

ARCHEOLOGICAL INVESTIGATIONS IN THE OAHE RESERVOIR

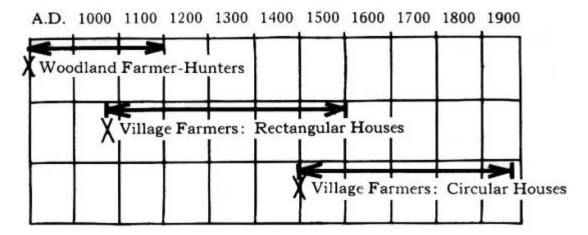
More than 350 archeological sites have been found within the Oahe Reservoir area. A great many of these are of major scientific importance. Some are significant because they represent new and hitherto unknown cultures; others are remarkable examples of their type or are illustrative of certain phases of prehistoric or historic development.

A great many of the sites, villages, burial areas, trading posts and others have been investigated by archeologists of the Smithsonian Institution, universities and other agencies. It has not been possible to excavate at all the locations of interest but enough has been accomplished to give a well-rounded picture of prehistoric life in the area.



PREHISTORIC SITES

The aboriginal cultures of the Oahe Reservoir and immediately adjacent areas are summarized in the following diagram:



The chronology, the beginning of new developments, and the end of old ones, is not exact. In all probability, no sharp lines can be drawn; the new overlaps and mingles with the old. Just as in our own culture, new ideas make themselves felt slowly and only occasionally do changes come abruptly or make themselves felt with such force that they come immediately to our attention.

Each of these cultural phases is documented by the meticulous excavation of several village or burial sites and, in a few cases, a considerable group of sites is involved. It is not practical to describe this work in detail, but a number of sites, each typical of one or another aspect of development, are worthy of comment. WOODLAND FARMER-HUNTERS: Settlements of the earliest farmers are not abundant, and to date have not been particularly informative. In large part this is a result of the considerable depth of wind-blown silts that cover them, making discovery infrequent and excavation extremely difficult. Burials, on the other hand, usually occur within man-made mounds which, although low and eroded, are distinctive features on the otherwise even surfaces of the Missouri River terraces.



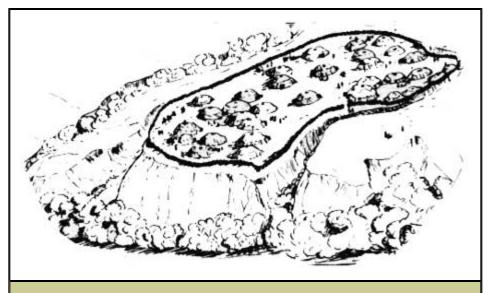
Aerial view of the Sully Site, the largest known earth-lodge village along the Missouri River. The dark

spots are lodge depressions marked by differences in vegetation. The village was unfortified, probably because it was so large that it was thought to be relatively safe from attack. Historic Fort Sully lay upon the high bluffs at the extreme upper left. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

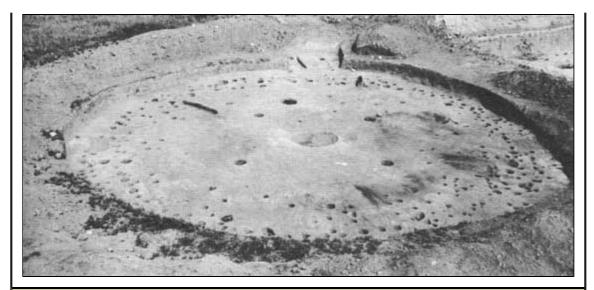


Aerial view of the Buffalo Pasture Site, a late village just above the Oahe Dam. Although a deep moat or ditch is evident, bastions are absent and the village outline is less regular than in earlier periods. The pits within the enclosure are earth-lodge remains excavated by Smithsonian Institution archeologists Photo:

Courtesy of the Missouri Basin Project, Smithsonian Institution



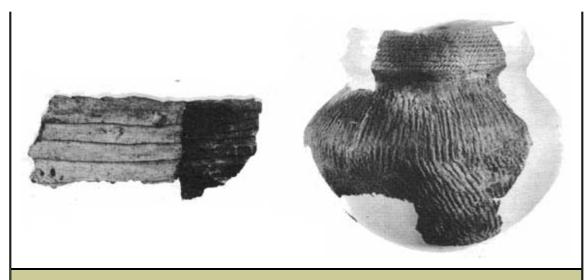
A reconstruction of the Buffalo Pasture Village as it probably appeared during the 18th century. Photo: courtesy of the Missouri Basin Project, Smithsonian Institution



