

THE ASHLAND SITE

The Platte river along its lower course flows east to the vicinity of Fremont, whence it turns south to a point near the mouth of Salt Creek and then swings eastward to its confluence with the Missouri. Its valley is in general bordered by high bluffs, the slopes of those against which the river closely flows being very steep. Where terraces intervene between the river bottoms and the uplands, however, the slopes to the uplands are usually gradual. The terraces, of rather limited extent, are bench-like except where they are dissected by tributaries to the river; while the uplands, although rather rugged along the river, are in general gently rolling. The bottom and terraces, composed of alluvial soil, and the draws support a fair amount of timber, which is nearly lacking on the higher lands covered with loess and glacial drift. Salt Creek, a stream whose waters are impregnated with salt, flows in a general northeasterly direction through a wide valley and, after entering the lower end of Todd Valley (an ancient channel of the Platte River extending across Saunders county from southeast to northwest) turns southeast across the Platte bottoms and empties into that stream. In its course along the bottoms it is bordered on the southwest by a broad terrace, above which the ground slopes gradually to the high lands. A small deeply-cut stream, fed by several springs, flows from the uplands to the southwest and through the terrace to its juncture with Salt Creek. The terrace, slopes and uplands on both sides of this small stream bear the evidence of extensive Indian occupation, the total area of which is still uncertain.

This site was first visited by Mr. and Mrs. John L. Champe and A. T. Hill in the fall of 1936, in the course of a reconnaissance inspired by evidence that the region at one time was the site of a village of the Oto tribe. That the Oto were in this area early in the period of European contact is indicated by some of the first maps

drawn of interior North America. A map drawn by Marquette and dated 1673-74, locates (by indirect evidence of course) the Oto in close proximity to the Pawnee and the Omaha. De Lisle in 1718 locates one of their villages on the south bank of Salt Creek at its mouth, and several succeeding maps of the early 18th century indicate a similar location. It should be pointed out, however, that these latter must not be uncritically accepted as cumulative evidence, for many of them were compiled, at least partially, on the basis of earlier maps.

One of our most important pieces of information is found in a description of the Missouri River region attributed to Veniard de Bourgmond, a French soldier and adventurer, who is supposed to have ascended the river as far as the mouth of the Platte in 1714. "Higher up (the Missouri) is the *Riviere Large* (Platte), called by the French and by the savages *Nibraskier* (Nebraska) which stream runs to the northwest and to the west-northwest. Ten leagues within are the *Maquetantala* (Otos)—a savage nation allied and friendly with the French. They are on the banks of a little stream whose water is salty (Saline) and from which they make salt; all the commerce of these savages is in skins." How long the Oto remained in this village is not known, for

LEWIS AND CLARK JOURNALS.

"The Otteaus a small nation reside on the South Side 10 Leagues up, the Panies on the Same Side 5 Leagues higher up. About 10 Leagues up this river on the South Side a Small river comes into the Platt Called **Salt River**,"—Page 87.

"Sent off George Drewyer and Peter Crousett with some tobacco to invite the Otteaus if at their town and Panies if they saw them, to come and talk with us at our Camp etc."—Page 89.

"A fair morning. Several hunters out today, at 2 o'clock Drewyer and Peter returned from the Otteau village, and informs that no Indians were at their towns, they saw some frash Signs of a Small party, but could not find them."—Page 90.

7. DeVilliers, 1925. p. 61. Translated from the French by Flavia Waters Champe.

though the map of De la Marche shows them still at that place as late as 1785, this and other maps of the 18th century cannot be relied upon as being up to date.

The next first-hand evidence after that of Bourmond's mention consists of a narrative and map of Perrin du Lac, who traversed the region in 1802. In his account we read that, travelling over land (probably from the mouth of the Weeping Water), he arrived at the old village of the Oto at which there were but few inhabitants, the Sioux having driven the tribe to the north where they had been living for many years. Just where this old village stood is uncertain, for while Du Lac's map shows but two Oto villages several miles above Salt Creek on the south side of the Platte, these probably represent the sites to which the Oto had retreated from the Sioux, and the old village may have been near the mouth of Salt Creek. For years the tribe resided on the right bank of the Platte River near the present village of Yutan, where they were probably situated when Pike reported them on that river in 1806, also Lewis and Clark in 1804.⁸ That they had not forgotten their former home, however, is attested by Long's report that at the time of his expedition in 1819 they were in temporary residence on Salt Creek, following the burning of their permanent village by the Sioux during their absence on the winter hunt.⁹ It is possible that after the removal of their permanent village from the mouth of Salt Creek they frequently returned for short periods.

During the autumn of 1936 several burials were excavated at this site, and work was continued here early in the spring of 1937 with the excavation of four house sites and a number of burials and outside cache-pits, which features were scattered over an area in excess of two hundred acres. Though the total extent of the occupation area is unknown, pottery and other cultural material were found considerably more widespread. All

8. Coues, 1895, p. 536.

9. Thwaites, 1906, Vol. 17, pp. 150-151.

burials found were on the hilltops, while the houses and cache-pits also occurred there as well as on the terraces and slopes.

Very early in the work here it became apparent that more than one group of people had inhabited the site, presumably at different times. The homes of one group were on the hilltops, while another group built its houses on the slopes and the terrace. Still another and later cultural manifestation is evident in remains also along the terrace edge. Three of the house sites and two outside cache-pits on the slopes and terrace are assignable to the one culture; one house and several cache-pits belong to the hilltop group, and the materials of the later occupants occur in several cache-pits. In order to make the picture as clear as possible the remains pertaining to the different occupations will be separately summarized. Analysis of the traits associated with Houses 1, 2 and 4 and with cache-pits 22 and 23 indicate that a single culture is represented. House 3 and ten cache-pits belong to another complex, and still a third occupation is represented by materials from a few cache-pits only.

