

INITIAL MIDDLE MISSOURI GARDENERS: GREAT OASIS

The influences that were in part responsible for the development of the Woodland tradition in South Dakota and throughout North America became more intense by 800 A.D. Central American cultures began a new florescence that spread their influence over wide areas. These Central American civilizations grew both in population and in the complexity of their cultures. They developed elaborate religious forms, material culture, and social organizations. Many of the groups, like those from the huge urban site of Teotihuacan, became involved in cycles of warfare and conquest. Some of the high civilizations may actually have sent colonists into surrounding regions to consolidate their territories and to gain new holdings. These activities had an immediate impact on the Gulf Coast and Southwest parts of North America.

These groups established settlements in areas already occupied by native Woodland tradition peoples. In many instances, the intrusion of these so-called Mississippian tradition peoples was accomplished peaceably, but many of these new settlements were fortified, indicating some conflict. The settlements were very different from the earlier Woodland settlements. Many might accurately be called cities. In some cases their populations were in the thousands, with the Cahokia settlement perhaps as large as thirty thousand people. These settlements had ceremonial complexes like their counterparts in Mexico. These complexes consisted of earthen mounds shaped like flat-topped pyramids which were the bases for temples. Burial mounds were also constructed and even more elaborate grave goods were developed than had been used by the Adena and Hopewell peoples.

These settlements spread their influence by both trade and missionary activities all over the eastern part of North America. The most important early influence on South Dakota came from the major Mississippian settlement, Cahokia, located on the American Bottoms area where the Missouri and Mississippi Rivers flow together near present-day St. Louis. The influence of Cahokia spread into the Plains by several routes: along the Missouri River, overland westward from the Mississippi, and particularly along the Des Moines River which flows across Iowa from southwest Minnesota to its mouth just north of Cahokia.

These large concentrations of Mississippian peoples required huge quantities of food, quantities which could be provided only with heavy reliance on domesticated plants like corn, beans and squash. When the Mississippian groups transmitted their influence to outlying regions, their reliance on growing crops supported the emphasis which many Woodland groups were already beginning to place on crops. The ongoing fluctuations in Plains climate also supported this emphasis on crops. What climatologists call

the NeoAtlantic climatic episode began about 800 A.D. with more rainfall and cooler temperatures than contemporary climate. This climate was ideal for growing crops and allowed the spread of the horticulturally based cultural complexes as far west as the foothills of the Rocky Mountains.

Plains archaeologists do not label these horticultural complexes "Mississippian tradition" as in the East, but rather the Plains Village tradition. This is because the Plains cultures were not nearly so elaborate as the Mississippian groups but the Plains cultures did see an increase in population, the development of larger fortified villages, a focus on growing crops as a mainstay of life, and a change in material culture. The first of these Plains Village tradition groups present in South Dakota were the Initial Middle Missouri cultures. This cultural complex was comprised of a variety of different local groups originally, but evolved during a four hundred year period into a generalized complex.

The first of the Initial Middle Missouri groups were people of the Great Oasis culture, which was one of the more important local groups. While this complex was thought for a time to be restricted to the areas at the headwaters of the Des Moines River in the Iowa Great Lakes area and southwestern Minnesota, the complex was much more widely spread. The Low and Big Slough sites near Great Oasis Lake, after which the complex is named, are located in southwestern Minnesota, and actually are only a local variety of the complex. Other Great Oasis sites have been found as far west as the Missouri in central South Dakota and as far east and south as the modern city of Des Moines, Iowa. Isolated finds of Great Oasis materials have been found in eastern and southwestern Iowa and northeastern South Dakota.

