

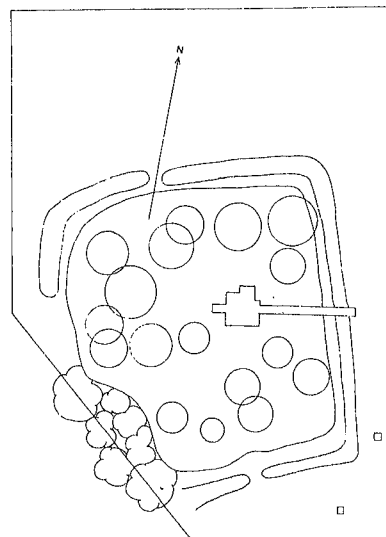
# INITIAL MIDDLE MISSOURI GARDENERS: INNOVATIONS AND MIGRATIONS

The heavy influence from the Mississippian traditions of the south and east were responsible for the development of a great variety of cultures across the northeastern Plains region. Approximately 100 years after the Great Oasis culture developed, that is, around 1000 A.D., another complex also associated with the Initial Middle Missouri variant developed in approximately the same area as the Great Oasis cultures. In northwestern Iowa the groups have been labeled the Mill Creek culture. In eastern South Dakota the groups have frequently been called the Over focus, but that term no longer sees much usage in archaeology. For the sake of simplicity, Mill Creek and the Over focus cultures are grouped in the general classification of Initial Middle Missouri variant.

While archaeologists are virtually certain that the origin of the Great Oasis culture stems from heavy Mississippian influence on local Woodland peoples, archaeologists are less certain about the origins of the other Initial Middle Missouri groups. Some archaeologists believe that the areas along the Big Sioux and Little Sioux River valleys in western Iowa and eastern South Dakota were colonized directly by groups migrating from the great Mississippian centers at Aztalan in southern Wisconsin or from Cahokia in southern Illinois. Other archaeologists believe that the origins of Mill Creek are similar to those of Great Oasis, that is, the local populations received very heavy Mississippian influence and changed their culture rapidly in a short period of time.

Nearly 30 Initial Middle Missouri variant sites are known in South Dakota. These sites generally are distributed along the Big Sioux River, the James River, the Missouri River valley, and in two instances, in the Black Hills region. The Initial Middle Missouri culture spread rapidly from its birthplace in southwestern Minnesota, northwestern Iowa and eastern South Dakota onto the Plains river drainage systems. Two factors may have influenced the rapid spread of Initial Middle Missouri culture. The climate around the time period of Initial Middle Missouri origin was extremely beneficial for the growth of crops like corn, beans, and squash. The climate was more moist and cooler than modern climate, and was ideal for the growth of maize. As well, the Initial Middle Missouri peoples may have been feeling the pressure of newly developing Mississippian-based cultures from the east and south. Primarily, the group that pushed westward was a group called Oneota. This pressure was obvious at some of the Mill Creek sites because the sites were heavily fortified. The best example of Mill Creek fortifications appears at the Wittrock site in Buena Vista County, Iowa.

The settlement pattern of the Initial Middle Missouri variant peoples is similar throughout the entire distribution of the sites in South Dakota. The pattern shows a much



*Fig. 1 Map of Wittrock Mill Creek village site. Shaded areas are part of the fortification. Circles are lodge depressions. Rectangular areas are excavations.*

more intensive occupation of sites than is known for the Great Oasis cultures. In many Initial Middle Missouri villages there has been reuse of the space developed for each village site. Lodges were frequently rebuilt on the same spot or overlapped old lodges. The result was that a midden, or mound, of village debris developed on the site. These mounds of village debris are especially common where sites were fortified.

Village locations were selected, at least in part, for defensive reasons. Many Initial Middle Missouri villages were located on points or promontories above rivers or streams. In many instances the steep bluff walls provided protection on the river side of the village. Across the open, or land-ward, side of the village, fortification ditches were frequently constructed. Some fortification ditches were rather deep and steep-sided, with palisade lines built along the inside of the ditch. These palisade lines were constructed of poles sunk in the ground interwoven with brush, hides and similar debris.

