



# Pre-1500 Patterson Site: Prehistoric Farm Families in Nebraska

## activities

Written by archaeologist Eric Kaldahl, edited by Lonnie Moore and Karen Graff. Based on, among other sources, *Archaeology of the Patterson Site: Native American Life in the Lower Platte Valley, A.D. 1000-1300*, by John R. Bozell and John Ludwickson, published in 1999 by the Nebraska State Historical Society.

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## 1

## Getting Started: Inquiry Questions

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### ■ activity

## Discussion

Have students read the Patterson Site section on the Sites Reveal Changing Ways page on the Nebraska Studies site.

<http://nebraskastudies.org/pre-1500/sites-reveal-changing-ways/>

Then, have students examine and discuss the supplementary readings found on the following pages.

**Social Studies Standards:** SS 4.3.1; SS 4.3.2; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.1; SS 4.4.2; SS .4.4.4 | SS 8.3.2; SS 8.3.3; SS 8.4.1; SS 8.4.2; SS 8.4.4; SS 8.4.5

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## Getting Started: Inquiry Questions & Historical Context

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### Prehistoric Farm Families in Nebraska (A.D. 1000-1400)



If we could look backwards into Nebraska's distant past, we would see rolling hills of grass, stream and river bottoms filled with trees, and overlooking it all, families who made their living in ancient Nebraska. Between 1000 and 600 years ago, many Native Americans called eastern Nebraska their home.

These people used everything the land had to offer. They cut wood from the forested hills to build.

They used mud to seal their homes tight against winter winds and summer storms. They made cutting tools from stone, and cooking pots from clay. They farmed the land, harvested plants, and hunted animals for food and for clothes. Archaeologists call the culture of these farm families the Central Plains tradition. These people left behind hundreds of ruins and artifacts that are the material fragments of their lives. They had no written language.

Archaeologists study and preserve the past. They excavate the ruins of ancient homes. The Patterson site was one archaeological site that was destroyed little by little over the years: people needed to build new homes, and a highway needed to be improved. Before the bulldozers turned the earth, archaeologists, school children, and volunteers excavated at the Patterson site.

This lesson will let you step into the shoes of a Patterson Site archaeologist. You will learn about the lives of Central Plains tradition people who once lived there, and you will learn about an ancient way of life in Nebraska that lasted for 400 years.



*Unless otherwise noted, images throughout this lesson are Courtesy of the Nebraska State Historical Society. The objects photographed for this lesson are from the collections of the Nebraska State Historical Society.*



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## Getting Started: Inquiry Questions & Historical Context

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The photograph above shows the location of the Patterson site. When families of ancient farmers lived here one thousand years ago, there were no grocery stores, no department stores, no hardware stores, no toy stores, no roads, no plumbing, no cars, no horses, no cattle, and no hogs. They had to make their own homes, get their own food, make their own clothes, and their own toys.

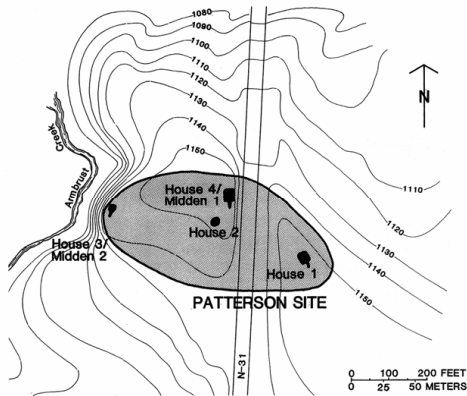
### Questions

If your family and your best friend's family lived here 1,000 years ago, how would you make a home for yourself? What would you use to build with? What do you think you would eat? What could you make your clothes from? What kinds of games could you play?

## 2 | Locating the Site

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## Maps

Have students read the Patterson Site section on the Sites Reveal Changing Ways page on the Nebraska Studies site.

<http://nebraskastudies.org/pre-1500/sites-reveal-changing-ways/>

Then, have students examine the maps of the Patterson Site found on the following pages, and answer the questions.