Remains of a typical circular house of the late prehistoric or early historic period. Photo: Courtesy of the Missouri Basin Project. Smithsonian Institution

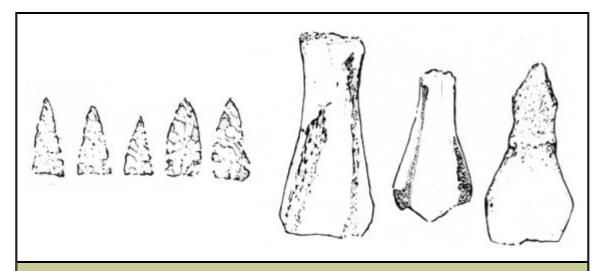


(Left) Reconstructed pottery vessel of the early village tradition. The body has been roughened by means of a cord-wrapped paddle and the "S"-shaped rim is decorated with horizontal cord impressions. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution. (Right) Rim fragment of a pottery vessel made by people of the late long-rectangular house tradition. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution



(*Left*) A reconstructed pottery vessel of the late prehistoric period. The simple-stamped or fluted body and the thickened lip are good time markers for the late village period. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution. (*Right*) Rim fragment of a typical vessel found in an early circular earth lodge. The horizontal grooving of the rim is characteristic. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

One such group of low dome-shaped mounds, the Swift Bird Site; was situated on the west shore of the Missouri midway between the Moreau and the Grand Rivers. During preliminary tests, an extended primary burial—that is, a body interred without previous exposure or without removal of the flesh, was found at the base of one of the mounds. Later excavation exposed a centrally located, sub-mound pit containing the partially articulated remains of at least eight persons. Marine shell beads, a shell pendant and a number of other artifacts were present and one of the burials, that of an infant, was covered with red ochre, a mineral pigment. Charred timbers were found around the opening of the burial pit and others were scattered throughout the fill. Articulated buffalo skeletons, a secondary human burial, and other mammal bones lay above the mound floor.



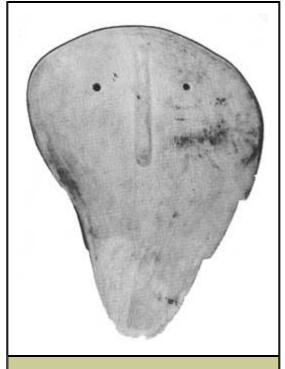
(*Left*) Typical projectile points from the prehistoric villages of the Dakotas. The two examples at right are more characteristic of the early period; the three at left of the late or circular house period. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution. (*Right*) Bison scapula hoes (left), and a digging tool made from the horn core and frontal bone of a bison skull. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

A second mound excavated at the site was essentially similar but lacked the primary burial.

Artifacts from one of several earth lodges in the immediate vicinity show no relationship with the mound; instead, they appear to be representative of the later village-farmers. Similarly, the buffalo skeletons, human burial, and other bones in the mound fill are probably intrusions from a later period. Indeed, such interments were being made in prehistoric mounds well into the historic period.



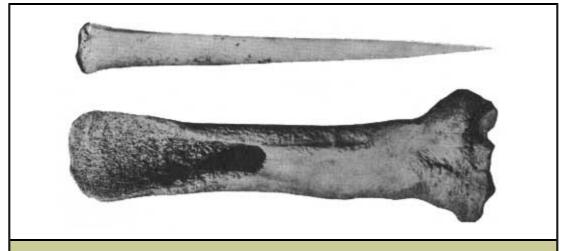
(Left) Stone knives from village sites in South Dakota. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution. (Right) Pipestone (catlinite) plaque found at the Sully Site, South Dakota. The many striations and scratches probably result from use as a tobacco cutting board. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution



A shell gorget or breast ornament in the form of a mask Although possibly made at the Sully village, the shell was imported from the Gulf of Mexico. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

VILLAGE FARMERS: RECTANGULAR HOUSES: Towns of the early villagers are not numerous, perhaps because they formed compact centers of population in contrast to the rambling villages of a later time.