The best example of an Initial Middle Missouri village in eastern South Dakota is the Brandon site which is situated on a flat-topped ridge 85 feet above the Big Sioux River in Minnehaha County. The site was a semi-permanent village of rectangular lodges loosely organized and fortified only on the exposed side of the village away from the river. The fortification ditch at Brandon was rather short in length and shallow in depth when it was originally constructed. Other sites in South Dakota, like the Mitchell site in Davison County, were much more elaborately fortified and had, at

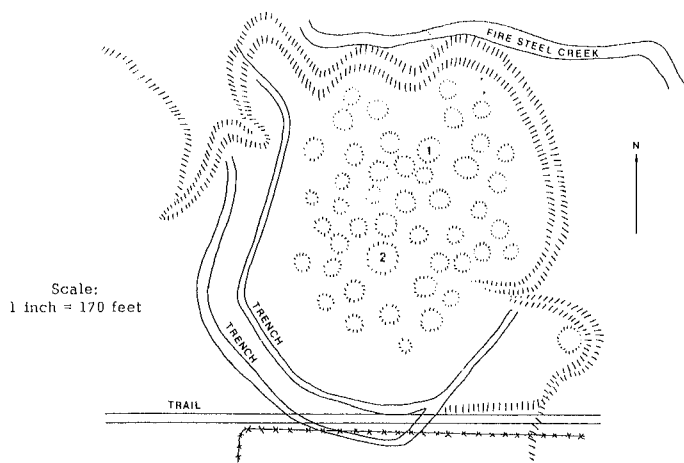


Fig. 2 Map of Mitchell village site showing fortifications and lodge depressions. Mitchell site had two ditches to fortify it (After Over, 1922).

Mitchell, at least two ditches. Both ditches may not have been used at the same time, but may have been the result of an expanding population in the village. The village size, in other words, may have been enlarged and a new ditch constructed to protect the new lodges. At the Smiley-Evans site near Belle Fourche, an elaborate fortification system appears to have been used. The fortification ditch itself was relatively simple but archaeological evidence of a gate structure has been discovered which has not been found at any other Initial Middle Missouri site.

The village sizes and plans show considerable variation. In most instances the sites were limited to 20 or 30 houses but in some cases, as at the Goering site, outside the modern city of Mitchell, remnants of approximately 90 lodges have been counted. Most houses were arranged side by side in more or less regular rows. The distance between the rows of houses and between the houses themselves varied but was directly related to the overall size of the village and whether or not the village was fortified. Houses tended to be closer together in large, fortified communities. In a few Initial Middle Missouri villages, the village had a plaza, or at least a central open space, which was perhaps used for ceremonial purposes. In some sites archaeological evidence of drying racks between the houses has been discovered.

The houses of the Initial Middle Missouri variant were very similar to those of the Great Oasis culture. They were long rectangular structures about one and one half times longer than their width but, occasionally, over twice the width. The average house size seems to have been around 35 feet by 20 feet but, in some cases, houses that may have had special ceremonial or communal functions were longer than 60 feet. The houses were usually dug down into the ground 3 or 4 feet and floors were usually the tramped bottom of the house pit although in some instances clay floors had been made. Raised earthen benches have also been found in a few houses. These were usually at one or both ends of the floor and occasionally around all four sides of the central area. The fireplace of the house was usually a shallow, unlined hole in the floor located near the entrance. In some instances, as at the Mitchell site, firepits were lined with clay or mud and were raised slightly above the level of the floor. The

superstructure of the lodge consisted of a framework of heavy posts. The walls and roof of the house were made of small poles. Large numbers of posts formed each of the long walls of the house which suggests that the side walls were load-bearing walls. The post-hole pattern of the lodges suggests the use of very heavy ridge poles; parallel stringers on either side of the ridge pole were used in many of the larger houses. The entrance of most lodges was from the south end of the house and consisted of a roofed, narrow, walled antechamber which frequently was more than eight feet long beyond the end of the house. Earthen steps or ramps led from the entrance into the house pit. As in the Great Oasis culture, cache pits were used to store food and later filled with garbage. Many of the pits were only shallow pockets but others were straight sided and were either circular or irregular in outline. Some cache pits are bell-shaped or undercut, with the maximum diameter at the bottom and the minimum diameter of the pit at the top.