**Social Studies Standards:** SS 4.3.1; SS 4.3.2; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.1; SS 4.4.2; SS .4.4.4 | SS 8.3.2; SS 8.3.3; SS 8.4.1; SS 8.4.2; SS 8.4.4; SS 8.4.5

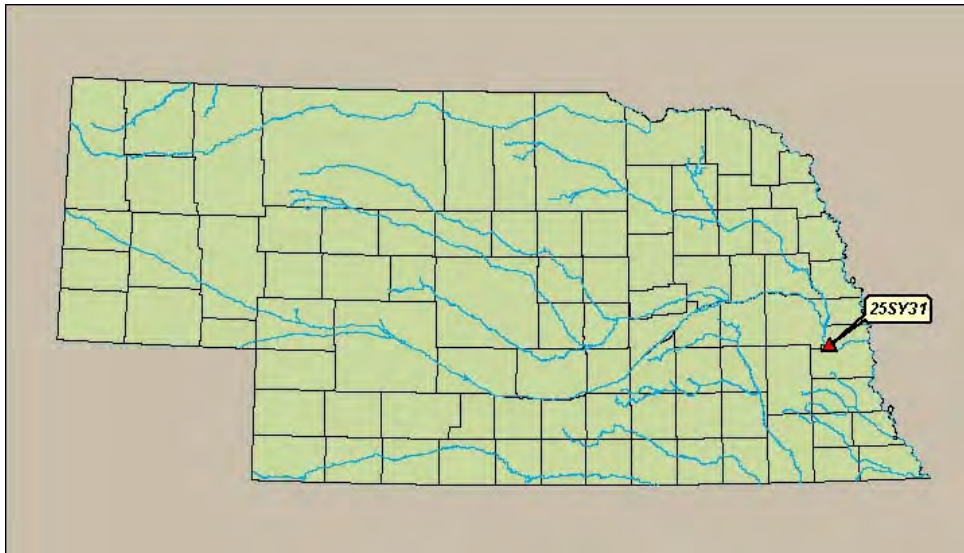
## 2 Locating the Site

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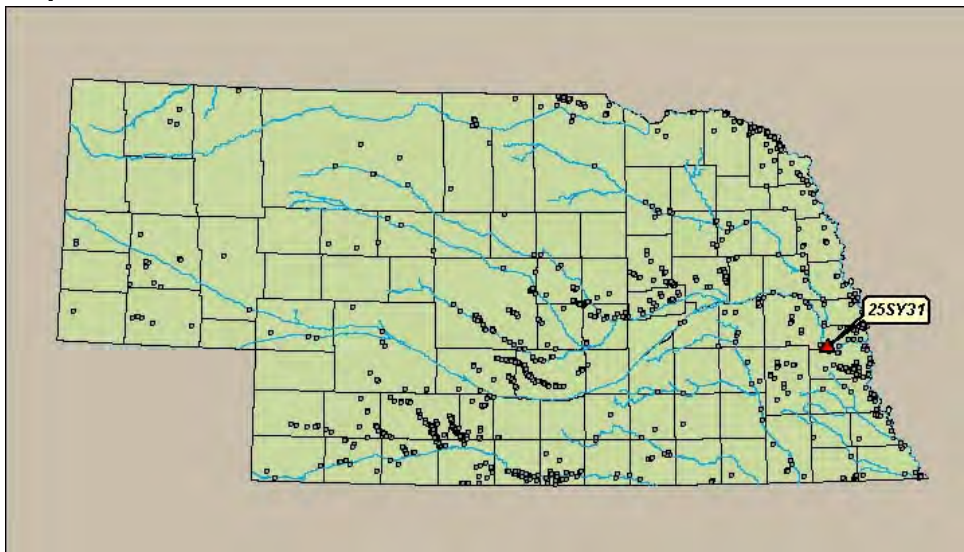
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### Map 1a: Patterson Site Location

(The Patterson Site is marked with a red triangle labeled 25SY31)



### Map 1b: Central Plains Tradition Sites in Nebraska around A.D. 1000



### Questions for Maps 1a and 1b

1. Locate the Patterson Site on Maps 1a and 1b. How would you describe its location?
2. How many Central Plains tradition sites have been found in Nebraska that date to A.D. 1000? If you find it hard to count all the dots, estimate them. Is the number of sites greater than 20 (sites > 20)? Greater than 50 (sites > 50)? Greater than 100 (sites > 100)? Less than 1,000 (sites < 1,000)?
3. Where in Nebraska did Central Plains tradition people live?