Occupation A

House 1

House 1 was located 125 feet from the steep margin of the terrace bordering Salt Creek. Excavated to an average depth of only nine inches into the dark terrace soil, its outlines could not be determined definitely. Likewise the exact depth and size of the small shallow outer posts were uncertain. As the larger center and other post moulds were fairly readily discerned, however, the general size and shape of the structure are not in doubt. The very slightly depressed fireplace, 36 inches in diameter, was in the center of a slightly asymmetrical rectangle with sides of 8 and 9 feet formed by four posts with diameters of from 9 to 12 inches and from 13 to 16 inches deep. The moulds of 14 posts, which served

as the outside roof supports, formed about this a rectangle 24 feet long and 21 feet wide, with the long sides lying northeast to southwest, while 6 to 18 inches outside these were more numerous and smaller moulds, which probably represent the positions of posts forming the walls of the lodge, which were square with slightly rounded corners. The entrance passage, flanked by the moulds of light posts, extended to the southeast. Owing to the nature of the soil in which the house pit had been dug and to the fact that rodents had been extremely active in it, the exact line of the floor could not be determined, yet it appeared to be relatively level. The earth

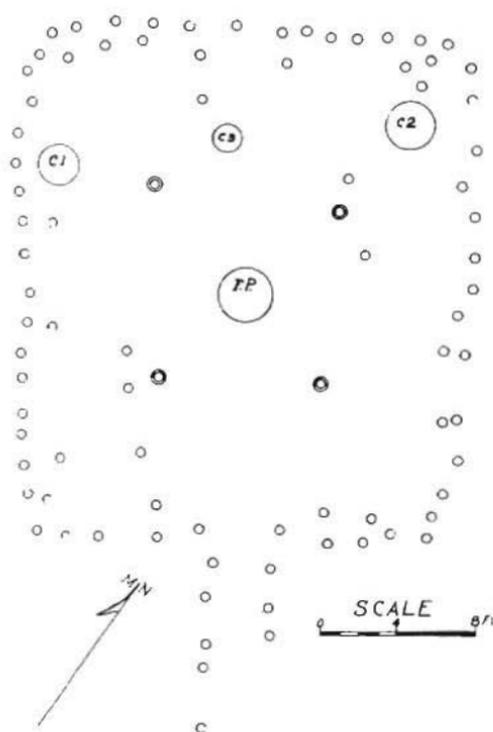


FIGURE 1. Ground plan of House 1, Ashland Site. O, post moulds; double circles, center post moulds; C1, C2, C3, cache-pits; F. P., fireplace.

underlying the central fireplace showed the effects of burning for a depth of 2 to 3 inches.

Three sub-floor pits were all in the back half of the house. Cache 1 was small and straight-sided, with a diameter of 28 inches and a depth of 16 inches. Cache 2 was a jug-shaped excavation 32 inches across at the top and 40 inches across at the floor, which was at a depth of 36 inches beneath the house floor. The largest was Cache 3 with a top diameter of 42 inches, a bottom diameter of 50 inches and a depth of 49 inches.

Although not abundant, artifacts did occur immediately above the house floor and in the fill of the pits. These consisted of 453 pottery fragments (54 rims, 396 body sherds, and 3 handle fragments), and small numbers of stone and bone objects. In addition, small animal bones, rare mussel-shell fragments, and charred corn and plum pits were recovered.



PLATE I—3

Excavation at Ashland Site.

House 2

House 2 was a small rectangular structure on the slope west of the small tributary of Salt Creek. Situated about 300 feet from the ravine, it was excavated into the hillside at a point where it dropped approximately 7 feet in 100 feet. The floor of the pit, which measured 19 feet from front to back and 20 feet from side to side, was at a depth of 38 inches beneath the surface at the back wall, while the entrance passage, which extended 14 feet slightly south of east, sloped gradually up to the surface. The walls of the pit, readily distinguished owing to their having been subjected to a considerable amount of fire, were vertical. The outer small posts were frequently set slightly into the pit walls, and slanted toward the center of the house at an angle sufficient to make them meet the inner posts at a height of about 6 feet. These inner posts, which were considerably larger than the outer ones, stood vertically about a foot inside. There were three of these along the back wall, three at the south, and two at the north, but none could be found near the front wall. Two moulds occurred between the central fireplace and each corner, forming squares with dimensions of about $8\frac{1}{2}$ feet and $10\frac{1}{2}$ feet respectively.

Burned at the time of or subsequent to its abandonment, this house yielded a large amount of charred material, some of which casts light on the problems of construction. Along the south wall near the southwest corner lay several partially burned timbers. A single piece $5\frac{1}{2}$ feet long and another $2\frac{1}{2}$ feet long lay parallel with the wall, the longer one of which lay directly above two of the inner line of wall posts. Three shorter and smaller timber fragments lay over it and perpendicular to it at intervals of 26 and 29 inches. There seems little doubt that these are the remnants of a horizontal beam supported by the inner wall posts and supporting in its turn the poles which served as rafters. Lying on the floor between the fireplace and the wall in the same side of the house was an area of burned earth and charcoal which

revealed the constitution of the roof covering. Immediately upon the floor were bunches of grass laid parallel with each other and above them a thick coating of earth which had been burned hard when the lodge was burned. These findings permit us to outline with relative certainty a part of the method of roof construction on this house. Across the tops of several posts about 6 feet high along the sides of the house-pit and across the tops of the center posts were laid horizontal timbers, after which poles were laid between these two sets of beams. Upon these poles were placed large bundles of grass, over which earth was thrown.

This reconstruction corresponds generally with the methods noted by early observers as employed by historic Indians of the plains.¹⁰ Beneath the floor of the house, which was well defined by a stratum of burned material, were two pits, neither of which had the usual cache-pit form and both of which were still open at the time the building burned. One, 12 inches east of the fireplace, was circular with a top diameter of 13 inches and a depth of 19 inches. The walls, which were intensely burned, sloped to a rounding bottom 8 inches in diameter; and the fill, which consisted of burned earth and charcoal, was sterile of artifacts. While this is admittedly speculation, we suggest that its form, size and location may indicate its use as a receptacle for a pottery vessel.

The other pit, situated near the north wall, was 30 inches across the top, from which the wall contracted slightly to a diameter of 26 inches at a depth of 14 inches and then expanded to the floor, which was at a depth of 34 inches and was 32 inches in diameter. Lenses of charcoal and burned earth (probably representing roof material) occurred for a distance of 11 inches above the floor and were overlaid by washed-in earth.

10. See Fletcher and LaFlesche, 1911, pp. 97-98, for an account of similar roof construction.

The fireplace, a saucer-shaped depression 40 inches in diameter containing a thick bed of ashes, occupied a central position on the lodge floor. Intense burning of the earth beneath it proves its prolonged use for heating and cooking purposes.

