THE HISTORY of man in the Red River Valley precedes the arrival of homesteaders, modern agriculture, towns, and cities by some ten thousand years. American Indians have lived in and adjacent to the valley for all of this immense period, leaving behind an archaeological record which documents their cultural adaptations and changes through time. Because archaeological research is recent and the hundreds of habitation sites and burial places have been only sampled scientifically, the record is still sketchy and incomplete. The main trends of these prehistoric cultures can be seen, however, and are outlined in this brief paper.

Much of our knowledge of the prehistoric archaeology of the valley comes from the work of Theodore H. Lewis who surveyed many burial mound groups for the Minnesota Historical Society in the late nineteenth century. More comes from the work of Professors Albert E. Jenks and Lloyd A. Wilford of the University of Minnesota who have excavated sites in the area. The results of Lewis' work in the Red River Valley may be found in Newton H. Winchell, ed., The Aborigines of Minnesota, 300-322, 358-363 (St. Paul, 1911). See also Theodore H. Lewis, "Mounds on the Red River of the North," in American Antiquarian, 8:369-371 (November, 1886).

Material on the region is included in numerous writings by both Jenks and Mr. Wilford. See, for example, Albert Ernest Jenks, "Recent Discoveries in Minnesota Prehistory," in Minnesota History, 16:5-14 (March, 1935); Lloyd A. Wilford, "Minnesota Archaeology: Current Explorations and Concepts," in Minnesota Academy of Science, Proceedings, 10:21, 25 (1942). A recent summary appears in Waldo R. Wedel, Prehistoric Man on the Great Plains, 210-239 (Norman, Oklahoma, 1961).
three-year program of survey and excavation has been carried out by the University of Minnesota under a grant from the National Science Foundation. This work was conducted from 1959 through 1962 by archaeologists from the university's department of anthropology under the direction of the author. It was possible only with the help of many interested valley residents, and our findings were enhanced by the cooperation of the North Dakota Historical Society, which permitted us to excavate in North Dakota.

The Red River Valley is a product of glacial and postglacial action. During the latter phases of the most recent ice age, the valley was overlaid by a section of the huge continental ice sheet. As the last glacial sheet melted and its margins withdrew to the northeast, the melt water, seeking its normal northern drainage channels, met the edge of the ice, which blocked its flow. The water then ponded against the edge of the glacial sheet, forming a huge lake whose depth was accentuated by the weight of adjacent ice depressing the crust of the earth. It established an outlet at Lake Traverse and flowed south through Glacial River Warren, or the valley of the present Minnesota River. This body of water, known as Glacial Lake Agassiz, existed until about 4000 B.C. when the glacier had finally receded far enough to allow passage for the normal northerly drainage.

Gravel and sand beaches formed during the existence of Glacial Lake Agassiz mark stages in its history. The lake was not static, for as the ice front slowly receded, easterly outlets through Lake of the Woods and the border lake chain were formed, reducing the expanse of melt water and creating new beaches which mark the progressively smaller lake areas. These beaches are known by the names of nearby towns. The Herman is the highest and marks the lake’s greatest extent. The Norcross, Tintah, and Campbell beaches represent successive levels reached while the waters of the lake poured out to the south. Well within these are such others as the McCauleyville, Blanchard, and Gladstone beaches, formed during the final stages of the lake’s existence, when the waters drained to the east and north.

At its maximum the lake extended over much of south-central Canada so that the southern tongue lying within the United States portion of the Red River Valley is only a small part of the total. By arbitrarily restricting this discussion to the region south of the international border we exclude many important archaeological complexes described by Canadian scholars.

EVIDENCE for the earliest inhabitants of the region is obscure. The find which may

---


Modern studies reveal the lake’s story to be a complex one. Geologists have tentatively reconstructed it as follows: After the formation of the Tintah beach an eastern outlet was opened, only to be closed again by a relatively short-lived glacial advance during the Campbell beach period, when the lake once more drained to the south. Following this another eastern outlet was formed through which the lake drained completely. Its bed remained dry for an indeterminate period, when a new advance of the ice sheet produced more melt water and formed so-called Lake Agassiz II, somewhere around 6000 B.C. This second lake drained to the south until the final retreat of the ice sheet opened outlets to the east and eventually to the north. It was during this last period that the lower beach lines were formed. Leverett and Sardeson, *Quaternary Geology of Minnesota*, 137, 139; Elson, in *Science*, 1003.