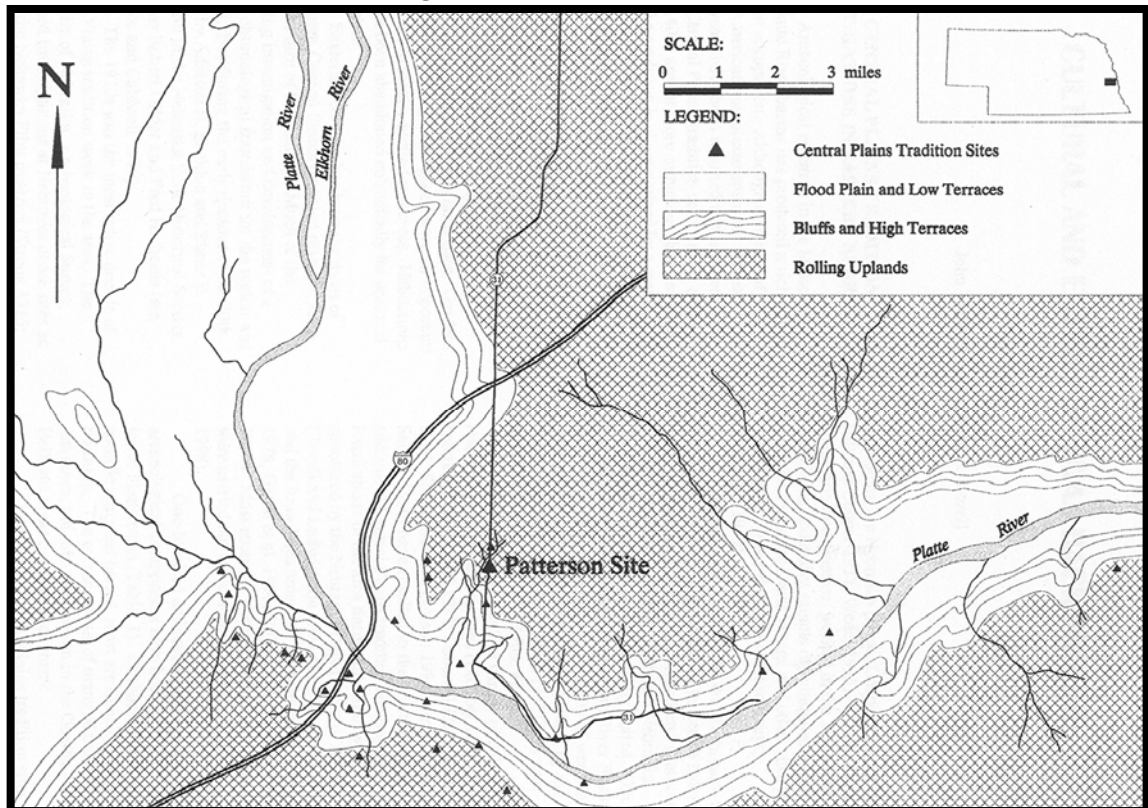


## 2 Locating the Site

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Map 2: The Patterson Site Neighborhood