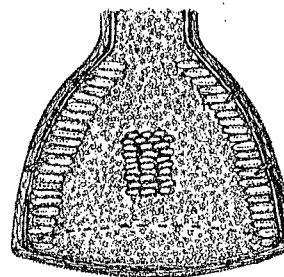


Fig. 3 Bell-shaped cache pits for storing grain. These varied in size and shape. Corn on ears and shelled was stored with other vegetables. When emptied, the pits were filled with garbage.

The material culture of the Initial Middle Missouri peoples of South Dakota was even more complex than the material of their Great Oasis counterparts. The Great Oasis groups appear to have been relatively conservative in the amount of influence and material cultural innovations they would accept from the Mississippian groups. The pottery of the Initial Middle Missouri groups was less well made than the ceramics of the Great Oasis groups but was more elaborate in many ways. The Mill Creek peoples of northwestern Iowa made elaborate forms like bowls with tab handles in effigy forms. They also made a variety of both flared and wedge-lipped rims on their pots. The cord-roughening that was so prevalent in the Woodland and Great Oasis pots became less important and smoothed-over cord-roughening and completely smooth vessel exteriors became predominant. In some cases, as in the Mitchell and Chamberlain wares, the Initial Middle Missouri peoples decorated the shoulders of the pottery with incised lines and, in some cases, trailed lines. On the whole, pottery was made in much the same way as many of the other groups from South Dakota's past. Clay was tempered with a coarse grit which may have been obtained from breaking down chunks of granite by heating and cooling; the vessels were then formed from the lumps of clay and beaten with paddles.

The bone tool industry was much more complex among the South Dakota Initial Middle Missouri variant peoples



Fig. 4 Mitchell, Chamberlain and Foreman Pottery.

than it was with their Great Oasis counterparts. Tools of bone and antler have often been recovered from sites and include such things as scapula hoes, horn scoops, picks for tilling the soil, fleshers, spatulas or "quill flatteners" which also may have been used as clay modeling tools, knife handles, awls, punches, "squash knives," and large hooked scapula knives. Fish hooks were also made and are quite common at the Mitchell site. They are unbarbed and were used for taking fish from nearby Firesteel Creek or the James River. Stone tools are also quite common, both of the chipped and ground-stone variety. Projectile points were small, triangular and light weight. They were either notched or unnotched with convex edges and bases of varied styles. Also found were chipped stone knives and drills, snubbed-nosed scrapers, and a variety of flakes used for

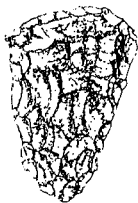


Fig. 5 Snub nosed end scraper for working hides.

many different purposes. Large, pecked, grooved mauls were made. Pecked diorite and granite celts and adzes were formed. Some stone axes were carved and sandstone arrow shaft abraders shaped like canoes were used. Also made were flat, oval "nut stones." Stone "blanks," lumps of granite and nodules of brown chalcedony, commonly known

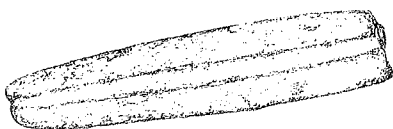
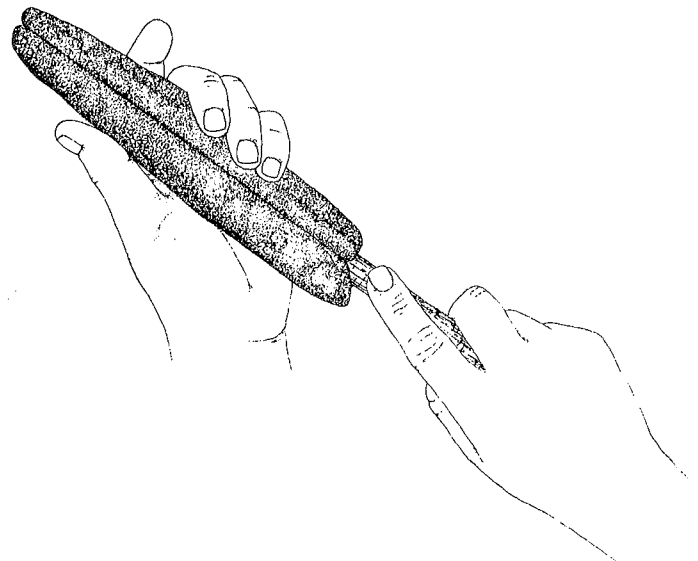


