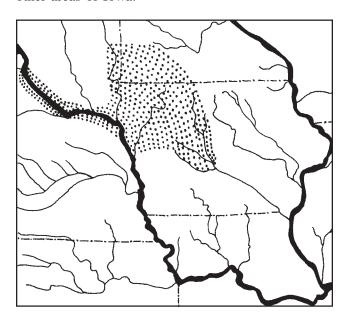
OFFICE OF THE STATE ARCHAEOLOGIST EDUCATIONAL SERIES 4

GREAT OASIS

DURING THE LATE Woodland period, western and central Iowa were inhabited by groups of people whose culture archaeologists identify as "Great Oasis." Great Oasis remains were first discovered in southwestern Minnesota at the Low Village and Big Slough sites. We now know that the distribution of Great Oasis materials is quite extensive throughout the eastern periphery of the Plains. In addition to southwestern Minnesota, sites are found in eastern Nebraska, in Iowa in the vicinity of the Big and Little Sioux rivers and the central Des Moines River drainage, and along the Missouri River as far west as Chamberlain, South Dakota. Isolated finds of Great Oasis artifacts in Iowa have been reported from the Coralville Reservoir and from the Glenwood vicinity in the southwestern part of the state. Archaeologists believe that environmental conditions or pressure from resident Late Woodland populations may have prevented Great Oasis people from expanding into other areas of Iowa.



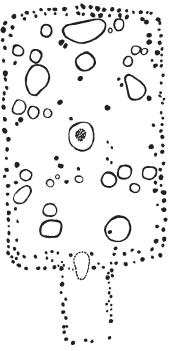
Great Oasis sites are distributed throughout northwestern and central Iowa and into surrounding areas

Great Oasis is a late Woodland culture with characteristics of early members of the Plains Village pattern including the Mill Creek sites of northwestern Iowa, villages along the James River in South Dakota, and Cambria, a site in southern Minnesota. Great Oasis is

thought to have developed from a Woodland culture base by AD 900. Archaeologists believe that Great Oasis was ancestral to cultures like Mill Creek. Great Oasis culture underwent a dramatic change shortly after AD1050 as a result of social and political changes and external influences from Mississippian sites such as Cahokia in the American Bottom of Illinois.

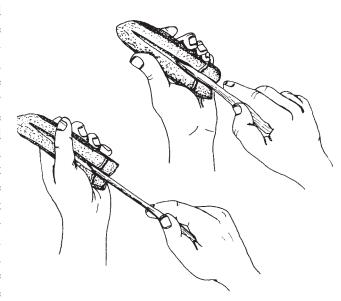
The distribution of known sites indicates that Great Oasis people built their villages on low ground, usually on terraces above the floodplain of a nearby river or stream. A number of these sites in Iowa have been excavated including the Broken Kettle West site and the Williams site in Plymouth County, the Cowan site in Woodbury County, the Beals site in Cherokee County, the Gypsum Quarry site in Webster County, portions of the Hubby, Meehan-Schell and Old Moser sites in Boone County, and the Maxwell and Kuehn sites in Dallas County. These excavations provide some idea of the type of houses and internal characteristics of Great Oasis villages. Houses, like the four uncovered at the Broken Kettle West site, were long rectangular structures which had been built into a shallow pit about one and a half feet deep. House walls were constructed of vertical posts interwoven with sticks and plastered with mud. This is sometimes referred to as "wattle and daub" construction. A covered entryway extended outward from the narrow end of the house. The style of roof is somewhat conjectural but may have been of grass thatching as were later Mill Creek houses. Evidence for similar houses also exists at the Maxwell and Kuehn sites. At the Cowan site, wall post holes and large chunks of burned daub were found but no actual floor plan.

The floor plan of a Great Oasis structure



Within each of the structures, a central fireplace and many cache pits had been constructed. Cache pits were designed to store food and other items. Once their original contents had spoiled or were disturbed by rodents, these pits were filled with earth and refuse from the living area. When archaeologists excavate them they find an abundance of broken pottery, discarded stone and bone tools, chipped stone flakes, and animal and plant remains. It is possible to analyze these remains in order to retrieve information about the diet of Great Oasis people and to discern the time of year that the house was occupied. At one of the Broken Kettle West houses, cache pits contained the remains of large mammals such as deer, elk, bison, wolf, and coyote, as well as smaller animals like rabbit, gopher, mouse, mole, frog, turtle, snake, and a variety of birds and fish. From the quantity of deer and elk bone, it appeared that these were the two most important animals hunted. In fact, evidence from other Great Oasis sites in Iowa suggests that these may have been more important than bison. Seeds of corn, sunflower, and squash or gourd indicated the garden crops cultivated, while the remains of goosefoot, pigweed, smartweed, hackberry, and walnut pointed to types of wild plants collected. At the Cowan site, an entire cache pit of burned corn kernels and cobs attests to the importance of this crop.