### Questions for Map 2

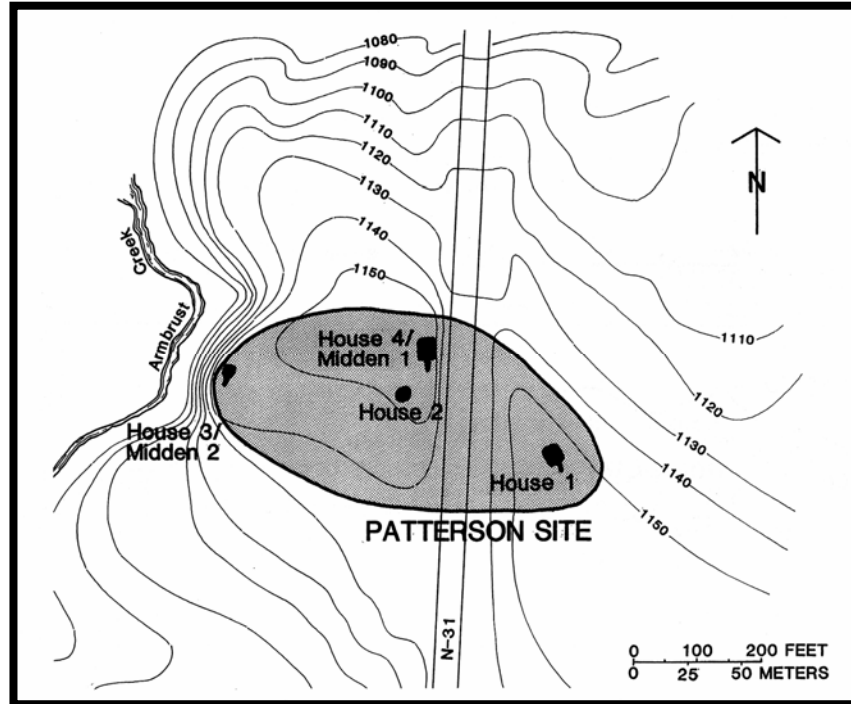
1. Look at the map legend. What kind of land is described in the key? Have you seen rolling hills or a river valley? What do these areas look like?
2. What river is close to the site?
3. What kinds of plants and animals do you find near the river and in the hills?
4. What would be good about living there if you wanted to garden, hunt, fish, and gather wild plants?
5. Using the map scale, how far from the Patterson site are other sites of the Central Plains tradition? Estimate how long it would take you to walk from the Patterson site to these other sites. [Hint: People can usually walk 2-3 miles in 1 hour.] They had no horses, no cars, and no bicycles, so they went everywhere by walking.

## 2 Locating the Site

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Map 3: The Patterson Site



After archaeologists had studied the Patterson site, they found four house ruins buried under the ground. House 2 has not been excavated, but Houses 1, 3, and 4 were excavated. In front of House 2 was an area of trash. Archaeologists call an area of trash a “midden.” On top of the ruin of House 4, they discovered that trash from later centuries had been tossed on top of the ruin. Archaeologists also discovered that not all of the house ruins and trash were created at the same time.

Table of Dates

Time Period	The House Ruin or Trash Area
<ul style="list-style-type: none"> <li>CE 1050-1100</li> </ul>	<ul style="list-style-type: none"> <li>People built and lived in House 4</li> </ul>
<ul style="list-style-type: none"> <li>CE 1100-1250</li> </ul>	<ul style="list-style-type: none"> <li>No one lived at the site as far as we know</li> </ul>
<ul style="list-style-type: none"> <li>CE 1250-1280</li> </ul>	<ul style="list-style-type: none"> <li>People built and lived in House 3, and tossed their trash into Midden 1 and Midden 2</li> </ul>
<ul style="list-style-type: none"> <li>CE 1280-1320</li> </ul>	<ul style="list-style-type: none"> <li>People built and lived in House 1</li> </ul>
<ul style="list-style-type: none"> <li>Unknown Time Period</li> </ul>	<ul style="list-style-type: none"> <li>People built and lived in House 2</li> </ul>

### Questions for Map 3

1. How many houses were found at the Patterson site?
2. Using the scale on the map, how far apart were the houses at the Patterson site?
3. Using subtraction, how long a period of time passed from when people lived in House 4 to when people lived in House 3?
4. Why do you think people moved away from the site and then came back?



### 3 | Determining the Facts

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#### ■ activity Discussion

Have students read the Patterson Site section on the Sites Reveal Changing Ways page on the Nebraska Studies site.

<http://nebraskastudies.org/pre-1500/sites-reveal-changing-ways/>

Then, have students read the supplementary materials on the following pages, and answer the questions.

**Social Studies Standards:** SS 4.3.1; SS 4.3.2; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.1; SS 4.4.2; SS .4.4.4 | SS 8.3.2; SS 8.3.3; SS 8.4.1; SS 8.4.2; SS 8.4.4; SS 8.4.5

### 3 Determining the Facts

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#### Student Reading #1: Central Plains Tradition Life (CE 1000-1400)

Can you imagine a time before roads, grocery stores, cars, horses, doctors' offices, and schools? Can you imagine a time before clothing stores, hardware stores, indoor plumbing, electricity, towns, and cities? Can you imagine a time before television, radio, cell phones, video games, and toy stores? Can you imagine a time when eastern and central Nebraska did not have large farm fields? Can you imagine a time when our state was all rolling grassland, prairies, marshes, wooded streams, and forested river valleys?