One of the earliest of these villages, and one of the most important excavated in the Oahe Reservoir, is the Dodd Site, which lay in the channel leading to the discharge tunnels of the Oahe Dam. The site actually contained evidence of three distinct occupations by village farmers. The latest falls within the circular house tradition and may well be protohistoric Arikara. The earlier occupations, labeled *Monroe* and *Anderson*, are closely related developments of the rectangular house peoples. They differ somewhat in house type and in the proportions of certain distinctive types of artifacts, but otherwise they are not markedly different.



(*Top*) Bone awl or perforating tool made from the leg bone of a deer or antelope. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution. (*Bottom*) Bone chisel or gouge. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

The village was roughly rectangular in plan, and lay upon a broken section of terrace that stood well above the river. The landward edge was defended by a deep ditch but lacked any evidence of a supporting palisade. Within the village, the long-rectangular houses appear to have been arranged in irregular rows, somewhat like streets in modern towns. In each case the long axis of the house excavation lay roughly in a north-to-south direction, with the entrance always at the south. A step inside the house pit led to an antechamber that projected outward from the wall. Firepits were basin-like and lay on the centerline but were offset toward the south end of the house.

Posts to support the ridge pole were found along the central axis. In a number of instances the postholes outlining the walls were confined to the sides of the structure, suggesting that the ends were open or were built of light materials which left no remains. It is possible that the houses were expandable, utilizing a movable wall to increase space when needed. Other houses contained posts around the entire margin. In two cases, such a house lay beneath a house of the open end type, thus providing evidence of change through time, an inference later substantiated by study of the artifacts associated with the various structures.

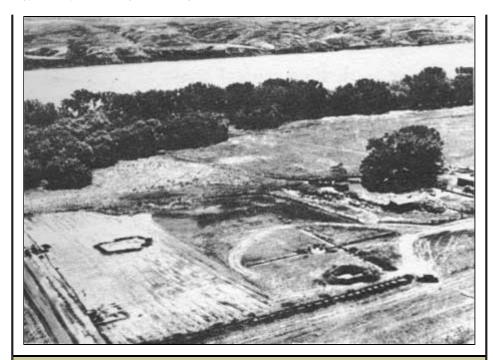


Aerial view (1956) of Fort Manuel, built by Manuel Lisa's trading party in the autumn of 1812 and abandoned the following spring. The timber enclosure is the remnant of a reconstruction made in the 1930's. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

No great time separated the two occupations but exactly when they began, how they developed, or how long they lasted is not known. This much can be said: the early villagers, of which the Monroe and Anderson peoples were an integral part, held the Middle Missouri country during the 1200's, and they or their descendents continued in the area for several hundred years. The village peoples did not remain unchanged during this long period but later representatives seem to have followed most of the traditions of an earlier day.

The people of the Thomas Riggs Site, a village of the early 1500's situated a short distance upstream from Pierre, still lived in long-rectangular houses similar to those of the Anderson peoples. The village plan however was much less regular and fortifications were lacking. The Huff Site in North Dakota was still later in time, but here the village seems to have been more carefully planned, and was surrounded by an elaborate system of fortifications consisting of a ditch, bastions, and palisade.

The artifacts made and used by these later long-rectangular house builders differed little from those used by their ancestors. The principal change occurred in pottery, the cooking and storage vessels that were so important to an agricultural economy. The rim—that is the upper portion of the vessel—is still either "S" shaped or straight-to-flaring in profile, as was characteristic of the earlier period, but there is a marked change in the surface treatment of the vessel. In pottery manufactured by primitive methods, the vessel wall is usually pounded or paddled to compact the clay and thus increase strength. The Monroe and Anderson peoples used a paddle wrapped with twisted fibers, producing a cord-roughened surface in which the impressions of tightly wrapped twine are apparent. Among the Thomas Riggs people and their close relatives, the cord-wrapped paddle was replaced by a grooved paddle which left a deeply fluted impression on the clay. While this change in manufacturing techniques may appear to be unimportant in itself, it is of significance because all later pottery has the fluted or grooved-paddle surface. Thus the Thomas Riggs culture is a transitional one, the old ways continue but there is a first inkling of future developments.