6 An excellent discussion of the prehistoric archaeology of this more northern region is Richard S. MacNeish, *An Introduction to the Archaeology of Southeast Manitoba* (National Museum of Canada, Bulletins No. 157 — Ottawa, 1958).
have the greatest antiquity, and which some have claimed indicates the presence of man in the terminal Pleistocene, is the famous Minnesota Man. This skeleton was accidentally discovered in the process of highway construction near Pelican Rapids in 1931, but it was removed and the covering earth disturbed before archaeologists had examined the site. Thus questions have always remained as to the importance of the find. Those who claim a Pleistocene age for the skeleton point out that it lay beneath a varved clay lake sediment deposited in the now extinct Glacial Lake Pelican; that it was deeply buried beneath these sediments; and that if it had been a later intruded burial, the varved clay would have shown the disturbance made by excavation of a burial pit. Because of the conditions surrounding its discovery, however, there is no conclusive evidence that the skeleton was not a much later intruded burial, accidentally associated with a glacial lake sediment. It should be noted that the extreme depth of the skeleton below the surface would tend to support those who argue for an earlier age. Native burial pits in cemeteries or burial mounds are seldom found to be deeply intruded into the earth.ª

Two artifacts were discovered with the bones, one an antler object, perforated at the base, and the other a shell pendant, interesting in that it is a marine or saltwater shell, probably from the Gulf of Mexico and perhaps indicative of trade with peoples to the Red River Valley, showing southern arm of Lake Agassiz at highest, or Herman, stage (shaded) and Campbell stage (hatched line).

ª For a discussion of this find see Albert Ernest Jenks, *Pleistocene Man in Minnesota: A Fossil Homo Sapiens* (Minneapolis, 1936).
Neither artifact is diagnostic — that is, both are generalized and cannot be compared typologically for purposes of age determination. Shell pendants are common toward the close of the prepottery Archaic stage, and they also occur in later horizons. Attempts at radiocarbon dating of the find have been inconclusive. An early attempt to extract organic carbon from the antler artifact failed because the artifact is highly mineralized and did not produce the required carbon. A later processing of bone from the actual skeleton proved equally frustrating for two reasons: The skeleton had been carefully cleaned and then treated with a coating of shellac in the laboratory. Shellac is an organic substance and bone is highly porous. As the modern shellac penetrated the bone, it contaminated the older carbon present. Professor Wallace Armstrong of the University of Minnesota carefully prepared the carbon sample from the bone submitted, after treating the bone to remove the shellac. Much of the contaminating shellac must have been removed, but it is impossible to say how much remained to alter the subsequent date. The second reason for lack of acceptance of the radiocarbon date is that the residue carbon tested fell below the minimum amount required by the radiocarbon laboratory for accuracy. The date produced falls within the time period allotted to the Archaic stage, which extended from 5000 B.C. (perhaps earlier) until nearly 1000 B.C. Together with the slim typological evidence from the shell pendant, this may indicate that Minnesota Man is Archaic and not as early as many had hoped.

Other archaeological evidence for the earliest inhabitants of the Lake Agassiz region is slight and with one exception consists of various types of spear points found on the surface of the ground. The exception is a site in Browns Valley found accidentally when crews were removing gravel from a pit on the south edge of the town in 1933. William H. Jensen of Browns Valley noticed a projectile point in a load of gravel spread on the road in front of his grain elevator. Recognizing the possible importance of this finely made point, Jensen went to the gravel pit on the south edge of the town in 1933. William H. Jensen of Browns Valley noticed a projectile point in a load of gravel spread a human burial and associated with it were other points and knives of the same fine workmanship. Fortunately Jensen realized the importance of documenting this find and photographed the burial in place before it was completely removed. He also notified Professor Jenks and allowed the University of Minnesota to study both the points and the skeleton.