The time you imagined existed for thousands and thousands of years. The people who lived here in that time were Native Americans. Over those many thousands of years, Native American men, women, and children lived in many different cultures. We will talk about one of those cultures. Archaeologists call that culture the Central Plains tradition.

The families of the Central Plains tradition were Native American people. They lived in Nebraska from CE 1000-1400. That means they lived here from 600 to 1,000 years ago. They were farmers. The people of this culture lived in many parts of Nebraska. The largest numbers of them lived in central and eastern Nebraska.

Much of what we know about Central Plains tradition people has been learned through archaeology. Archaeology is the study of people and their cultures. Archaeologists study ancient cultures by examining the objects of past people. Artifacts are one kind of object. Artifacts are things that people made in the past, like a basket or a bowl or deer hide shirt. Ecofacts are another kind of object. Ecofacts are natural objects that past people used, like apples or walnuts or firewood.

Central Plains tradition people left many artifacts and ecofacts behind. They built houses that were dug into the ground. We call these pithouses. Before building their homes, they dug a pit knee-deep to waist-deep into the ground. Each pithouse had one big room that was square in shape. A long ramp would connect the pithouse with the outside surface.

After digging the pit for their house, they had to build the walls and the roof. Central Plains tradition people chopped down cottonwood, oak, and elm trees for building. They had no metal tools, so they chopped down trees with a kind of stone ax. Archaeologists call these axes celts. They would cut the tree trunks and branches down to the right size. Inside the pit of the pithouse, the home builders dug circular pits into the house floor. These little pits were just big enough to hold the posts for the roof supports and the walls.

On top of the wall and roof posts were placed timbers for the roof. Thinner branches and sticks were attached to the wall posts and roof timbers. The whole structure was covered over with daub. Daub is a sticky mixture of mud. The daub covering the house kept the rain and wind out.

In the center of the home was a fireplace, called the hearth. A hole was probably left in the roof to let the smoke from the fireplace out. Along the walls people placed their beds, probably on benches made from wood. Storage pits were dug two to four feet deep below the floor. These pits were used to store tools and to store food over the long winter.

A small pithouse would be only twelve or fifteen feet across. Small pithouses were probably built

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for one family of 4-6 people. Larger pithouses were 20, 30, or 40 feet across, and could house 20-40 people. Several families could live inside a larger pithouse. Can you imagine living with your cousins, aunts, uncles, parents, brothers, sisters, and grandparents in one house? In one group of houses, there might be two to eight families.

That many people in one house meant pretty large meals! Meals were cooked in clay cooking pots by the fireplace. Clay was gathered in the countryside, shaped, and heated to make ceramic pots.

Central Plains families ate all kinds of food. They grew crops in gardens, like corn, beans, and squash. They also grew some crops that you might not know very much about. They grew sunflowers, goosefoot, marshelder, and smartweed. They used wild plants, like wild grapes, berries, and nuts. They made hoes to help them work in their garden. The blade of their garden hoe was made from a large bone. Usually this bone was the shoulder blade bone from a bison.

For meat, they hunted with bows and arrows. They mainly hunted deer, antelope, and bison, but also caught squirrels, rabbits, and other smaller animals. They fished in the rivers and streams, making fishhooks from bones or antlers. They had no metal tools, and had no nails to hold things together. Instead, things were held together with woven string and rope. They used many kinds of fibers to weave their ropes, but fibers from reeds that grow in marshlands were probably common.

Big animals provided leather to make clothes. Sharp stones provided tools for cutting meat and scraping hides smooth. Other rough stones were used like sandpaper for smoothing arrowshafts. Rough slabs of stone were ALSO used to grind seeds into flour. Jewelry was made from hollow bone tubes and the shells of clams to make necklaces and bracelets.

For four hundred years, Central Plains families made east and central Nebraska their home. For reasons we don't understand, many families moved away from Nebraska about six hundred years ago. Archaeologists think that the great-great-great-great-great-great-great grandchildren of the last Central Plains tradition families would be known to Europeans as members of the Pawnee tribe of Nebraska, the Wichita tribe of Kansas, and the Arikara tribe of the Dakotas.

