

Native Americans A.D. 1000-1400

Nebraska State Historical Society



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Explore Nebraska Archeology, No. 2

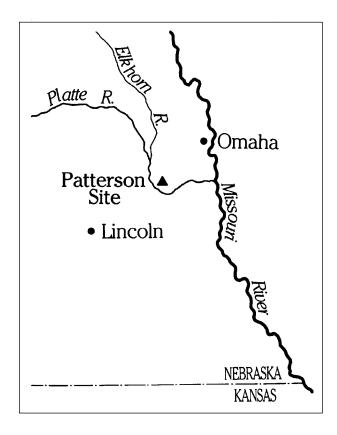
A series on Nebraska Archeology produced jointly by the State Historic Preservation Office and the Archeology Division of the Nebraska State Historical Society.

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Illustrations courtesy of the Nebraska Game and Parks Commission and the Nebraska State Historical Society. 1998

Native Americans of the Lower Platte Valley A.D. 1000–1400

As motorists today travel along Interstate 80, and cross the Platte River, most do not realize that people lived here for thousands of years before there was a Nebraska or a United States. Since the early 1980s, the Nebraska Department of Roads, the Nebraska State Historical Society, and the Federal Highway Administration, have teamed up to explore some villages of these "ancient Nebraskans." The most significant investigations have been at the Patterson site, an almost 1,000-year-old Indian village. The archeological remnants of dwellings were found on either side of highway N-31 several miles south of Interstate 80.



Patterson is affiliated with the Central Plains tradition—the term used by archeologists to define the vast prehistoric Native American population that lived in Nebraska from A.D. 1000 to 1400. The Central Plains tradition comprises several geographic groups and the one Patterson is attributed to is the Nebraska culture. These people built and lived in permanent earth houses, grew crops, and hunted a variety of wild animals. Their artifacts were beautifully crafted and included many tools, pottery vessels, and ornaments. Farmsteads and hamlets of the culture are scattered along river and stream valleys throughout the eastern two-thirds of Nebraska and portions of adjoining states. Their lifestyle was vastly different from the horse riding, nomadic Plains Indian buffalo hunters of the nineteenth century.

Though people lived in the valleys along the Platte River for thousands of years, the Patterson site people were among the first to grow gardens and they appear to be quite distinct from any people who lived here before. Whether these newcomers immigrated, or whether their cultures evolved in place from earlier ones is unknown. It is clear that they came upon the scene quite suddenly about A.D. 1000.

What have we learned of these ancient people? Where did they come from? How did they live? Where did they go? These are some of the questions being answered by investigations at Patterson and similar archeological explorations.

Past Environment of the Platte River Valley

Patterson is in the "South Bend locality," which is a reference to a huge bend in the lower Platte River valley. This large meander starts near Leshara and continues downstream beyond Louisville. It is a distinct environmental unit characterized by natural beauty and abundant natural resources.



Patterson site on top of bluff.

Timber was an important resource for the people at Patterson and other Central Plains tradition hamlets scattered around the lower Platte Valley. Wood was used for house construction, fuel, and for crafting tools and weapons. Ravines and ridges today have an oak-hickory forest. Cottonwood, willow, and other trees occur in the Platte River floodplain. The local environment, however, was different 1,000 years ago during the Central Plains tradition occupation. The Patterson area had significantly less timber than today. The Platte River, situated 1.5 miles from the Patterson site, was bordered by moderate amounts of timber as were small tributary valleys.

The Central Plains tradition occurred during at least two significant climate changes. The magnitude, timing, and character of environmental shifts and the human responses are unclear. A warm, moist period lasting from A.D. 300 to 1200 was followed by a drought period that caused a gradual northward movement of Cen-

tral Plains tradition people and the eventual abandonment of Nebraska around A.D. 1400. The evidence used to understand these episodes includes the habitat of animals and plants present in the archeological record, animal bone chemistry reflecting diet, and evidence of significant flooding and other environmental events through the study of soils.

Settlement Pattern

A typical location for Central Plains tradition settlements was on a bluff overlooking a stream or river. Village sites normally are found at the junction of rivers and smaller streams. Rarely are sites located along river bluffs away from stream confluences. It is unclear why Central Plains people favored smaller stream valleys over main stem rivers, but it is a pattern evident throughout the tradition.