Most of the knowledge about the life of Great Oasis peoples comes from sites along the Big Sioux in western Iowa and eastern South Dakota. Most Great Oasis sites were built on low ground, usually near the floodplain on a terrace of a nearby stream or river. Houses were long, rectangular structures which had been built into a pit that was shallow, perhaps no more than one and a half feet deep. Vertical posts on the outside walls were interwoven with sticks and plastered over with mud, a construction technique known as "wattle and daub." Burned thatch found at the Broken Kettle West site along the Big Sioux River in Plymouth County, Iowa, suggests that roofs were covered with grass thatch, shaped into a rounded dome. Entryways extended from the narrow ends of the structures. Remains of similar lodges have been found at the Heath site in Lincoln County, South Dakota. Inside each house was a central fireplace and many cache pits were dug into the ground to store food or

Ground stone tools were also common. The shaft abraders were made from sandstone; besides smoothing arrowshafts, the rough stone was also used for grinding the sharp points on bone awls or perforators. Small celts or adzes for working wood were made. Many of these are extremely well fashioned and have highly polished bits which may be from heavy use. Only a few milling stones have been found which is surprising if both wild and domesticated plant seeds were important to the diet.

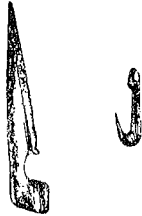


Figure 3. Great Oasis bone tools. Bone awl or perforator on left and fishhook on right.

Bone tools were varied. A number of different types of awls have been found which were probably used either for perforating hides so that they could be fashioned into clothing or for incising designs on pottery. Fish hooks may have been made but are much more common in later Initial Middle Missouri tradition sites. Sickles were made from the jawbones of deer and may have been used for harvesting. As already noted, scapulae hoes were made but were rare.

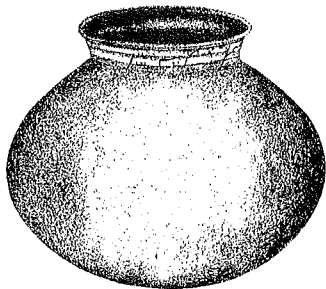


Figure 4. A reconstructed Great Oasis jar.

Pottery made by the Great Oasis peoples was distinctive and differed dramatically from the Woodland ceramics in quality of construction but it was derived from Woodland styles. The cone-shaped Woodland pots became more globular or rounded and were tempered with much finer grit. This allowed much thinner walls. The pottery was made in much the same way as earlier forms, having been pounded with a paddle wrapped with cord. The cord marks were later smoothed over before the decoration was applied. Decoration was done primarily by incising designs in the wet clay. The most common decorations were straight lines but different formats also appear including bands of horizontal lines around the rims, incised triangles with opposite "points" either filled with lines or vacant, "ticking" or small notches around the lip, "turkey track or running deer" motifs, and cross-hatching. Besides the decoration, the form of the rim itself was unique. The rim was usually out-flaring but had sides that were parallel with an extremely flat lip. The flat lip and horizontal line motif is most common on the

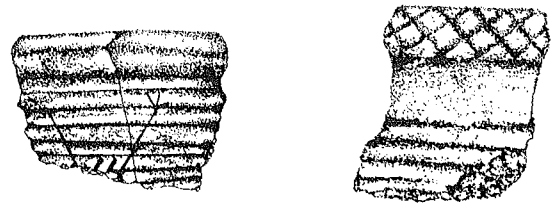


Figure 5. Varieties of Great Oasis rimsherds like those found in Iowa, Minnesota and South Dakota.

Great Oasis Incised type. Other types include low, wedge-shaped lip rims, with and without tool impressions on the lip, and a rim with a "channel" shaped like the letter "S." Most Great Oasis pottery has forms that are much like the forms made by other Initial Middle Missouri groups; generally, the pottery has the appearance of being extraordinarily well made.

Archaeologists know little of the social and religious life of the people. Because they were living in more settled villages and perhaps raising crops, the family structure may have shifted from groups that focused on the male line or patriline to a focus on the female or matriline. Extended family groups would then have consisted of a woman, her husband, her daughters and their husbands, and any children born to the daughters. Religious life, too, probably changed. While there is little evidence of Great Oasis burials from South Dakota, a Great Oasis cemetery was found near west Des Moines, Iowa. This cemetery included 18 individuals buried in a flexed position and had a variety of grave goods, including eight cross-shaped objects made of clam shell. The bison may also have been important to the peoples' religion. At the Heath site, a bison skull was found in a very shallow depression near the entry of the lodge and may have been an "altar" similar to those found in later Plains Village lodges.