#### Student Reading #1: Comprehension Questions

1. What kinds of materials did Central Plains tradition people collect from their environment?
2. What plants did people grow in their gardens?
3. How many people lived in each house? About how many families lived in one settlement?
4. How do you think people stayed in touch with other families who lived miles away? Do you think they visited each other?
5. The Central Plains tradition people most likely did not have written words or schools. How do you think children learned the things they needed to know in order to survive and continue their society?



### 3 Determining the Facts

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#### Student Reading #2: Preservation of the Past

Today in Nebraska, our towns and cities are growing. During that growth, new roads, schools, stores, homes, and hospitals need to be built. Water pipes, electric lines, phones lines, and TV cable lines need to be installed. Sometimes, however, pieces of the past get in the way of developing our new places.

These pieces of the past could include buried archaeological sites, like the house ruins you have seen pictured in this lesson. An archaeological site is a location where ancient ruins, ecofacts, and artifacts can be found. Archaeological sites contain information that can tell us about past people and their lives. These sites contain the stories of ancient Nebraska: stories that deserve to be remembered.

Sometimes older buildings need to be torn down. Sometimes an old school or church is very important to the people of a town or city, and they fight to protect it. These buildings are landmarks: places people keep preserved to remind them of their pasts.

People do need new houses, schools, and safe roads. So what happens when new construction has to destroy something old? Some building projects take into consideration the old buildings or ancient ruins. Before the bulldozers begin their work, archaeologists get a chance to conduct an excavation, or to carefully study an old building.

These activities allow archaeologists and historians to collect information about the past, and share that information in books, websites, pictures, and museums with Nebraska's people. The archaeological site or old building might get demolished, but some of the information is preserved. The information from these studies — and the artifacts, ecofacts, photographs, and other documents — are all stored in a public museum.

For instance, the materials from the Patterson site presented in this lesson are stored at the Nebraska State Historical Society in Lincoln. These materials can be studied by anyone in the years to come. Perhaps by someone like you!

In the case of the Patterson site, the ruins of the old pithouses were excavated because some new houses were going to be constructed, and because Highway N-31 was going to be reconstructed. The Nebraska Department of Roads is a state agency. The Nebraska Department of Roads is responsible for road construction. Under our nation's laws, the Nebraska State Department of Roads made time and funds available to excavate and study the Patterson site. They also helped people learn what was found at the site. The Department of Roads provided funds to build exhibits and to write publications that citizens could read.

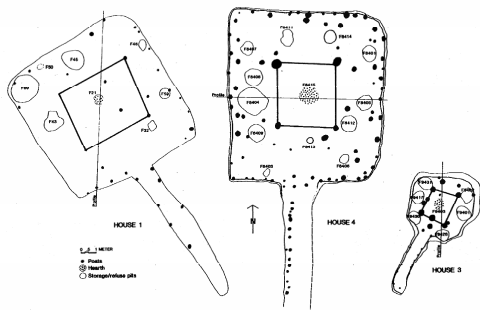
#### Reading Comprehension Questions

1. Is there a historic building in your town that is very important? For example, an old library, courthouse, movie theater?
2. Why are old places important to people?
3. What can we learn from historic buildings about people in the past?
4. What can we learn from archaeological sites about people in the past?
5. Today, people do need homes, hospitals, good roads, and water. How do you think the need to build and the need to preserve historic places can be balanced?
6. Why was the Patterson site excavated?

## 4 | Visual Evidence: Images and Tables

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### ■ activity

## Discussion

Have students read the Patterson Site section on the Sites Reveal Changing Ways page on the Nebraska Studies site.

<http://nebraskastudies.org/pre-1500/sites-reveal-changing-ways/>

Then, have students examine the images on the following pages, and answer the questions.

