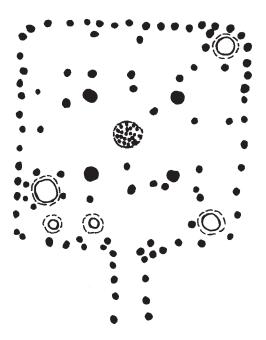
OFFICE OF THE STATE ARCHAEOLOGIST EDUCATIONAL SERIES 6

GLENWOOD CULTURE

BY THE TIME THAT Mill Creek people occupied northwestern Iowa, earthlodge settlements of the Nebraska phase were being established along the dramatic loess bluffs paralleling the Missouri River in southwestern Iowa and southeastern Nebraska. The Nebraska phase sites in Iowa are called the Glenwood Culture. A series of contemporary and related sites referred to as the Upper Republican phase extends from northern Kansas across Nebraska and west to Colorado. The Upper Republican and Nebraska phases, along with several other phases, belong to what archaeologists have named the Central Plains tradition. Cultures within the Central Plains tradition share a similar economy, type of earthlodge houses, pottery styles, and specific types of stone tools.

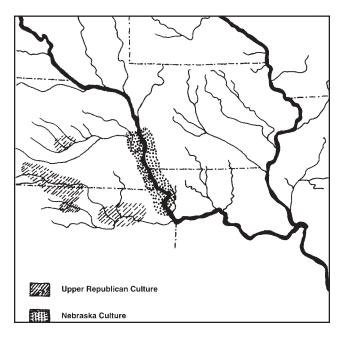


Floor plan of a Nebraska Culture house.

Glenwood culture sites are concentrated in Mills County along the ridges and bluffs and in the stream valleys of the Missouri River, Keg Creek, and Pony Creek. These locations would have been particularly favorable to horticultural groups tilling the fertile, alluvial bottomland along the river. They would have assured the presence not only of workable soil, but also of a readily available supply of water and wood for fuel and house construction.

Approximately 240 Nebraska phase lodges are known in the Glenwood area. The excavation of these structures indicates that the most typical house built by Glenwood people had a square shape with rounded corners and a covered entryway that commonly faced south. These earthlodges were constructed within a semi-subterranean pit, and had walls of

closely spaced vertical posts and four conical roof supports spaced around a central firepit. In some of the Glenwood houses, a wide bench was built around the central living area



Distribution of Upper Republican and Nebraska Cultures.

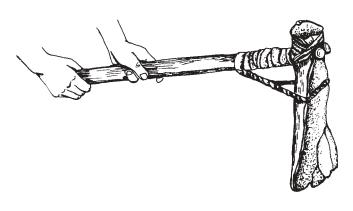
Like their contemporary Plains neighbors, Glenwood people dug subterranean storage pits in the floor of their houses in order to store food and other items. These "cache pits" range in shape from shallow depressions to deep, straight-walled or bell-shaped pits.

The majority of Glenwood houses occur as individual homesteads or in small clusters. None of these sites appear to have been fortified, and from this we assume that Glenwood people coexisted peacefully with their neighbors. Although few foreign items appear in Glenwood sites, the occasional occurrence of shell-tempered Oneota pottery suggests interaction with Oneota groups. Certain features of early Glenwood pottery also bear similarities to ceramics of Mississippian groups in the area around the townsite of Cahokia in Illinois.



Artist's reconstruction of a Nebraska Culture house. This structure measured about 30 feet across.

There is no question that Glenwood people were farmers. The location of sites near easily tillable land and the charred remains of corn, beans, sunflowers, and squash in Glenwood cache pits point to horticulture as an important part of the economy. In addition, the stone and bone artifacts found in excavation are commonly those used in farming. Bone hoes were made of the scapula (shoulder blade) of bison and elk. These hoes have notched edges that probably made it easier to haft them to handles made from sturdy wooden shafts. Freshwater mussel shells were used for hoes and also as corn-shellers. Stone tools, such as ground stone manos, were used to grind corn and other seeds.



The scapula hoe used by Glenwood people.

In addition to their farming activities, Glenwood people hunted a variety of animals. Sites are located in areas surrounded by tall grass prairie and prairie woodlands which must have provided a rich habitat for a wide range of animal species. While we know that Nebraska culture groups further to the west depended on bison as a food source, bison appear to have been only a minor part of the diet for people living at Glenwood. The nearby woodlands would have been an ideal habitat for deer, a solitary forest animal, and elk, and the quantity of deer and elk bone found in Glenwood houses suggests that both of these were frequently sought. Singletoggle-head harpoons have been found at Nebraska culture sites, and as with the Ice Age reindeer hunters of Europe, these may have been used in hunting deer, although most archaeologists believe they were probably fishing implements. The most common hunting weapon appears to have been the bow and arrow, using small, sometimes multiple, notched projectile points or larger triangular points. Other animals favored by Glenwood people include squirrel, rabbit, and smaller



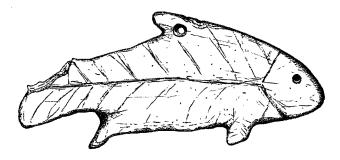
An eyed bone needle.