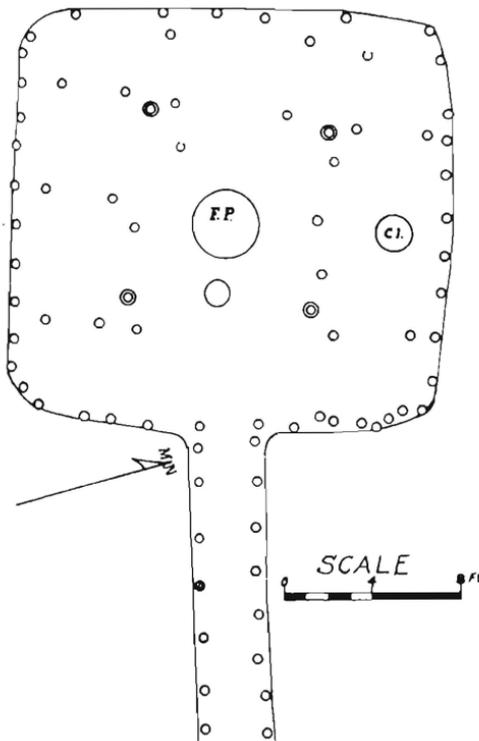


FIGURE 2. Ground plan of House 2, Ashland Site. O, post moulds; double circles, center post moulds; C1, cache-pit; F. P., fireplace;....., edge of house pit.



House 4

This house, on the slope overlooking the first terrace of Salt Creek to the east of the previously mentioned small creek, was a small structure 17.5 feet square with very much rounded corners and rather bulging sides built in a pit 36 inches deep at the uphill wall. Immediately within the vertical walls of the pit, a single line of post moulds, averaging 5 inches in diameter and 11 inches in depth, constituted the house walls, and four large posts between the fireplace and the four corners served as roof supports. The covered entrance passage, which extended 10 feet to the east, was gained from the house

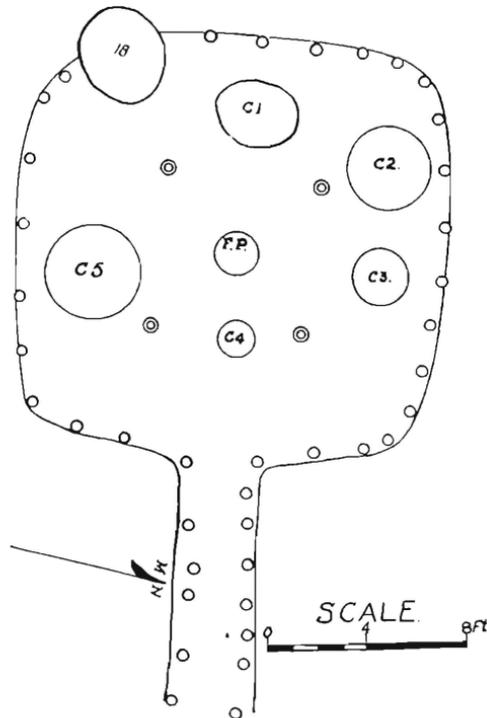


FIGURE 3. Ground plan of House 4, Ashland Site. O, post moulds, double circles, center post moulds; C1-C5, inclusive, cache-pits; 18, intrusive cache-pit; F. P., fireplace; , edge of house pit.

by a step 7 inches high and sloped gradually to the surface. Centrally located was an unusually deep bowl-shaped fireplace 36 inches in diameter. Seven inches deep and completely filled with ashes, it was unusual in that the earth beneath it showed little effect from the fires which had burned in it.

The occupants of this earth lodge had dug five pits below the floor in which to store their possessions, and after their use for that purpose, had thrown into them their ashes, the remnants of their meals, and other refuse. All were round and straight-sided, with diameters of 19 to 45 inches and depths of 18 to 36 inches. These pits, as well as the fill immediately above the lodge floor, contained a relative abundance of broken pottery, and stone, bone and shell artifacts, as well as many animal bones. The fact that these numerous objects were not left during a hurried departure, but were a gradual accumulation incident to the normal life of the inhabitants, points to a fairly long occupation. After its desertion, the lodge was gradually destroyed and the evidences of its presence obliterated by the natural processes of decay and erosion and, finally, the farming operations of the white man.

Artifacts

Although the artifact lists from these three houses are not identical, this situation is explained by the wide difference in the abundance of specimens recovered, and there seems to be no doubt that a single cultural complex is represented. Houses 1 and 2 were characterized by a paucity of specimens, particularly of bone, but what types do occur are invariably duplicated in the larger series from House 4. That they were actually contemporaneous is suggested by the occurrence in two or more of the houses of single examples of unusual pottery treatments. For example, House 1 and House 2 each yielded one rim sherd from vessels apparently as nearly