The Browns Valley site is important, for the burial pit was intruded into a gravel bar laid down during the Tintah beach stage of Lake Agassiz. Because the pit fill appeared to contain little humus and because the earth over the pit seemed to have been undisturbed, it is felt that the burial was intruded into the gravel after the outlet channel which drained the lake during its Tintah stage had ceased to be active but before there had been much soil accumulation on the gravel bar. As we have no way of determining the rate of soil accumulation on such a surface, we do not know the elapsed time involved, and because there has been no radiocarbon age determination for these remains, we cannot date the site exactly.

While there are no exact typological equivalents for the Browns Valley points and knives, they are like others which have been found on the Plains and grouped into a broad category called parallel flaked points. These are the most recent in a sequence of projectile points associated with a big-game-hunting Paleo-Indian culture which was found over the eastern half of the United States.
OTHER Paleo-Indian sites in the Lake Agassiz basin have not yet been discovered, although characteristic projectile points appear in some of the region’s private collections. Early sites rarely can be located by noting surface conditions. Generally they are deeply buried, and it is only through accidents, such as those which resulted in the Minnesota Man and Browns Valley finds, that we actually see such a site in place. Unfortunately also, these sites are not always reported, which means that their scientific value is lost. In studying the points in private collections, others of Paleo-Indian origin have been noted, and in some cases the collector has had accurate knowledge of the location of his find—not at least the township, and occasionally the exact section and even quarter section. It is not necessary to list all these finds and their possible significance, but one important earlier type should be noted.

This is the kind known technically as Folsom fluted and documented in actual sites elsewhere on the Plains. Folsom points have been dated between 8000 and 6000 B.C. Several private Northwest collections contain examples. Their distribution is interesting, for although they occur with greatest frequency in North Dakota along the James River and on the upper Sheyenne, they have also been found in the Sheyenne delta of Lake Agassiz. This sandy, dunelike area east of Lisbon, North Dakota, was formed as the Sheyenne discharged sediment-laden waters into Lake Agassiz, building up a large delta. Folsom points have been found in the upper delta area, which means that

A four-inch copper spear point in the museum of the Grant County Historical Society at Elbow Lake.

Bison were hunted in this region after the maximum or Herman lake stage, but probably while the diminishing Lake Agassiz II was in existence. Although Folsom fluted points have also been found on the surface in southern and central Minnesota, none have been noted in the areas along the eastern shore of Lake Agassiz.

Early cultural developments reflected in archaeological sites distributed along the eastern margins of Lake Agassiz seem to be associated with a second prepottery cultural stage called the Eastern Archaic. This is characterized by the presence of ground and polished as well as chipped stone work and by local adaptations to specific environmental situations. The projectile points, unlike the Paleo-Indian points, tend to be variable in form and are usually stemmed and notched.

The earliest phases of this stage are vague, but several habitation or camp sites have been located and some have been excavated. As with the earlier Paleo-Indian culture, burial sites are difficult to locate from the surface. Our archaeological survey of the Lake Agassiz basin in the summer of 1959 revealed many instances of gravel operations, particularly along the Campbell beaches, where pit burials had been found and removed, but unfortunately documentation of these sites at the time of their discovery did not take place, and our information consists of after-the-fact reports, sometimes filtered through rather hazy memories.

One interesting aspect of this region's Archaic culture is the frequent occurrence of large copper spear points made of relatively pure native metal. For example, an old copper grave investigated in 1960 on the Campbell beach near Fertile, consisted of a flexed primary burial in a circular pit excavated into the gravel beach. With the skeleton were found two large tanged copper spear points.

Though there is a tendency for accidental finds of copper to occur in the vicinity of the Campbell beaches, this probably does not mean that the Archaic complex is associated with the Campbell stage of the lake. Instead it probably indicates that a natural gravel ridge was a preferred burial zone. This fact, combined with the numerous modern gravel excavations along the Campbell, would account for the frequency of finds.

Carefully documented private collections contain similar copper points and other artifacts from areas well within the Red River Valley proper. One collection from Crookston includes several copper artifacts found in a cultivated field west of the town, and fairly close to the present Red River. This would indicate that the copper is post-Lake Agassiz, and if the radiocarbon dates for similar copper sites in Wisconsin are accurate, Lake Agassiz had ceased to exist, at least in this southern area, sometime before the period of 5000 to 3000 B.C.