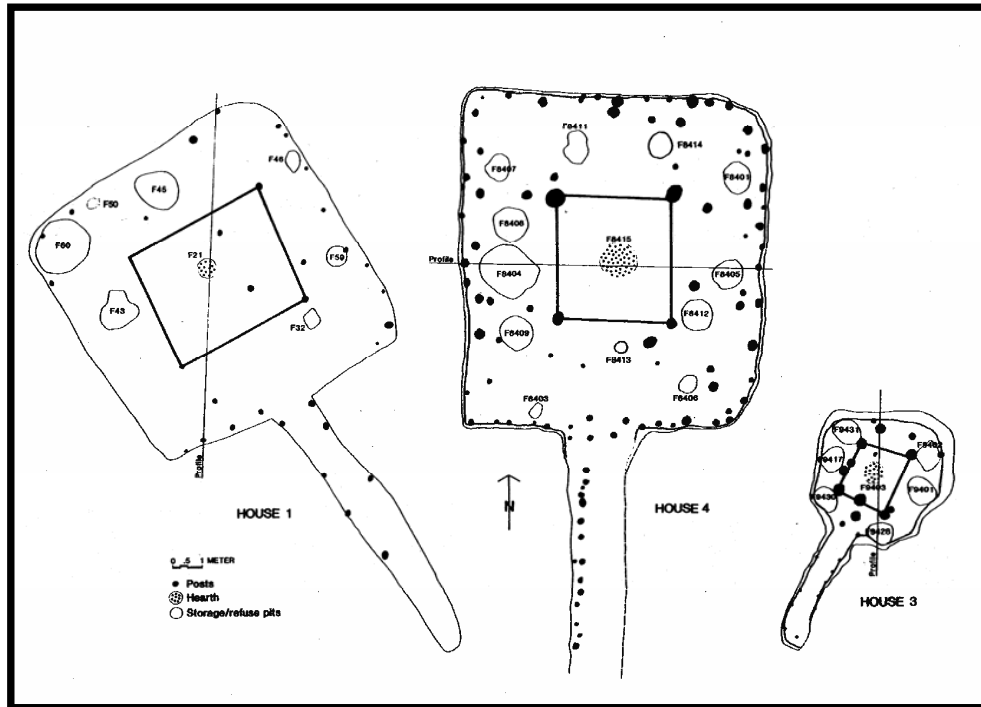
**Social Studies Standards:** SS 4.3.1; SS 4.3.2; SS 4.3.3; SS 4.3.4; SS 4.3.5; SS 4.4.1; SS 4.4.2; SS .4.4.4 | SS 8.3.2; SS 8.3.3; SS 8.4.1; SS 8.4.2; SS 8.4.4; SS 8.4.5

# 4 Visual Evidence: Images and Tables

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Drawing 1: Pithouse Floors after Excavation (Houses 1, 4, and 3 from left to right)



When archaeologists excavate a site, they make very careful drawings of everything that they find. They also take photographs of the excavation. Remember, the houses at the Patterson were going to be destroyed by construction. So the photographs, drawings, artifacts, and the notes written by the excavators are the only evidence of the ancient homes that we have left.

The houses at the Patterson were built, lived in, and then abandoned centuries ago. Over the centuries, the roof fell down and so did the walls. Then the house was covered over by years of dust from the air and rain that carried dirt into the abandoned house pit.

In the images on this page, you are looking at drawings and photographs from all that's left of the Patterson houses: the pithouse floors. The floors are full of big and little holes that archaeologists call floor features.

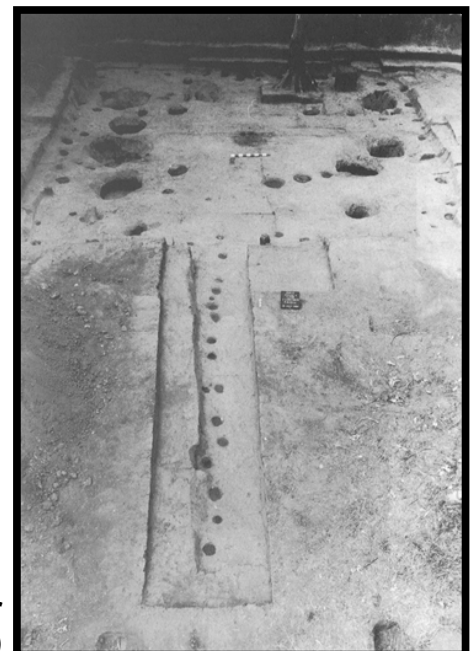


Photo 1: A Pithouse Floor after Excavation (House 4)