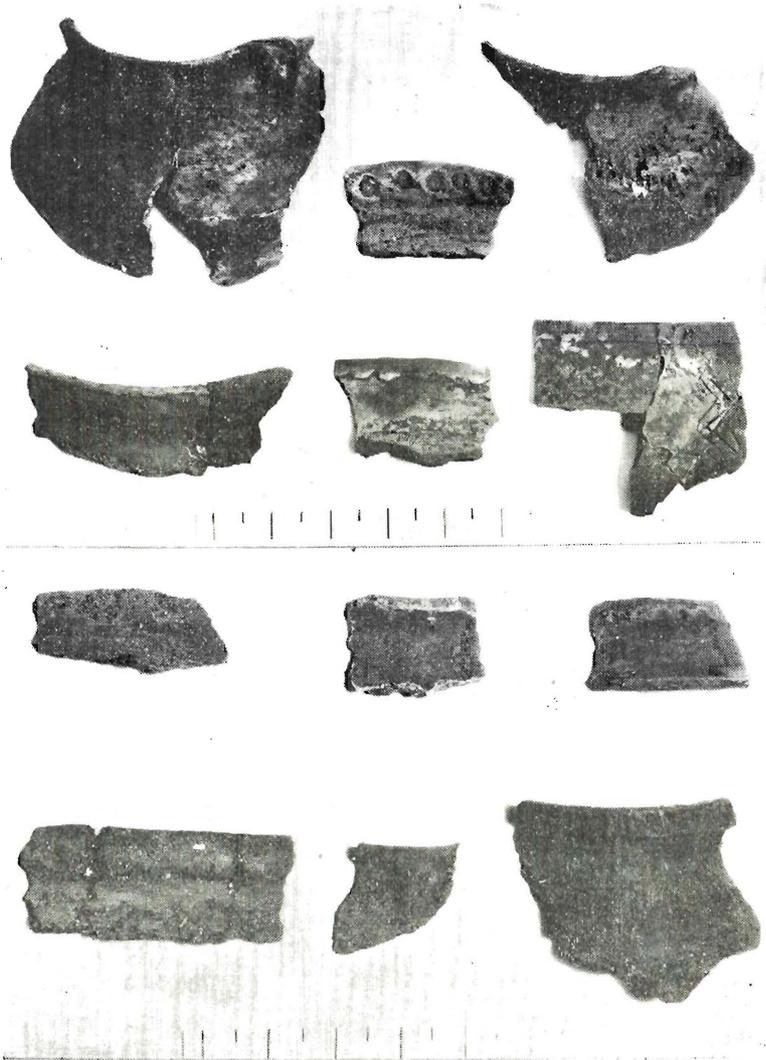


PLATE IV
Rim sherds from Occupation A, Ashland Site.

identical as two manufactured objects could be, and of a type unique in this site. Both have diagonally incised lips and the exterior rims are decorated with three horizontal cord impressions, beneath which is a triangular element executed by the same technique.

The pottery is predominantly a grit-tempered, often carelessly finished ware, with a form most commonly characterized by a wide mouth, constricted neck and globular body. The surface color, ranging from gray to orange, is most often dull buff, while the paste between the surfaces is generally gray. Approximately 55 per cent of the sherds have been roughened—probably by the application of a cord-wrapped paddle, the results of which usually have been partially destroyed by smoothing the wet clay with the hand or with a tool. Handling of the vessels, which are of only moderate size, was facilitated by the presence of loops attached to the lip and shoulder area and lugs fastened to the rim. The loop handles were usually fastened to the body by inserting the lower end into a hole in the pot.

Simple direct rims are characteristic, with slight collars present on less than 10 per cent. Decoration, which occurs in but a small percentage, is confined (with the rare exceptions noted below) to the lip and juncture of the lip and outer rim, and consists of notches and incised lines. (See examples in Plate IV.)

Elements which occur very rarely here include occasional shell-tempering, bowl forms, and body decoration, which consists of rectilinear incised motives. The occurrence of two sherds decorated with single impressed cords has been noted above.

All that remain to us of the weapons with which the men of this village hunted and fought are the stone points which tipped their arrows. Their bows and the shafts of their arrows, of course, have decayed long since. These arrow points are triangular, usually small, and most often unnotched, although about 40 per cent

are side-notched,—occasionally with two notches on a side.

As is usual in this area, one of the most abundantly represented forms is the plano-convex flint end scraper, of which 32 were recovered from the three houses and 23 of them from House 4. These implements are uniform in having a well-finished working edge at one end, but are variable in size and shape. The large majority are short and triangular, but occasional specimens are long and narrow, while the almost omnipresent medial ridge is created either by careful chipping from two edges or by the removal of large longitudinal flakes.

Other implements of flint are fewer in number. Of five drills, four are crudely worked and rather large, their points only being well finished, while one alone has a straight slender shaft and a well-executed expanding base. Only three of the characteristic bevelled knives of this area were found, and two of these are fragments. Knives and scrapers are fairly numerous, but most of them are not amenable to classification, for, while a few are ovate, the form of the majority appears to have been dictated by the shape of the flakes from which they were made. Several knives are simply thin flakes with re-touched edges, and two large flint fragments are so worked as to create a pronouncedly concave cutting edge reminiscent of a spoke-shave.

Among the ground stone objects, sandstone abraders are by far the most numerous. These implements, which include boat-shaped, rectanguloid and irregular forms, appear to have been used for grinding or polishing a variety of objects, for the evidences of use they exhibit consist of broad, shallow, uniform grooves—probably the result of smoothing arrow shafts, deep, narrow, irregular grooves in which bone awls and wooden implements were possibly sharpened; and flat, convex and concave surfaces for working down various materials. The two ground celts, one of them fragmentary, are both oval in form with elliptical cross-sections. To complete

this brief list we need only mention a number of unworked but abraded pecking stones, and several fragments of hematite showing the marks of scraping incidental to removal of material—presumably for paint.

Bone artifacts were rare in Houses 1 and 2, but a fairly good series was recovered from House 4. Awls, of which there are eight in our collection, are of three types, two of which are represented by only one specimen. One of these is made from a canine ulna, the shaft of which has been worked down to a point; the other is a splinter of bird bone, on one end of which is a slender sharp point. The six remaining awls are all sections cut from long bones, a portion of the articular surface of which often remains to form the butt.

Also numerous are shoulder-blade hoes or fragments thereof. This implement for the cultivation of the Indians' corn was made by removing the spine and trimming the vertebral margin, and evidences of hafting consist in a worn bevel on the margin of the joint and opposite notches on the angles near the blade. While the exact method of attaching the handle is uncertain,¹¹ there is little doubt that it was set at an angle to the blade similar to that of our modern hoe. Worn-out hoes were commonly cut up and the edges resharpened to serve as knives.

Other implements of bone were found in small numbers. Three fragments appear to belong to as many long flat objects, pointed at one end and perforated at the other. The most nearly complete specimen is slightly more than 5 inches long and is uniformly $5/16$ of an inch wide except where the sides narrow to the point. Single specimens include a fish hook, unbarbed and with two notches near the end of the shank for the attachment of the line, a bead of bird bone, and a cone-shaped object worked from the cancellous bone of a large joint. A number of bone fragments which have been cut and

11. See Hill and Wedel, 1936, p. 54, for a suggested method.



PLATE III

1. Restored pot from House 4, Ashland Site. Height, $4\frac{3}{4}$ inches; greatest diameter, $5\frac{1}{2}$ inches.
- 2, 3. Pottery effigy pipe, from House 4, Ashland Site, front and side views.

ground appear to represent stages in the manufacture of awls and other objects.

Artifacts fashioned from antler include several cylinders of the kind common in this area, a fragment of an undecorated bracelet, and a fragment of elk antler well polished near the point. Three pieces of antler cut and partially worked down probably were intended as material for bracelets, and several other pieces show traces of cutting.