A bone shaft straightener.

mammals. Wild fowl were killed, and large river fish, such as catfish and buffalo suckers, were caught using bone hooks. Fish-shaped lures or decoys made of mussel shell represent another fishing device. The river also provided an abundant source of flesh-water mussels used for tools and food.

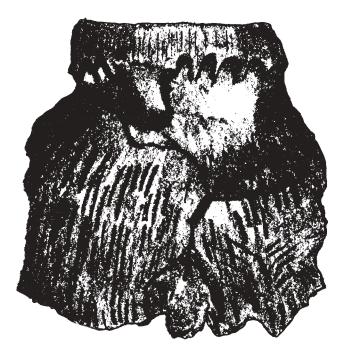
A number of different tools seem to have been used in the processing of meat and dressing of hides. These include oval, triangular, and diamond-shaped stone knives, snubnosed end scrapers and side scrapers, drills, bone awls, and hide grainers. In making a hide grainer, the ball joint on the long bone of a young animal was removed, and the tough, textured side was rubbed against the hide to roughen it. Eyed bone needles and thread, probably of sinew, were then used to sew skins together to make clothing and other items. Glenwood people had other sorts of artifacts, such as antler knapping tools, hammerstones, anvils, whetstones for sharpening blades, and shaft straighteners or wrenches to make their tools and keep them in working order. A shaft straightener was an implement used to straighten arrow shafts. It was made of bone or antler and was perforated with a hole. A wooden arrow shaft was inserted in the holes of two shaft straighteners which were then twisted and turned in opposing directions to straighten the shaft.



Fish lure or decoy made of clamshell.

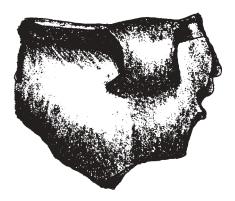
Ceramics are the feature which most distinguishes Nebraska culture sites from Upper Republican sites further west and north. In general, vessels were globular shaped with a constricted neck, varied rim form, rounded shoulder, and round bottom. Vessel walls were formed by modeling the clay into the desired shape and thinned by beating with a cord-wrapped paddle. Cord marks were often smoothed over before the pot was fired. Several different ceramic types have been distinguished on the basis of different rim forms and decoration. Collared vessels had a narrow band or collar of clay added to the rim. An uncollared vessel form also exists. Decoration was usually confined to the rim or collar and commonly, con-

sisted of pinching (similar to the pinch marks on a piecrust) or incising, usually of rectilinear motifs. Sometimes a narrow row of indentations was made on the lip or bottom of the collar with a finger or blunted tool. It appears that in earlier Nebraska Culture sites there are more ceramic characteristics suggestive of contact with Mississippian sites while later ceramics show influences from Oneota.

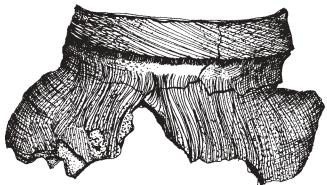


A Beckman decorated rim.

Loop handles, perforated lugs (probably to hang the vessel), and effigies, sometimes in animal forms, are additional features present on pottery at Nebraska Culture sites. Ceramic artifacts other than the larger utilitarian pots include pipes, beads, scoops, and miniature vessels, some probably the work of children in imitation of their parents. While grit temper of crushed granite or a mixture of sand and granite was most frequently added to the clay, a high percentage of shell temper at some sites may be another indication of contact with Mississippian groups.



McVey strap handle.



Collared rims are one feature of some Glenwood pottery.

Throughout their existence in Iowa, Glenwood sites present a picture of peaceful, well-adjusted, horticultural communities. A large suite of radiocarbon dates from Glenwood sites including Little Pony, Steinheimer, Stonebrook, and Wall Ridge, indicate that Glenwood people remained in southwestern Iowa until the early fourteenth century. After this time we find no further trace of them in the state. A changing climate, repeated crop failure, or pressure from other groups may have brought about their emigration from Iowa. After this time it seems likely that they moved westward and northward, possibly incorporating some of the traditions of people with whom they came in contact. It is likely that the descendants of the people at Glenwood come into history as Caddoan-speaking groups such as the Arikara and the Pawnee, first encountered by French explorers in South and North Dakota.

Lynn Marie Alex, 2002 Illustrations by Mary Slattery Layout by Valerie Johnson



Effigy pipe from a Glenwood site.



The material culture of late prehistoric groups in Iowa is characterized by a series of tiny projectile points which are true arrowheads. These include simple triangular points, double-notched points with a side notch on each edge, and multiple-notched point with side notches on each edge and a notch in the base.