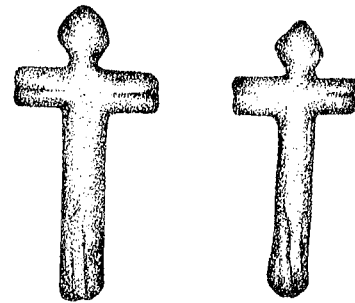


Figure 6. Crosses from west Des Moines, Iowa, Great Oasis cemetery (after Alex, 1981).

The Great Oasis villagers present archaeologists with several puzzling behaviors. They overlap several of the other later Initial Middle Missouri groups in time, the dates for the culture ranging from 800 A.D. to 1200 A.D. with some archaeologists suggesting that the complex may still have existed as late as 1350 A.D. The other complexes of the Initial Middle Missouri tradition start about 1000 A.D. and last until the 14th Century. Also intriguing is the fact that many of these villages which overlap in time with other Initial Middle Missouri groups are located very close in space to the other complexes. The village at Broken Kettle West is literally across a small stream from a Mill Creek

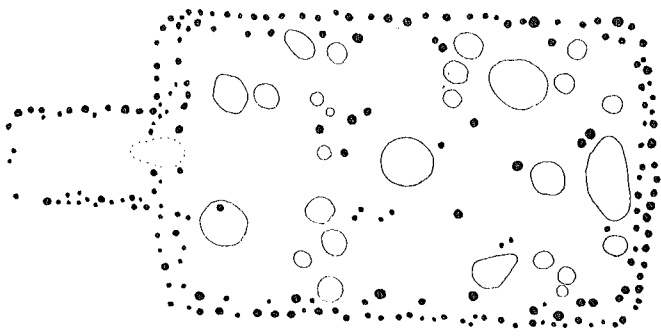
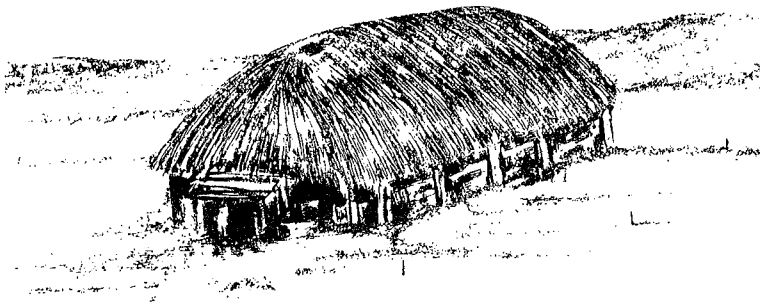


Figure 1. Floor plan of a Great Oasis lodge like that found at the Heath site (after Alex, 1981) and a reconstruction of the lodge. Dark circles are post holes and open circles are cache pits. Shaded area is a fire pit.



other supplies. When empty, these pits were filled with trash; broken pottery, animal bones, plant remains, flakes from stone tool manufacture and other garbage. Analysis of these remains in the cache pits and on the floor of the lodges has allowed archaeologists to reconstruct the lifeways of the Great Oasis peoples.

In some cache pits, like those at the Heath site, bones from larger animals have been recovered. These include the remains of bison, elk, and deer. Smaller animals were also used and include rabbits, gophers, mice and moles. Other animals used by the people include a variety of birds, fish, turtles, frogs and snakes which were concentrated near water like the Big Sioux River and small lakes and ponds. While some villages seem to have concentrated on deer and elk, the bison seems to have been the most important animal at the Heath site. Evidence from South Dakota sites regarding the use of plants is scanty, but evidence found in Iowa sites suggests that Great Oasis peoples probably gathered seeds from wild plants such as the goosefoot, smartweed, clover, hackweed, pondweeds and nuts. Cultivated crops have also been found and indicate that the people grew corn, sunflowers, and squash. However, some archaeologists suggest that the Great Oasis peoples grew very few crops and may have traded for those materials. This idea is based on the fact that few tools for cultivating crops, like hoes made of bison scapulae, antler rakes, or similar objects, have been found. One of the few such tools, a well used scapula hoe, was found at the Heath site and may indicate that crops were indeed being raised by the Great Oasis peoples themselves.