While the Platte proper offered access to fertile gardening land and other resources, settlement would have been threatened by spring flooding. The South Bend locality is subject to spring floods as snow melts and ice jams develop. Heavy rains in the early summer also result in significant inundation. Building a village sufficiently close to Platte River water left residents in harm's way. The wise alternative was to locate the settlement along the more steeply incised tributary valleys. There people could be close to water, but occupy homes on bluffs and ridges above flood prone areas. Small Central Plains tradition population groups required limited space for streamside horticulture. Many places along the tributary valleys offered adequate gardening space.

The South Bend locality held a number of advantages for Central Plains tradition settlers. The valley resembles a vast funnel fifteen miles wide at Fremont and narrowing to one mile at the apex of the "South Bend" and from that point to

the mouth of the Platte. The narrow portion of the valley created a natural resource "packing" situation with dense animal populations that were easier to capture. The wider portion of the floodplain, however, was better for procurement of waterfowl and timber, as well as providing vantage points for game observation. The horticultural potential was virtually limitless.

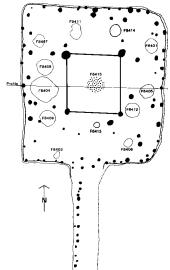


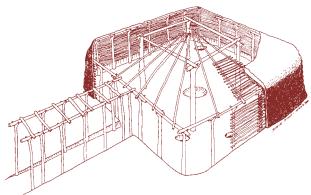
Central Plains tradition village and garden. Painting by Linda Meigs.

Abundant stone, including both Dakota Formation sandstone and flint-bearing Pennsylvanian Formation limestone, was readily available. The Patterson site lies two miles up a tributary whose mouth is just at the juncture between the wide and narrow portions of the Platte River floodplain. Patterson is situated at an optimum location for access to all available ecosystems and resources.

Architecture

Three houses and two trash piles (or middens) were excavated at Patterson. Two of the houses were large (850 ft² and 1050 ft²) and the third was





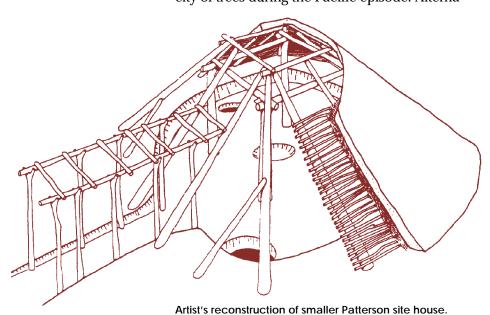
Floor plan and artist's reconstruction of larger Patterson site house. Floor plan by Dell Darling, drawing by Steve Ryan.

considerably smaller (200 ft²). These houses are mere ruins, indicated by subtle changes in soil color and texture, with occasional charred posts, rafter sections, and other evidence. The inhabitants dug basement-like foundations one to three feet deep, above which they built a substantial timber framework. Intervening spaces were filled with sticks, and both inside and outside were plastered with mud. The larger homes were nearly square with long entry passages emerging from the center of the southern wall. The small house was more irregularly-shaped, but also featured a long entry passage. Large storage chambers were dug into the house floors. These were cylindrical or bell-shaped holes, which were between two and five feet below the floor. They were dug to store corn and other food, but when damaged by rodents or water seepage, were filled with trash. More people lived in the larger houses, but the small house contained as many stone tools, pottery vessels, and other ancient artifacts as the other two houses combined.

One large house dated to A.D. 1050–1100, the small house to A.D. 1250–1280, and the other large house to about A.D. 1290–1320. These occupation dates are based on radiocarbon dating and types of ceramic decoration. The

site was less of a "village" than a sequence of solitary houses separated by decades—even a century—over a two-hundred-year period.

Timber growth is directly related to precipitation and depth of groundwater, which fluctuate with climatic episodes. The earliest Patterson dwelling was built during the warm and moist Neo-Atlantic climatic episode when trees may have been relatively abundant in the immediate area. The later houses were occupied when moisture was less reliable and temperatures perhaps cooler during the so-called Pacific episode. Architectural variation at Patterson may provide evidence of response to climatic fluctuation. The early house had more and heavier deep posts than the later dwellings. More than seventy-five small trees were required to build this structure based on the number of post molds. The later houses each possessed less than thirty posts. Felling trees with stone axes and transporting them was a considerable undertaking made more taxing by the scarcity of trees during the Pacific episode. Alterna-



Drawing by Dell Darling.

tives to densely spaced post arrangements may have been sought. A small, steep-sloping roof, like that hypothesized for the small structure, would require substantially fewer trees. The sloping roof/wall would not necessarily have to be constructed using straight trunks. Builders could have fared well with more crooked limbs, thus requiring fewer trees.