Aerial view of the Smithsonian Institution excavations at Fort Pierre II. A motor road patrol was used to expose the plan of the fort after exploratory excavations had been carried out by hand methods. Photo: Courtesy of the U. S. Army, Corps of Engineers, Omaha District, Oahe area

VILLAGE FARMERS: CIRCULAR HOUSES: During the middle years of the 15th century, peoples from eastern Nebraska began to work their way up the Missouri. Their settlements were not numerous but they were large and well defended. The principal villages of these intruders, such as the Arzberger Site, the Black Partizan Site, Talking Crow, and a few others, are to be found in the Big Bend Reservoir, southeast of Pierre.

Although not numerous, the newcomers had a profound effect upon village life in the Middle Missouri country. They seem to have lived in relatively close contact with the Thomas Riggs people. From this contact, extending over many decades, came a new and markedly different way of life. Many things continued as before, but changes in village plan, a new type of house, and new emphases in pottery and other artifacts, and, we may infer, many new ideas, gave a renewed vigor to village life.

The Potts Site, situated a short distance downstream from Mobridge, is an excellent example of a village representative of the new tradition, The settlement consisted of at least thirty circular earth lodges grouped in an elongated oval area at the edge of the second terrace above the Missouri River. Eleven of the houses, including a large structure that apparently served as a ceremonial center, were surrounded by a defensive ditch and timber stockade. The ditch, ranging from 6 to 8 feet in depth and from 10 to 20 feet in width, was backed by a palisade of closely spaced, upright timbers. A single large loop-bastion projected from one side of the village and there were two fortified gates, each consisting of a pair of small bastions, one on each side of a narrow entrance passage that extended some 10 feet into the village area.

The houses were uniformly circular, with four central posts supporting the roof, widely spaced wall posts, and a short entrance passage.

Pottery found in the village consisted of globular vessels with constricted rims which were decorated with narrow bands of horizontal incisions. In addition, there was a varied collection of stone, bone, and shell objects, including a number of the red stone (catlinite) pipes that

became so characteristic of later periods.

Such rambling villages with fortified strong points are typical of the early part of the circular house period. By the 1600's a number of particularly large villages had developed, lacking, so far as is known, any sort of fortification. Perhaps defenses were not necessary because it was a time of peace, or perhaps such villages were too large for profitable attack.

The Sully Site, the largest single village along the Missouri, was first occupied at this time. The village was 4,000 feet long, 1,500 feet wide, and may have contained as many as 400 houses. These were placed without apparent pattern, but they do not intrude upon a large rectangular area, which must have served as a plaza or city center.

The houses were circular, with entrances oriented toward the southwest. At least two distinct structural patterns were found, suggesting that there had been two periods of occupation. Numerous artifacts were excavated from the houses, from deep storage pits, from an extensive cemetery and from a mantle of debris spread over much of the village. The pottery complex includes rims with "S" shaped, straight and flared profiles, elaborate thickened lips, and a diverse group of decorative treatments. Other groups of artifacts are equally varied. A catlinite plaque probably used for preparing tobacco is particularly noteworthy.

The most recent occupation at Sully Village probably ended about 1750. By this time relatively large fortified villages had again become common. The period of written history was dawning. The la Verendryes had already been in contact with the Mandan and probably with the Arikara. A great many villages are known for this period. The Philip Ranch Site near Pierre, the two Arikara villages (together called the Leavenworth Site) near Mobridge, and the several Mandan villages to the north are outstanding examples marking the last phase of village life within the Oahe country.

HISTORIC SITES

Numerous sites of White origin were known for the Oahe Reservoir area and, like the aboriginal villages, were given systematic attention by archeologists and historians. Records pertaining to the historic sites were compiled from sources of many kinds, including interviews with long-time residents. Such sites included trading posts, military forts, Indian agencies, former towns, and other remains of White residence. Most were relocated by field surveys and archeological excavations designed to provide evidence of the sort not found in the written record were made at selected places.