Shell artifacts, confined to House 4, consist only of a small mussel shell with a small perforation near the hinge, probably for suspension, and a large perforated shell hoe similar to those found commonly in Middle Mississippi components but appearing very rarely in Nebraska.

The pipes found, invariably made from pottery clay, include six fragments of a tubular or elbow type and one effigy form. The bowl of the latter is an extremely well modelled human head with the face away from the smoker (Plate III, 2, 3). Across the cheeks are incised diagonal lines, possibly representing painting of the face—a suggestion lent weight by vestiges of red paint still remaining in one of them.

Vegetal Remains

Because normally they quickly disappear through decay, our knowledge of the vegetable foods of these people is necessarily dependent on their having been burned to a certain degree. For this reason the data on this subject are usually limited. Nevertheless, corn was found in all three houses, and both walnut shells and plum pits were recovered from House 1, providing us with evidence that in addition to raising crops, the Indians who lived here made full use of the natural resources of their environment.

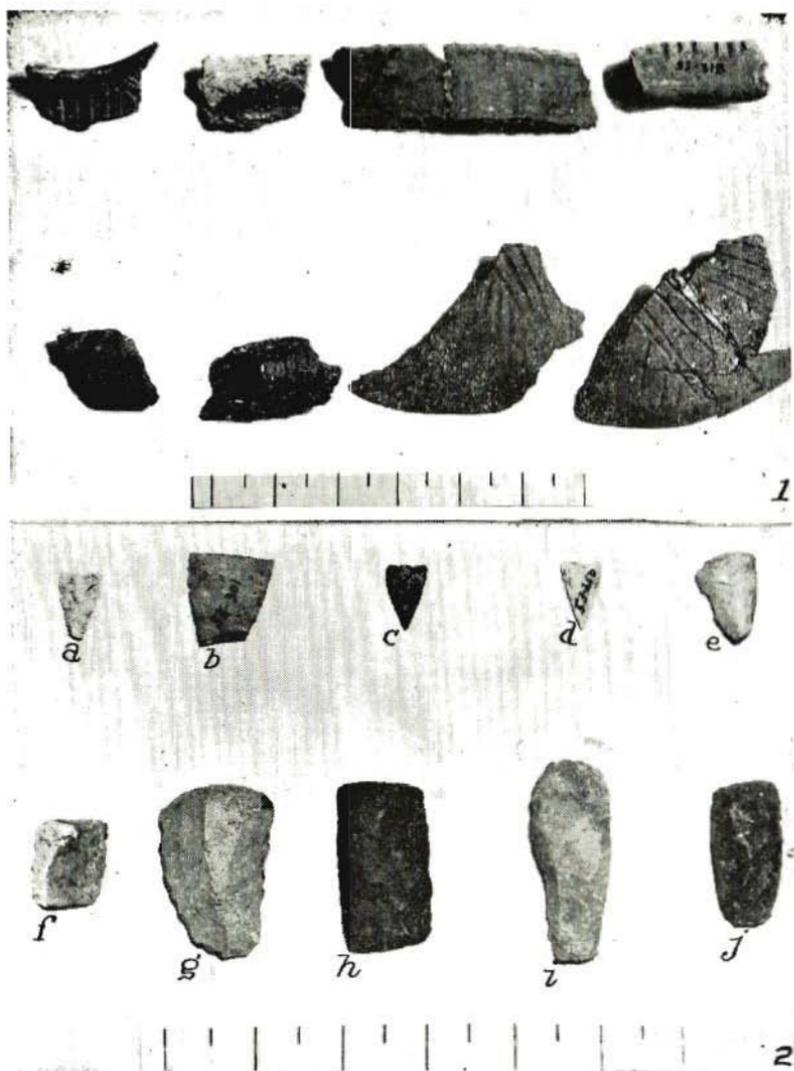


PLATE V

1. Pottery sherds from Occupation B, Ashland Site.
2. Chipped flint artifacts from Occupation B, Ashland Site. a-d, projectile points; e-h, j, end scrapers; i, flake knife.

Occupation B

Another group of people seems to have confined its activities mainly to the hilltops. On the ridge about 700 feet southwest of House 2 the remains of a structure were found, and scattered along the same ridge were cache-pits, of which ten were excavated, containing identical cultural materials. Owing to its situation on the high ground and the consequent erosion, as well as to long-continued farming activities, so few traces of the original structure remained that any conclusions must be drawn with caution. The plow-line was the deepest disturbance except for the remnants of a fireplace and a few post moulds, so that at the time of investigation there was no evidence of a floor. Four moulds at distances of 7 to 8 feet from the center of the fireplace marked the positions of what were apparently center roof supports, and traces of posts 12 and more feet from the fireplace probably were remnants of the wall. The direction and nature of the entrance, if the house possessed one, were not evident.

In the north corner of the house near the north center post was a small jug-shaped pit containing refuse, which included pottery sherds and stone and bone artifacts.

South of the fireplace an oval pit 48 inches long, 30 inches wide, and having a depth of six inches beneath the plow-line, contained the secondary burial of two adult individuals. No offerings were associated with this burial, but a single rim sherd in the fill near one skull is unlike the other pottery from the site, resembling sherds found occasionally in Nebraska which have woodland characteristics. Because of the destruction of the house floor by cultivation it is impossible to state whether this pit was dug prior to, during, or subsequent to occupation of the house.