An Archaic site of importance, not yet fully studied, was found a few miles south of Roseau on the banks of the Roseau River.

---


Excavations begun in August, 1960, revealed that though apparently lacking copper, it is characterized by a series of concave-based projectile points. It seems to have been a camping area for hunters, as considerable broken and charred animal bone is found throughout the site.

The Archaic stage is of particular importance, for it is very poorly defined in Minnesota, and the Agassiz basin offers a good opportunity to understand it in greater detail. The region is important also, for it seems probable that the postglacial valley itself has always been prairie. In addition, large areas east of the lake margins which are now wooded may have been prairie for much of the time period in which the Archaic culture developed. Understanding the relationship of these cultures to such ecological factors is one of the major goals in the study of the region's archaeology.

WOODLAND culture, which followed the Archaic in this area, differs in that both the making of pottery and the burial of the dead in artificial earth mounds were added to the inventory of culture. Careful survey indicates few locations within the present valley where peoples of the Woodland culture maintained permanent abodes, though many thin, scattered camp sites exist. The larger Woodland habitation sites are found along the margins of the valley—in the morainal and lake country to the east, and in the small river valleys to the west. Burial mounds are numerous, however, and the majority are situated on the surface of the raised gravel beaches which were laid down much earlier.

Though no burial mound radiocarbon dates have yet been obtained from the region, it seems probable that this method of interment spans a two-thousand year period ending sometime in the very early historic era, with the last of the Sioux mound burials. Many of the Red River mounds have been excavated and they show considerable variation in burial mode through time. Mr. Wilford defined an archaeological complex called the Arvilla on the basis of excavations in the 1930s, and in our recent work additional Arvilla burials were encountered. Although the Arvilla complex is in the process of revision—for it is too inclusive and contains complexes from different time horizons—the Haarstad burial mound near New Folden excavated in 1961, would seem to fall within this category.

Like most Arvilla mounds, this one is barely discernible. It is long, low, and linear instead of the usual circular, hemispherical form. Built directly on one of the Campbell strand-line beaches, and in a field cultivated for many years, the mound itself was visible only to one expecting to find it. The fill rose only about six inches above the surface of the beach, and its 250-foot length made it appear to be a natural feature.

Excavation of this long mound revealed two burial pits below the mound fill and excavated deeply into the underlying Campbell gravel. One pit, whose base was nine feet below the surface, had been previously disturbed by amateur excavations and contained no burial or mortuary offerings.

The second, slightly smaller pit contained the skull and larger bones of the extremities of a single human, and associated with the burial were a number of personal belongings. Bone needles, a bone awl, a necklace of perforated eagle talons, another of shells from tiny snails, a piece of red ocher, a lump of green clay, and a single clam shell pendant were clustered near the skull, as if they had been in a bag or container placed with the burial.

The mound fill of this and other Arvilla sites contains no cultural evidence. That is, there are no pottery sherds, projectile points, stone fragments or other debris. Occasionally an Arvilla mound will contain one or several burials in the upper fill, but without exception these are intrusive burials placed in the already existing mounds by a later people.

December 1962

The original mound of this type excavated by Mr. Wilford near Arvilla, North Dakota, showed some of the characteristics described in the Haarstad site. It was also a linear mound built on a gravel beach and burials were in large subsurface pits. The burial method differed, however, in that the skeletons were found in a sitting position with legs drawn up and knees under the chin. One burial was particularly interesting, for it had two large crescent-shaped sheet copper ornaments over the chest. The Arvilla burial pits were very deep and penetrated through the gravel to a pure white sand subsoil. In excavating, the pit outlines were not visible at the top of the subsoil, and it was only after several levels of the white sand had been removed that the burials were exposed.

AN EXAMPLE of the most recent form of burial mound in the valley was excavated at Crookston in 1960. This circular mound on the banks of the Red Lake River had been surveyed by Lewis in 1880. His map of the mound shows it as circular and nearly seven feet high and approximately 120 feet in diameter at that time. When the mound was excavated in 1960 it had been cultivated continuously since Lewis’ time and had we not had the original survey, we could not have located the mound. Its surface contours had disappeared.