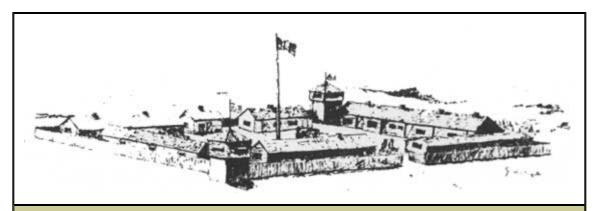
Sites of former trading posts were of special concern inasmuch as such business establishments were often poorly represented in surviving documents, chiefly because they were private ventures for which business records, if ever made, have been lost. Of special note among such sites are those of Fort Manuel, and Fort Pierre Chouteau.

Fort Manuel, used in 1812-13, was located on a prominent terrace overlooking the Missouri, in present Corson County, S. D., near the North Dakota—South Dakota boundary. Trial excavations at this site confirmed the location of the post, and further excavations, supplementing the brief post journal, should reveal details of the plan, construction and use of the station.

Fort Manuel is the oldest trading post in the immediate area. It is of special interest because Sakakawea, guide for Lewis and Clark across the Rockies, is believed to have died there in 1812. Perhaps she was also buried nearby.

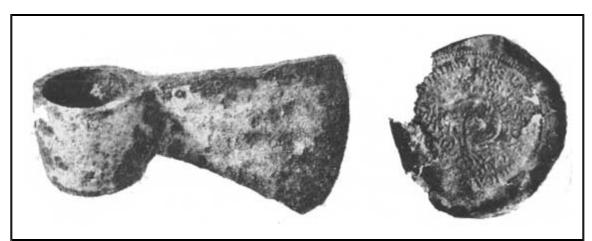
Only twenty years later, Fort Pierre Chouteau, regional headquarters of the most powerful trading firm then operating in the area, was built on the Missouri near the mouth of the Bad

River, but far enough above it to avoid the troublesome spring floods that had damaged its immediate predecessor, Fort Tecumseh. The site of this original Fort Pierre, as it was usually called, is marked today with a large native boulder carrying a bronze tablet telling the story of this most famous single trading post in the reservoir area. From this site, now owned by the State of South Dakota, the visitor can see the Oahe Dam, Fort Pierre, the city that took the full name of the former post, and Pierre, the capital of the state.



Fort Pierre Chouteau, departmental headquarters of P. Chouteau, Jr. & Co., for many years one of the most important trading posts on the Missouri. The artist's reconstruction is based upon a contemporary view and description. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

When in 1855, after many busy years of service, Fort Pierre was taken over from the traders by Gen. William S. Harney as headquarters for his Sioux Expedition, its owners cast about for a new location. Several years passed before they finally rebuilt once more almost within view of the first Port Pierre and even closer to the future dam. The old post by this time had nearly disappeared. Within a few more years, because of a severe decline in the trade resulting from the opening of the Civil War, the campaigns against the Sioux and, perhaps most important, the practical disappearance in the area of the buffalo, upon which the Indian tribes were chiefly dependent, the second Fort Pierre was also abandoned.



(*Left*) Wrought-iron half-ax found at the site of Fort Pierre II. Although poorly balanced for chopping, such tools were staples in the Indian trade. (*Right*) Brass cover for a box of percussion caps found at Fort Pierre II. The legend reads "Goldmark's Patent American Safety Percussion caps, metal lined, D 100 G, Warranted Water Proof." Goldmark of New York was a well-known manufacturer of ammunition components.



(Left) Traders were sometimes fortunate enough to have a few civilized comforts, as this glass seal from a wine bottle attests. It bears the mark of a well-known winery in Medoc, Gironde, France.

(Right) Fragment of a pipe bowl made of glazed clay from Fort Pierre, II.



(Left)Roman Catholic medal of the Order of the Sacred Heart, founded in 1830. The appearance on the reverse of St Patrick, patron of Ireland, suggests that the medal may originally have been given to an Irish communicant who later visited Fort Pierre. Photo: Courtesy of the Missouri Basin Project. Smithsonian Institution. (Right) U S. Army officer's dress hat ornament found at Fort Pierre II. Various volunteer regiments from Wisconsin, Iowa and Nebraska territory visited the post in 1863 during General Sully's campaign against the Sioux. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

Though located below the Oahe Dam, the site of the second Fort Pierre was acquired by the U. S. Army Corps of Engineers for construction purposes. Despite the fact that this site had long been plowed, excavations here added specific new information on the physical appearance of the trading post, supplementing the scanty surviving records. After the location had been confirmed by exploratory excavations, the site was exposed by a skillful machine operator, using a motor road-patrol. The machine work, followed by further excavations by hand, revealed the complete outline of the original timber stockade, surviving remains of which preserved abundant evidence of destruction by fire.