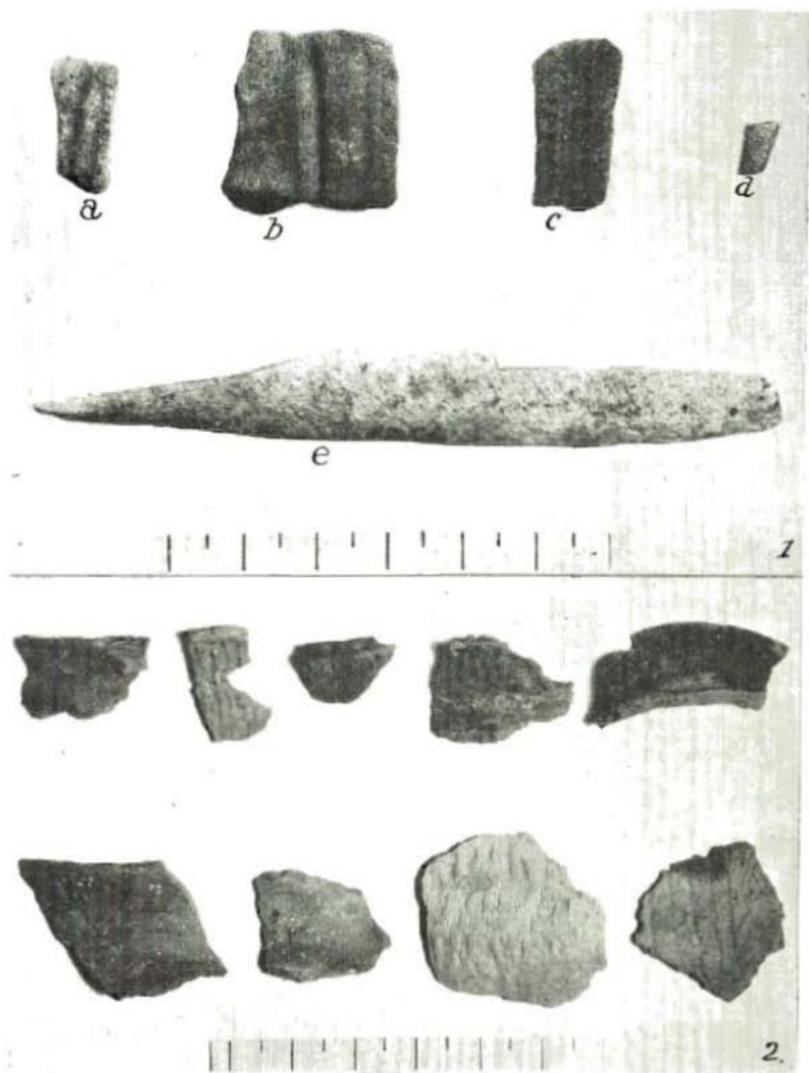


PLATE VI

1. Stone and bone artifacts from Occupation B, Ashland Site. a-c, sandstone abrasers; d, catlinite pipe fragment; e, harpoon point.
2. Pottery sherds from Occupation C, Ashland Site.

Although among the very small amount of stone and bone material from the cache-pit and the soil in the house area no distinctive forms occur, the pottery is readily distinguishable from that of the culture previously described. As stated above, this pottery is identical with that from ten cache-pits excavated on this same ridge. These pits, usually jug-shaped, varied considerably in size and yielded varying amounts of remains, all attributable to a single complex.

The pottery is a thin, flaky, shell-tempered ware with a gray paste and gray or dull brown surfaces. The rims are usually straight, flaring from a sharp angle at the neck, and most commonly they become uniformly thinner from the neck to the rounded lip. Owing to the absence of restorable pots and the rarity of large sherds, the complete body shape is not certain, but a flattened shoulder area, rounded shoulder, and rounded base are indicated. Decoration of the rim, an almost invariable rule, is confined to the lip and the rim interior. Occasionally the lip is notched or impressed, while on all except a few sherds vertical or diagonal impressed lines are present on the inside of the rim immediately below the lip. In rare instances this latter treatment is effected with the finger. With the above exceptions, decoration is confined to the area of the pot between the shoulder and the neck, where the designs are mainly composed of rectilinear trailed or incised lines, often combined with punctate elements. Unfortunately the specimens recovered are so fragmentary that no detailed description of designs is possible. The few handles recovered are of the strap type attached to the rim below the lip. When decorated, several vertical incised lines extend the length of the handle.

Without exception the seven projectile points are triangular and unnotched and all but one are small, differing little from the dimensions of a typical specimen which was $\frac{3}{4}$ inch long and $\frac{1}{2}$ inch wide. Other stone artifacts include end scrapers, usually small and tri-

angular in form, knives of rectanguloid or ovoid form, retouched flakes, and grooved sandstone abraders. A tapering fragment of ground catlinite with a rectangular cross-section is probably broken from the projecting stem of a pipe, possibly of disc type. Bone artifacts are even more scantily represented than are the stone. A single fragment appears to be the rounded butt of an awl well worked from a section of long bone, while several fragments prove the use of the typical hoe made from the scapula of the bison by removing the spine, sharpening the vertebral margin, and attaching a handle. The use of a handle is indicated by the presence of a worn notch in one margin of the glenoid cavity.

An unusual implement is a thin flat point $10\frac{1}{4}$ inches long made from a splinter of a large bone, with two barbs along one edge. The surface made from the interior of the bone still retains some of the cancellous tissue, except near the well polished point, while on the other surface are lightly incised cross-hatched lines. While one is immediately reminded of a harpoon, perforations or notches for the attachment of a cord are lacking. This implement, to our knowledge unique in Nebraska, closely resembles harpoons from New York state attributed by Parker to early Iroquois and Algonkian sites.¹²

Judging from what remains were recovered, the diet of the people who lived in this house and stored their possessions in these pits was similar to that of the other group who inhabited the site. Their animal food consisted of bison, deer and smaller land animals, as well as fish and mussels from the streams, while for vegetable food they raised corn and beans and gathered acorns, plums, and walnuts.

No metal or any other objects of European manufacture were found to indicate contact with the whites.

12. Parker, 1922, p. 412, and Plate 128, especially Figure 6.

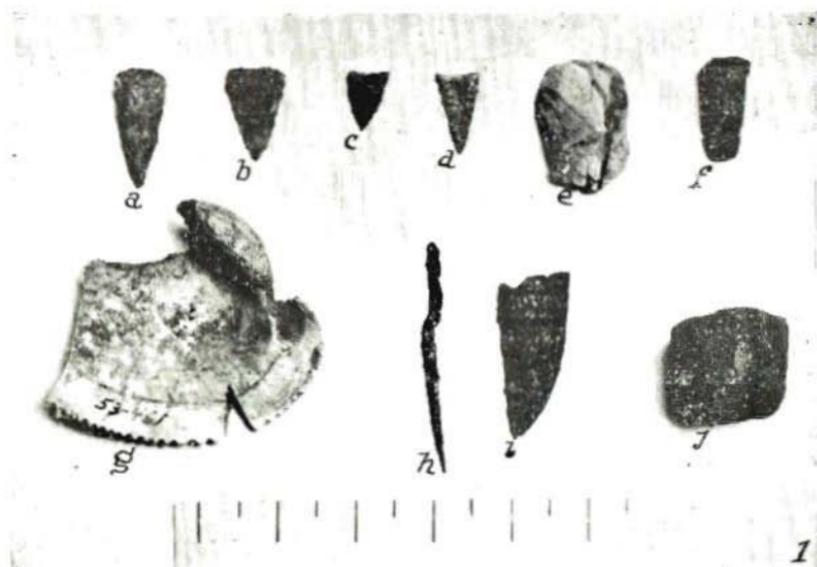


PLATE VII-1

1. Stone, shell and metal artifacts from Occupation C; Ashland Site. a-d, projectile points; e, end scraper; f, catlinite pipe fragment; g, shell spoon (?); h, iron awl; i, iron knife blade; j, sandstone abrader.