Excavation showed a single intrusive secondary burial in the mound fill at one extreme edge. This grave contained no artifacts. The original burials were again in pits excavated into the tough clay subsoil. The central mound pit was oval shaped and contained a mass secondary burial consisting of skulls and larger extremity bones of sixteen individuals. The base of the pit had been covered with a layer of red ocher as had several of the skulls. No grave goods were found. Surrounding this pit was a series of smaller ones spaced at an equal distance from the center. Each of the small pits, with one exception, contained a single secondary burial. The exception proved to be the primary burial of an adult badger. All were without grave goods, though a tubular copper bead was found in the upper fill of one pit. Several of the smaller pits had rock cairns above them, and the large central pit had the charred wood and charcoal remains of a fire that had been built over the top after the burials had been placed and the pit filled in.

See Mr. Wilford’s field notes, on file in the office of the department of anthropology, University of Minnesota.

Winchell, Aborigines, 361.
The traits found in this burial mound, consisting of primary burials in shallow pits, no grave goods, use of red ocher, primary burial of an animal, rock cairns, and fires built over the site, conform to the typical Kathio focus burials found quite commonly in central Minnesota. These burials are attributed to the late prehistoric Sioux whose descendants practiced a primary exposed tree or scaffold burial in historic times.¹⁸

Other mound groups of the late prehistoric period are seen at the southern end of the valley, and are concentrated along the high bluffs overlooking Traverse and Big Stone lakes. Some of these mounds are associated with the Cambria focus, which is characterized by large permanent villages, maize farming, globular, smooth-surfaced pottery, and burials which are primary and extended on the mound floor. The Cambria mounds are circular and conical, and some are flat topped.¹⁹ Peoples of the Cambria focus account for the only sizeable habitation sites on the valley itself during the late prehistoric period. Our recent surveys disclosed that they occupied the Strader site near Wheaton and the village site near Fort Abercrombie, North Dakota. These farming peoples moved north from the Minnesota River and Big Stone Lake and settled along the Red River and some tributaries where timbered bottom lands could be cut and burned to provide suitable garden plots. Having a hoe technology, they could not cope with prairie grasslands, and it was not until white settlers arrived with plows and draft animals that the rich Lake Agassiz lake bed began to reach its full economic potential.

Other habitation and camp sites in the valley during the Woodland stage tend to be quite small and scattered. A small Blackduck focus site on the Snake River west of Warren is typical in that it provided a thin deposit of camp litter including broken pottery, flint and chert implements, and a quantity of bison bone.²⁰ This was probably a hunting camp where people stayed temporarily while on the prairies in search of bison. Slain animals were apparently butchered here and the meat then taken back to a larger village found farther east in the spruce and lake country.

Valley mounds normally show good preservation of bone, probably due to the quantities of limestone in the soil. Those in parts of Minnesota where the soils are acid are often completely devoid of skeletal material. Many mounds in the valley and elsewhere in the state are badly disturbed by rodent burrows, although next to man, the most serious violator of mounds is the badger. The soft mound fill—and in western pit burial mounds, the deep pits themselves—are apparently ideal badger homes. The human skeletal material is frequently chewed, broken, and scattered by these powerful animals. Excavations of mounds by casual collectors or by people who are just curious is perhaps the major destructive force. Though generally well meaning, these people unfortunately destroy scientific evidence, for a badly disturbed mound asks more questions than it answers.

The story outlined here is only the barest sketch of the rich prehistory of the Red River Valley. As archaeological work continues, greater detail will appear and the significance of this area bordering both prairie and timber, plains and lake country, will become more apparent.

¹⁸ For a description of the Kathio focus see Wilford, in American Antiquity, 135; in Minnesota Heritage, 61.
²⁰ For characteristics of the Blackduck focus see Wilford, in American Antiquity, 156; in Minnesota Heritage, 61.

THE DRAWINGS on pages 157 and 162 are by Jeremy G. Welsh. The photograph on page 161 was taken by Eugene D. Becker, and the one opposite is from the files of the department of anthropology, University of Minnesota. The maps are based on Upham Lake Agassiz, plate ix; and Leverett and Sardeson, Quaternary Geology of Minnesota, page 121.