Fig. 6 "Boat stone" shaft abraders were made of sandstone and used in pairs (right) to smooth arrow shafts.

as Knife River flint, were often found grouped together in caches within the lodges. These stones may have been pieces of raw material from which scrapers, points and other objects were fashioned. There seems to be an absence of stone grinding tools which suggests that wood may have been used for processing corn and other vegetal materials. No wooden artifacts have been recovered but evidence suggests that wood was utilized because stone tools to fell trees and fashion wooden artifacts were abundant.

Unfortunately, the wealth of materials obtained from the early villages of the Initial Middle Missouri variant do not tell much of village social organization and customs. To build large semi-permanent villages with well planned defensive works indicates high degrees of organization and cooperation were present because they would have been necessary to build these structures. The precise form of social organization among the Initial Middle Missouri villagers is unknown, but some have suggested that it may be much like that of their historic descendants, the Mandan. This means that the culture would have been matrilineal, that is, that descent was focused on the female line. The Initial Middle Missouri homes would have been organized around a female, her spouse, her daughters, their spouses, and any children they had. The households may have controlled the local gardens through the land use concept of usufruct, which means that as a lodge or female clan needed the land, more land would be given; if the number of people decreased in a lodge or clan, the amount of land allocated would be returned to a common pool.

Possible indications of ceremonial and religious ritual activity appear in some of the Initial Middle Missouri sites. At the Swanson site, small caches of bison and deer hooves and knuckle bones were found in the lodges. As well, a buffalo skull which was perhaps an altar, was placed near the wall of the house. Nearby were elaborate atlatl weights which possibly had ritualistic use or meaning. Human burials from Initial Middle Missouri sites are rare. A few human bones



have been recovered in cache pits and inside lodges. One burial containing an infant and a child was found on the river edge near the Swanson site. That most burials were made at some distance from the villages, or perhaps that bodies were placed on scaffolds and left to deflesh is possible. The bones would then have been picked up at a later date and buried in mounds or left to be scattered by animals on the surface beneath the scaffolds. Mounds containing multiple burials have been excavated near the Mitchell site but there are very few artifacts associated with the burials and that prevents archaeologists from drawing any direct relationship between the mounds and the village site. Archaeologists must say then that the specific social and religious customs of the Initial Middle Missouri variant peoples are unknown.

The Initial Middle Missouri period for both the Great Oasis and its cultural counterparts was a time period of dramatic change. The cultures were in the process of adjusting to new and profound Mississippian influences. They were pressured by other Mississippian groups like the Oneota as well and apparently some cultural conflict between groups developed. Further, the groups had to make cultural adjustments from living in a prairie environment in the eastern part of South Dakota to a plains environment along the Missouri River and into the Black Hills region. Because they grew crops they were largely limited to permanent water sources like river drainage systems. They did make the adaptation to hunting bison that many Plains groups of a later period also made. They may well have developed seasonal bison hunts that were prominent among the village agricultural tribes along the Missouri River at the time of European contact. One thing is quite apparent among the Initial Middle Missouri village groups; these groups were feeling intense pressure from other populations, many of them very similar to their own culture. Adjustments to the social environment were perhaps as demanding or even more demanding than adjustments to the natural environment. Adaptation to these new social pressures would

be especially important after 1150 A.D. when the Central Plains tradition peoples from the south moved into the Missouri River trench in South Dakota.

Larry J. Zimmerman

Illustrations by Marianne Schuld

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