Despite the rather limited sample of the total complex thus far recovered here, there seems to be no doubt that this is an Oneota manifestation very similar to that of the Leary Site on the Nemaha River. No artifact, with the single exception of the bone harpoon point, would be out of place at the Leary Site, and several of the diagnostics of the Oneota aspect (most notable of which is the pottery complex) are present. The association of small triangular unnotched projectile points and catlinite with the type pottery is confirmatory evidence that here we have a component of some focus of the Oneota aspect.

Occupation C

Evidence of a third and later occupation of this site consists of several cache-pits with their contents located mainly along the edge of the terrace below House 4.

That Indians lived here well after the white man had penetrated to the region is indicated by objects of metal, including copper fragments and iron knife blades and awls, which were found associated with the aboriginal materials in a number of the pits. Artifacts other than pottery are rare, consisting mainly of a few triangular unnotched points and end scrapers, a number of which are very crudely made, and rather numerous grooved sandstone abraders. In addition to these, objects of stone included a single broken, stemmed point, retouched flakes, a pebble pecking stone and three fragments of catlinite, all of the latter apparently parts of pipes. One of these is the tapered projecting stem apparently of a disc pipe, while the other two are bowl fragments of what were probably elbow pipes. Work in bone is not common, a single scapula hoe fragment and a bead fragment comprising all the examples found, while a large mussel shell with serrated margin and notched at one end for hafting is the only worked shell specimen.

The most characteristic feature of the pottery from these pits is its lack of homogeneity. Even within a single pit the sherds vary widely, suggesting strongly that we have here, not a stable complex, but a melting-pot of various ceramic traditions in which amalgamation has not taken place. Aside from an occasional Oneota sherd, two general types are distinguishable. One is grit-tempered and characterized by a high direct rim with an often thickened and impressed lip, and frequently has been tooled with a grooved paddle. In color it ranges from dark gray to bright orange. Of three loop handles recovered all are elliptical in cross-section and two are decorated with horizontal incised lines, while the other bears vertical lines. The sherds of this type are similar to the plainer ware of the Lower Loup focus (Proto-historic Pawnee).

The second type is a thick, compact, shell-tempered ware with flaring rims. Surfaces are smooth and rarely crudely incised, and the color ranges from gray through

brown to bright orange. The lip is frequently notched or incised. We are at a loss to indicate the relationships of this pottery unless the form and lip treatment point to a Nebraska aspect influence. No identical ceramic pattern from this area is known to us, and it may be the result of the fusion of two pottery-making traditions.

In addition to these two types there are occasional cord-paddled sherds, and a single flaring rim with a diagonally incised lip is decorated with single horizontal cord impressions.

Judging from the remains found, the subsistence pattern of this people was similar to that of the other occupants of the site. Except for the somewhat greater number of bison bones and the very much less frequent occurrence of fish remains, the animal forms utilized were the same. Similarly, charred specimens give us what is certainly an incomplete list of plant foods consisting of corn, beans, hazelnuts, plums and walnuts.

No traces of the habitations of these people were found, and this fact, combined with evidences of recency and instability, suggests that tipis or temporary shelters were in use.

A cache-pit near House 1, unassignable to any specific occupation because of the absence of artifacts, contained the remains of what was probably a bison hide. Considering its position in the not-too-well-drained terrace, this hide was extremely well preserved, for little of it seems to have been destroyed. This occurrence, in the absence of favorable conditions for its preservation, would appear to demonstrate the fact that this site was revisited at a relatively late date.

Burials

Burial of the dead, our evidence shows, was confined to the hilltops, where 16 pits containing human remains were excavated. Association of artifacts with the

burials was so rare that it is impossible to relate the interments to any one of the village occupations, and the absence of human skeletal material in the occupied areas precludes the possibility of any check on their relative ages. We do know, however, from the occurrence of a gun spring and two porcelain beads, that at least one of the burials post-dates the first contact with the whites.

Pits were excavated to only moderate depths, the floor of the deepest being but 22 inches beneath the surface. The disposal of the dead within the pits was not uniform. In most instances at least some of the bones appeared to have been thrown on the floor with no attempt at arrangement, but in other cases complete skeletons or a few articulated bones were found among them. A few pits contained only one or two complete skeletons and in a few only two or three bone fragments remained. With the exception of two semi-flexed individuals, all articulated skeletons lay in an extended position. Uniform orientation of the skeletal material was lacking; even within the same pit the heads of articulated bodies often lay in different directions. The bones of both sexes and of individuals of all ages were present in the graves, in several cases together. Occasional grit-tempered sherds of a rather nondescript nature, flint fragments, a flint drill, and a stone bead were recovered from the fill of various pits, but there is no evidence that they were associated with the burials, nor are these specimens sufficiently distinctive to permit their assignment to any particular complex. Were this last possible we might at least say the burials were no earlier than the occupation represented by that complex.

Only in Burial 2, the one pit containing evidence of white contact, was there an apparently intentional inclusion of objects with the bodies. In this pit, which contained two extended adult individuals and, in the south end, a pile of six skulls and a number of long bones, two porcelain beads lay at the right shoulder of one individual and near the left hand of the other were

a gunspring and a mussel shell. The similarity of this burial to the others suggests that they were perhaps also relatively recent.