Stone Age Implements

In addition to plentiful game and superb conditions for growing gardens, the Platte River provided abundant stone for making tools of all varieties. These people lived a "stone-age" way of life, and easily accessible stone for tools was a major attraction for settlement. From the stone they made tips for their arrows, knives to cut meat and plants, scrapers to help finish deer and elk hides for clothing and other purposes, and drills to perforate bone and antler. Abrading tools made from local sandstone smoothed and finished bone, antler, and wooden tools. Bone and antler tools included sharp awls to pierce hides and sew clothing, tools for digging in the soil, and even fishhooks. Bone ornaments include bell-like cones made from deer toe bones, and tube-shaped beads cut from small animal bones.

Nearly three hundred pottery vessels, some unbroken, were found on the floors and in trash deposits near the houses. Many of these could be partially reconstructed and several were complete. Some had no decoration and others featured rather elaborate designs formed by incising the clay while still moist and soft. Vessels included large cooking and storage pots, as well as smaller bowls, and even one ceramic bottle. Ceramic decoration is quite useful to archeologists attempting to assign dates to an occupation. The frequency of decoration increases through time. The type of decoration, such as horizontal lines, cross-hatching, or lip-notching,

Ceramic cooking pot.



Carved bone fishhooks.

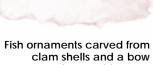
can reveal connections with other groups throughout the region.

There is some evidence that Patterson site residents engaged in exchange or trade. Pieces of galena (a soft lead ore from the eastern United States) and red pipestone (from Minnesota) were recovered from the houses. Some pottery designs suggest long-distance contacts. It is possible the people traded their pottery, or perhaps some of the sandstone abrading tools they possessed in such abundance, for exotic items.

Prehistoric Economics

Bison meat and corn are considered the food staples of Central Plains Native Americans. Archeologists at Patterson and other sites in the region pass excavated dirt through fine mesh screens. This technique allows for the retrieval of thousands of small plant and animal remains, which significantly alters our understanding of the prehistoric economy.

Such fine screen recovery at Patterson allowed for the identification of sixty-three species of animals and twenty-two species of plants. Although some species may be present as a result of natural processes, most are thought to be food items. The most common animals include river clam, catfish or bullhead, sunfish, gar, prairie chicken, cottontail, gopher, and deer. Plants commonly found at Patterson include little barley grass, walnuts, sunflowers, and corn. Patterson inhabitants exploited all environments of the lower Platte valley and enjoyed a diverse diet of meat, fish, fowl, gathered plant foods, and garden produce. They may also have left the area periodically for bison hunting expeditions to the west. Little bison bone was actually found at Patterson and it was mostly in the form of tools. But if the people hunted bison very far away they may have brought home only boned meat and the few bones from which they liked to make tools.



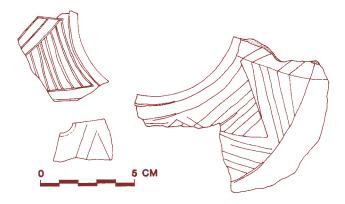
clam shells and a bow guard carved from an elk antler.

Interaction with Other Groups

From east to west in Nebraska there are successive environments. Each environment was the homeland to a people related to those in eastern Nebraska. The Missouri River valley between Kansas, South Dakota, and the Platte River valley was the heart of the Nebraska culture, as has been sketched above. From Lincoln to Grand Island, and mainly to the south of Interstate 80 and well into Kansas, was the homeland of a group archeologists have named Smoky Hill (for a river in Kansas). These people were perhaps the most closely related to the eastern Nebraska populations.

The region from Grand Island to about Lexington, though predominantly north of Interstate 80, was the homeland of the Itskari, or Loup River, people. The Loup River houses resembled the smaller type of houses in eastern Nebraska. Loup River groups seem to have been in contact with almost everyone, and to have borrowed something from almost all of their contemporaries, including people living far north near modern Pierre, South Dakota. They lived in the Loup River valley, where stone to make tools was not abundant. They traveled far to the northwest into Wyoming and South Dakota as well as to southern and eastern Nebraska to obtain the stone they needed.

