excavating the house sites of a different tribe of Indians who lived in the present Omaha Indian region many years before the Omaha came to Nebraska. In the lower view they are digging the first trench to outline the house, while the upper shows the excavation near completion.