It seems obvious that at least some of the burials here were secondary. Similar conditions have been found in previous investigations in various parts of Nebraska,¹³ and secondary burial after exposure of the bodies was practiced by several plains tribes, including the Dakota, the Omaha, and the Mandan¹⁴ during the time they were being first visited by those of the white men who left us descriptions of their customs. The specific conditions here call strongly to mind the burial customs of the Huron tribe observed by Jean de Breboeuf in 1636.¹⁵ Usually every twelve years the bones of all those who had died and been buried during that period were disinterred and, amid much ceremony, were cast into a common pit, the recently dead still covered with flesh being placed on the floor. Such a custom would explain at this site the haphazard disposition of much of the skeletal material and the occurrence with such material of articulated individuals. Also exhumation might be invoked to explain the very few fragments found in some of the pits. Strong has suggested that the presence of only a few scattered bones in excavations along the Missouri River might be the result of the removal of burials.¹⁶

Summary

It is apparent from the foregoing that near the mouth of Salt Creek there have been in the past three occupations by tribes of Indians. Occupation A represents a manifestation of the Nebraska aspect, Occupation B can be confidently assigned to the Oneota aspect, and

13. Wedel, 1935, Strong, 1935.

14. Bushnell, 1927, pp. 20-21, 38-78.

15. Kenton, 1927, pp. 297-308.

16. Strong, 1935, p. 266.

Occupation C has at least some relationship to the Lower Loup focus.

Unfortunately stratigraphic evidence of the relative ages of these components was not encountered in the areas excavated, but despite this lack, certain suggestions seem justified. The presence of materials of European manufacture associated with the aboriginal remains of Occupation C, and their total absence from the other two complexes, strongly point to a later date for the former, as does the presence of pottery of Lower Loup type, which has elsewhere a post-Columbian date. Furthermore, an occasional Oneota sherd was found included in the cache-pits of this culture.

For light on the temporal relationships of the Nebraska and Oneota remains, we must turn to more general considerations. The Nebraska aspect appears on the basis of present evidence to be strictly prehistoric. Never to our knowledge has there been an object indicating contact with white men reported as in association with remains of this culture, although literally scores of sites have been dug in. The Oneota, on the other hand, is a relatively late manifestation. Although it has not yet been found in Nebraska with undoubted European associations, sites in Iowa have been definitely established as post-dating the introduction of trade goods. In view of these considerations at least the suggestion that the Nebraska culture occupation was the earliest here is not unreasonable.

The problem of authorship for the various patterns is still more difficult. The question of the identity of the group or groups who were responsible for remains of the Nebraska aspect is still purely a matter of conjecture.

Speculation as to what people left the Oneota remains is on somewhat firmer ground. It has been suggested that the Oneota may be attributed to the Chiwere Sioux on the basis of a high correlation between the occurrence of this archeological culture and the traditional

and known distribution of various tribes of that linguistic group.¹⁷ In the light of this opinion, held by various students of the area involved, the reports of an Oto village at the mouth of Salt Creek in the 17th century may be significant, and also suggestive is the statement in Long's account of the Oto migration legend that this tribe in its trek westward from the Mississippi first struck the Missouri River near the mouth of the Great Nemaha River. Here they remained some time, and Long suggests that, because the word *Nemaha* means *water of cultivation* in their language, they raised crops before moving up the river.¹⁸ While Long's translation of the word *Nemaha* is probably erroneous, this account is interesting in view of the statement made above that Oneota remains at Ashland appear to be nearly identical to those from the Leary Site, near the mouth of the Nemaha.

Conclusive evidence for assigning the Oneota remains at the Ashland Site to the Oto tribe has not yet been recovered, but more data have been contributed to the problem of Chiweran and Oneota correlation, and further excavation of this and other sites for which there is evidence of occupancy by Chiweran groups may ultimately bring about a solution of the problem. The possibility of Dhegihan peoples also having carried an Oneota culture has been discussed elsewhere in this series¹⁹ and need not be considered here.

A part of the pottery associated with Occupation C, as has already been noted, is in certain respects very similar to that of the Lower Loup focus, a culture which was almost certainly carried by the Pawnee at an early date. It is entirely conceivable, however, that some other group may have adopted all or part of the Pawnee ceramic pattern, especially during this period of rather violent readjustment. A case in point is that of the Oto

17. Griffin, 1937, pp. 180-181.

18. Thwaites, 1906, Vol. 15, p. 131.

19. Hill and Wedel, 1936, p. 67.

who, if the site at Yutan is correctly identified as belonging to them, had taken over very largely the material culture of the Pawnee as a result of close contact with them. The pottery of this later period at Ashland, moreover, is not homogeneous, and there is no assurance even that it was all the product of one people.

The burials, because of the lack of associated artifacts, cannot be assigned at present to any of the complexes found, and may even belong to none of them.

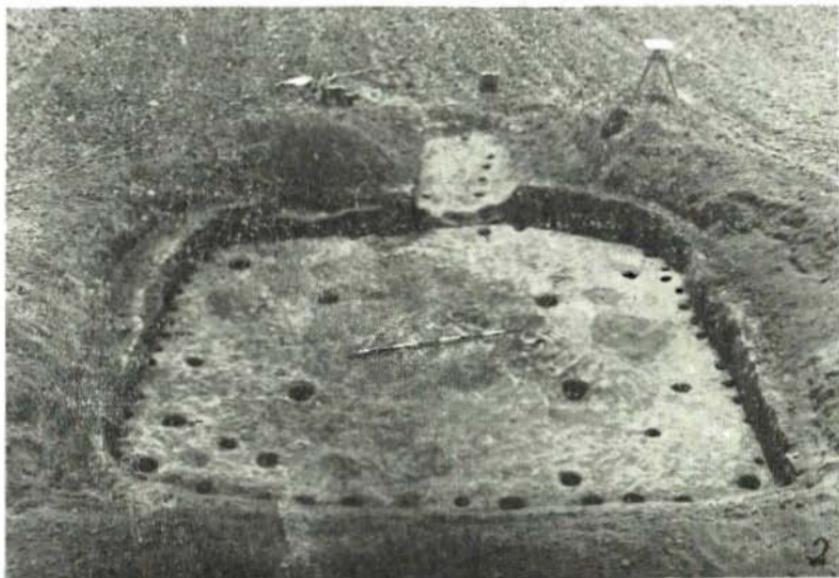


PLATE VII—2
2. House 1, Pawnee Creek Site.