It has been suggested that Great Oasis people lived in villages during certain times of the year, but left for communal bison hunts or split into smaller groups to establish garden plots at other locations. Broken Kettle West may be an example of one of the larger, more permanent Great Oasis villages. Here the animal remains from cache pits suggested that the site was

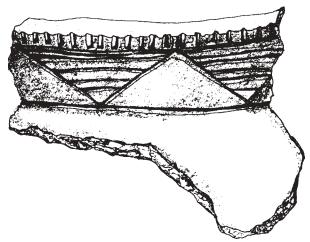


A sandstone abrader for smoothing and rounding objects of bone and wood

occupied throughout the fall, winter, and spring months. An analysis of the seasonal growth rings on fish scales pointed to the fall occupation; a deer skull with antlers shed suggested residence during the winter months; and a bird's medullary bone, which appears only during the

An artist's reconstruction of a Great Oasis house blends architectural knowledge with archaeological evidence. Post mold patterns in the floor of the structure indicate the general shape and layout of the wall plan. Pieces of wall daub and burned thatching found in the excavation can suggest the materials used in wall and roof construction.

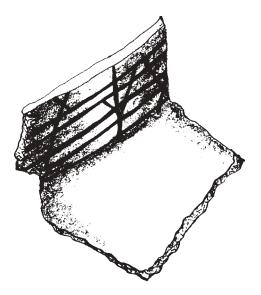




Great Oasis Incised pottery

reproductive period, was evidence that the inhabitants had occupied the site during the spring. The Williams site, in contrast, may help to explain the whereabouts of Great Oasis people during the summer. Here, the small size of the site and its shallow deposits suggested a short-term occupation. The abundance of corn and other seeds indicated that gardening was an important activity to the residents. It may be that the Williams site represents one of the smaller summer encampments of Great Oasis people.

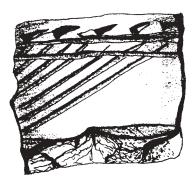
Stone tools used by Great Oasis people are similar to those of other Plains cultures although certain anomalies exist. The bow and arrow, which had replaced the spear and dart used by earlier groups, is represented by numerous small, triangular side-notched projectile points.



The so-called "Turkey Tracks" and "Running Deer" are two motifs, shared by Great Oasis and Mill Creek ceramics.

Many of the chipped stone tools are made of materials that must have been traded in from sources at some distance from the site. Bijou Hills quartzite and Knife River flint from the Dakotas and Hixton silicified sandstone from Wisconsin have all been found in Great Oasis sites in Iowa.

Although the remains of domesticated plants in sites indicate that Great Oasis people were horticulturists, there are few examples of manos, metates, or scapula hoes (made from the shoulder blade of elk or bison). These are common agricultural implements in other Plains sites but also are missing from Late Woodland sites elsewhere. It may be that Great Oasis people used other types of tools for gardening.

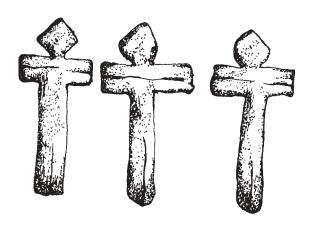


Great Oasis Incised is characterized by a thin, straight, parallel-sided rim and flattened lip.

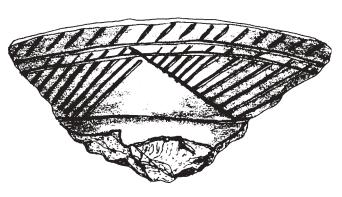
Perhaps the most distinctive of Great Oasis artifacts are ceramics. These are grit-tempered, globularshaped jars with rounded bases. The surface of these jars often shows evidence of having been pounded into shape with a cord-wrapped paddle. The cord marks left on the surface of the pot were usually smoothed over before decoration was applied. This process of smoothing over the cordmarking is a typical Woodland trait and is another characteristic that suggests the derivation of Great Oasis from a Woodland culture base. The most common ceramic type, Great Oasis High Rim, is characterized by a thin, straight, parallel-sided rim that usually has a flattened lip. Rim decoration was applied by incising, usually rectilinear motifs, against a background of parallel horizontal lines. A low, wedge-shaped lip decorated with tool impressions characterizes another ceramic type, common at sites in the Des Moines River Valley. A third type having an S-shaped rim has also been identified.

Although human bone is sometimes found in village refuse, and occasional burials occur within the village itself, most Great Oasis cemeteries appear to be located on hills or bluff tops away from the living area.

It appears that Great Oasis people practiced a number of different burial customs including both interment (sometimes in a mound) and cremation. Both single and multiple burials have been found. We know of two extensive Great Oasis cemeteries, one in the city of Des Moines and another in Dallas County south of Redfield. At each site, close to 100 individuals were uncovered. Many occurred in a flexed position (knees drawn up to their chest), and were accompanied by a variety of grave items including whole pots and hundreds of small Leptoxis shell beads. Leptoxis is a freshwater snail found in the streams and rivers of the eastern U.S. (It was formerly classified by biologists as Anculosa.) Crossshaped artifacts manufactured from clamshell also occurred at the West Des Moines cemetery, but are unknown from Great Oasis sites elsewhere.



Shell crosses found at the West Des Moines Burial site



Open triangle design on Great Oasis Incised

The exact relationship between Great Oasis people and contemporary groups is not precisely known. There is evidence, however, that trade was established over long distances. The *Leptoxis* shell beads from the Ohio and Arkansas rivers confirm the presence of contacts to the south and east. Stone acquired for chipped stone tools derives from across Iowa and from locations outside the state to the west and north. We do not know what products Great Oasis people exchanged for these materials. Some archaeologists have suggested that foodstuffs, such as meat, or skins may have been traded to outside groups. Unfortunately these are highly perishable items which rarely survive in the archaeological record.

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