The area enclosed within the stockade was also carefully stripped, exposing the remains of

several of the original fire-damaged buildings. Numerous specimens and objects used during the relatively short life of the post were also found. Among these, none are more interesting than articles used at the time in the Indian trade, though many household objects and bits of equipment used by the traders themselves also afforded information of historical value.



Brass spigot or bibcock of the sort often used with whiskey kegs and vinegar barrels: excavated at the site of Fort Pierre II. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

Some miles above the site of the Oahe Dam, Fort Sully, the major military installation in the area, was also investigated by means of a series of test excavations. The post was begun in 1866 to replace an earlier fort of the same name. The previous post, a short distance downstream from Pierre, was exposed to spring floods and had proven to be unsatisfactory. At the new location good facilities for a steamboat landing were available, as well as ample forage and rough timber needed by the post. Here—within view of the Sully Indian Village Site—Fort Sully grew to be one of the largest military posts in the Dakotas. It was to be used for nearly 30 years, an unusually long occupation for western military installations of the last century.

Though all of the buildings once in use at Fort Sully had been removed following its abandonment in 1894, numerous informative records concerning their construction and varied purposes have been preserved in military archives. There are even several ground plans showing the composition and arrangement of the post at different periods of its career. Several pictures also show something of its appearance while in use. Thus a remarkably full record of the physical history has been preserved, and excavations at the site were therefore confined to verifying contemporary records and to obtaining representative specimens, which would illustrate the furnishings and equipment at this frontier military installation. These objects, many of them well preserved and little damaged, cover many aspects of the history of the fort. Among them are even pieces of printers' type used for printing official post orders.

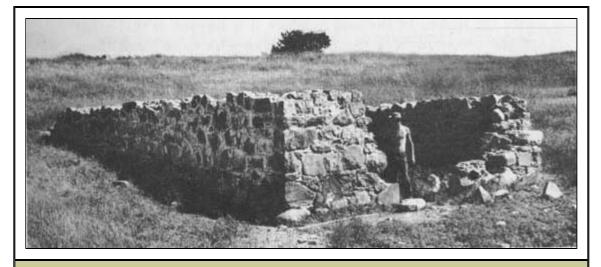


White ironstone saucer with transfer decoration in black, bearing manufacturer's mark of Edward Challinor of present-day Stoke-on-Trent, Staffordshire, England.

Excavated at the site of Fort Pierre II. Photo: Courtesy of the Missouri Basin

Project, Smithsonian Institution

The human story within the Oahe area is one of change—Woodland peoples, followed in turn by village farmers, by equestrian hunters, and finally by a tide of explorers, traders, soldiers and ranchers. Each brought something new and each played a part in the shaping of the region. This has been a continuing process. The construction of Oahe Dam and the creation of its great reservoir is just one more step, bringing new ideas, new technologies and new problems in its turn. Viewed in the context of what has gone before, it marks the beginning of another major phase in the long history of the Plains.



Ruins of the Post chapel (built in 1871) at Fort Sully. Religious services, a post library of some 2,000 volumes, and regimental band concerts (conducted by Achille La Guardia, father of the famous Fiorello, who lived here as a boy) including music by Verdi and Suppe provided relief from the monotony of military service at the post. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution



Excavation at the site of the Headquarters Building, Fort Sully. Photo: Courtesy of the Missouri Basin Project, Smithsonian Institution

Contrasting with the remains of the past cultures, unearthed during its construction, is Oahe Dam, built by the U. S. Army, Corps of Engineers, six miles upstream from Pierre. Oahe is the largest rolled earth dam in the world. Ninety million cubic yards of earth comprise its 242-foot high, 9,300-foot long embankment. Its 250-mile long reservoir can hold 23,000,000 acre-feet of water, and its seven power units have a generating capacity of 595,000 kilowatts.

Of special interest, when viewing Oahe Dam in connection with the history of the area in which it is located, is that many of the descendants of the Indian tribes who once lived there helped to build the dam.



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