From Grand Island to about North Platte, well south of Interstate 80, and centered on the Republican River, were the Upper Republican people. Upper Republican culture resembled others much less, leading to the suspicion that this may be the oldest and most "original" of these types of gardening people, perhaps dating to A.D. 1000 or before. In contrast to the habitat of Loup River people, the Republican Valley has abundant stone resources. Upper Republican house ruins often contain hundreds of pounds of flint debris. Upper Republicans seem



Geometric designs on pottery.

to have been very conservative in the sense that they did not borrow new ideas or techniques into their culture. If they were truly the most ancient of these groups, there may not have been others with whom to exchange ideas.

By the mid-1300s, Central Plains tradition people began moving to the north, where they came into conflict with another culture. This latter culture, indigenous to South Dakota and North Dakota, is termed the Middle Missouri tradition. Climatic deterioration and resource depletion led to the northward expansion of Central Plains people. A cluster of Central Plains tradition sites in northeast Nebraska dates to the final century of the culture's existence and is referred to as the St. Helena culture.

From the vicinity of North Platte and to the west into eastern Wyoming and northeast Colorado as well, archeologists have found only hunting camp sites—no villages of permanent houses. Whether these sites were western bison hunting camps of the people living farther to the east, or whether these camps were left by more permanent residents, who traded with people farther east, are unresolved questions.

The similarities among sites in various areas are greater than the minor differences. In part this

is believed to be because of common origins. Therefore archeologists have concluded that the ancient peoples in all areas of Nebraska were in communication during this relatively brief (200 to 300-year) period.

Disappearance of a Culture

What had been a successful adaptation apparently failed. The onset of a "Little Ice Age" around A.D. 1300 caused environmental deterioration. Between A.D. 1300 and 1400, sites similar to those once in Nebraska appear in South Dakota. The movement into South Dakota resulted in deadly conflicts between people as revealed by heavily fortified villages and skeletal remains with frequent battle-related traumas. Soon after A.D. 1400 there is no archeological evidence for Central Plains people. New groups immigrated from the Midwest, perhaps ancestral to the Omaha, Ponca. and Oto. Around A.D. 1600 the Pawnee immigrated to Nebraska. By the early 1700s, the first colonial Europeans began to explore Nebraska. A century later, Lewis and Clark explored the area for the new United States.

Making connections between modern "tribes" and ancient cultures is difficult. The people who lived at Patterson and similar sites may be ancestors of the Pawnee, Oto, Omaha, or other tribes, but scientific evidence is lacking. The modern tribes do have rich oral traditions about their origins, but it is difficult to assign time and geography to these accounts. We do not know what languages the Central Plains people spoke nor do we have any written accounts, pictures, or maps revealing who they may have been. There are some similarities in artifacts and architecture between the Central Plains tradition and the modern tribes, but there are also some differences. While it is tempting to attribute the Central Plains tradition to certain modern tribes, the culture could simply have became "extinct."

Archeological Preservation and Opportunities for Involvement

Over 10,000 years of human occupation in Nebraska occurred prior to written records, map making, and photography. The only way to tell the stories of ancient peoples, such as those who lived at the Patterson site, is through archeological remains. Archeological sites are fragile and non-renewable resources. Modern land use practices and urban expansion are taking an alarming toll on the archeological record. Looting for fun or profit is also having serious effects on significant sites. A disturbed site is nearly impossible to interpret for the benefit of science and public appreciation. For example, had the house ruins at Patterson been vandalized and many artifacts carried off,



House floor being excavated.



Crushed pots on house floor.

archeologists would have had a difficult time developing meaningful interpretation of architectural style, economy, and tool use.

The Nebraska State Historical Society recognizes the need to balance archeological conservation and the public's desire to participate in research. This publication series is directed to this need. The Society also invites anyone to contact us about volunteer opportunities. The Society sponsors bus tours of sites and volunteer excavations for the general public. The Society also has several publications available that interpret Nebraska prehistory. *Central Plains Archaeology* is a publication jointly sponsored by the Society and the Nebraska Association of Professional Archeologists. The journal reports the results of recent archeological investigations and is available at the NSHS in Lincoln.

For more information please call the Society archeological staff at (308) 665-2918 or (402) 471-4760. Our E-mail address is archnshs@nebraskahistory.org. Also, visit our website at nebraskahistory.org.

Additional Reading

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For nearly forty years, the Nebraska Department of Roads has recognized the importance of archeological resources during highway construction projects. The Patterson site project is but one example of the department's consistent committment to cultural resources. This project was funded through the Transportation Enhancement Program [Project STPB-77 (30)] and the Nebraska Highway Archeology Program [RS-BRS-31-2 (101)].