The animal bones found at Great Oasis may also indicate that the people lived in large villages for most of the year but

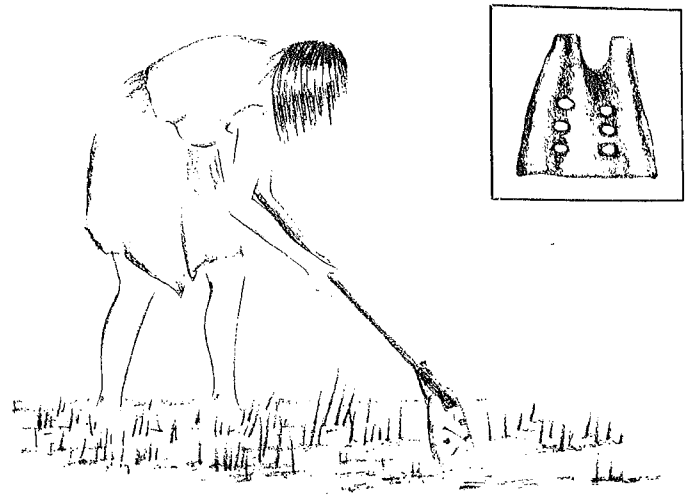


Figure 2. On the right is the bison scapula hoe from the Heath site. Note the notch cut in the top and the holes drilled in the blade. These probably aided in hafting to a handle as in the reconstruction on the right.

during the summer may have divided into smaller groups to hunt bison or to establish garden plots away from the village. The best evidence for this comes from two Iowa sites near the South Dakota border along the Big Sioux River. The Broken Kettle West site, for example, is the large village. The animal bones suggest that the site was inhabited through the fall, winter and spring months. The seasonal growth rings on fish scales indicate a fall occupation; a deer skull, with its antlers shed, points to a winter residence, and the medullary bone of birds which appears only during the spring reproductive months demonstrates a spring occupation. By contrast, the Williams site is much smaller and has very shallow deposits of archaeological remains which probably show short term occupation. The site had a large amount of seeds from domesticated plants like corn which indicates the importance of the site as a gardening encampment which may have been occupied from late spring planting through the harvest.

The stone tools made and used by Great Oasis peoples were even more variable than those made by the earlier Woodland groups. The bow and arrow by this time was certainly the most commonly used hunting implement. Arrow shafts were usually made of woods like Osage Orange or Ash and were smoothed by pairs of shaft abraders made of sandstone and fletched with feathers. The projectile points were formed into small triangles with notches on the sides. At some sites, however, the larger corner-notched points of the Woodland tradition were still used. Chipped stone tools for the preparation of animal hides were also made; these include knives, sidescrapers, and small "thumbnail" scrapers which could either be held between the fingers or attached to an L-shaped segment of antler. Most of the chipped stone tools were made from cherts or flints found in the glacially deposited rocks of the area. Larger tools were frequently made from the grey green Bijou Hills quartzite from Gregory County. The translucent brown Knife River flint was either picked up locally, traded for, or quarried in North Dakota and was used for points and smaller tools.

(another Initial Middle Missouri complex) site; the same is the case in several other Iowa localities and at the Brandon and Swanson sites in South Dakota. Some have suggested that the presence of corn kernels but no corn cobs or gardening implements may be accounted for by the idea that the Great Oasis peoples may have been corn consumers and not corn growers. In other words, they traded other products for food produced in the neighboring villages. Archaeologists have also suggested that the Great Oasis peoples had been the first to feel the cultural influences from the south and east but were actually Woodland peoples who remained very conservative in their reaction to the cultural changes going on around them. They participated in trade and incorporated exotic trade goods like *Anculosa* shell beads from the Ohio and Illinois River valleys and conch from the Gulf Coast into their cultural inventory. Yet, they retained much of their cultural core intact. They may well have been much like some of the communal societies such as the present day Hutterites who maintain their ways by choice, even though they live surrounded by a more rapidly changing society and deal with those groups on a daily basis.

In South Dakota, Great Oasis is still a very puzzling cultural complex. The archaeological information about the culture is scanty, especially the kind of information necessary to demonstrate that the hypotheses proposed above about the complex are valid. Archaeologists do know that the environment was not now the only force on the Plains with which people had to cope: they also had to consider the influences of other groups and the impact of changes that inter-societal contact inevitably brings.

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