## 4

## Visual Evidence: Images and Tables

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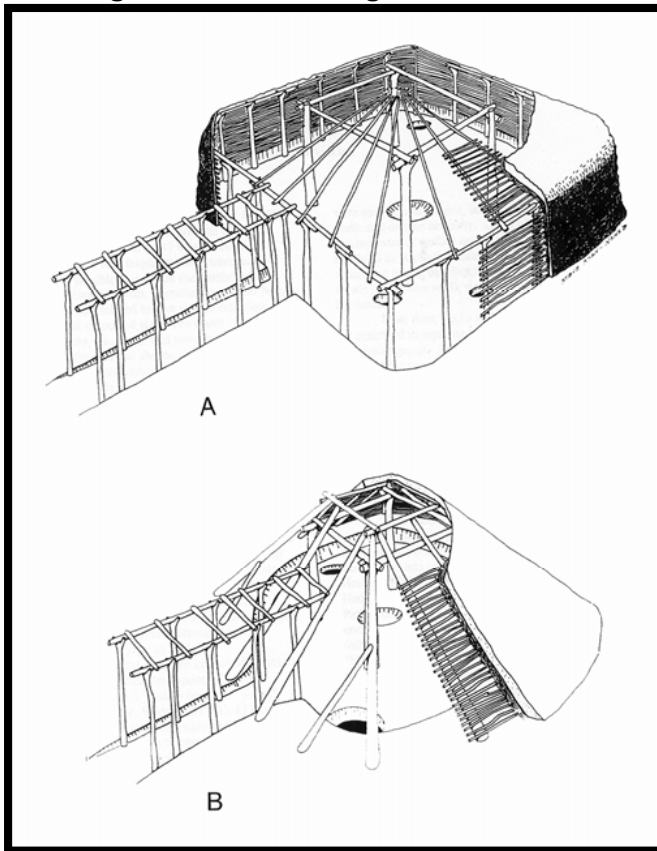
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**Questions for Drawing 1**

1. Based on what you have read about Central Plains tradition houses, can you identify the entrance ramp into the houses? Can you identify the holes where wooden posts were placed to support the roof? Can you see where the fireplace was located? And can you find the holes that opened into underground storage pits?
2. Using the scale on the drawing, pick one of the houses and measure it. How long is each wall? Remember, you are measuring in metric.
3. In your classroom, get some bean bags or blocks and a meter stick. Place 4 beanbags (or blocks) in a square on the floor. Using your measurements from question #2, make the corners of your square as far apart as the four corners of the house in the drawing. Now stand inside the square. How many people could fit in a house that size? (Hint: Some archaeologists estimate how many people could live in a pithouse by imagining how beds could fit along each of the walls. Then we estimate how many people could have slept in each bed. Adding the number of people in each bed together, we estimate how many people could have made that house their home.)

**Questions for Photo 1**

1. Photo 1 is a picture from House 4. Looking at the drawing of House 4 in Drawing 1, and the Photo 1, can you identify the entryway ramp into the house? Can you identify the holes where wooden posts were placed to support the roof? Can you see where the fireplace was located? And can you find the holes that opened into underground storage pits?
2. Look at the other objects in Photo 1. The checkered black-and-white stick is 1 meter long. Why did the archaeologists put that stick in the house before taking the photo? There is a small white arrow in the picture that points north. Why did the archaeologists put that in there? You can also see that a tree grew up in the ruin of the house. The archaeologists excavated around the tree. What do you think a tree's roots would do to an ancient buried house?

**Drawing 2: Artist's Drawing of a Pithouse**

The drawing to the left is an imaginative drawing. The artist who drew it is imagining what a Central Plains tradition pithouse might have looked like. And just like a dollhouse, the artist has drawn the house so that we can peek inside. When a pithouse was finished, the roof would be closed over so rain wouldn't fall into the house. We think there was one small opening in the roof to let out smoke from the fireplace.

So what things did the artist draw from their imagination? Remember, the poles of wood that make up the walls and roof rotted away over the centuries. So we can't say for sure how tall the poles were. But the pattern of postholes does tell us where the roof and wall posts were placed. (The postholes are the little circular holes on the floor that you could see in Drawing 1 and Photo 1. A roof or wall support post would have been placed in each posthole to help keep the pole in place.)

Archaeologists found pieces of hardened mud from the roof and walls of the house. Those pieces of mud are called daub. The outside of the house, on the walls and roof, would have been covered over with the daub to seal the house from wind, rain, snow, and ice. The daub was applied when wet, and then allowed to dry. The daub found by archaeologists has the impressions of wood from sticks, poles, and beams. This allows the artist to imagine how the poles and sticks were placed and how big they were.

### Questions for Drawing 2

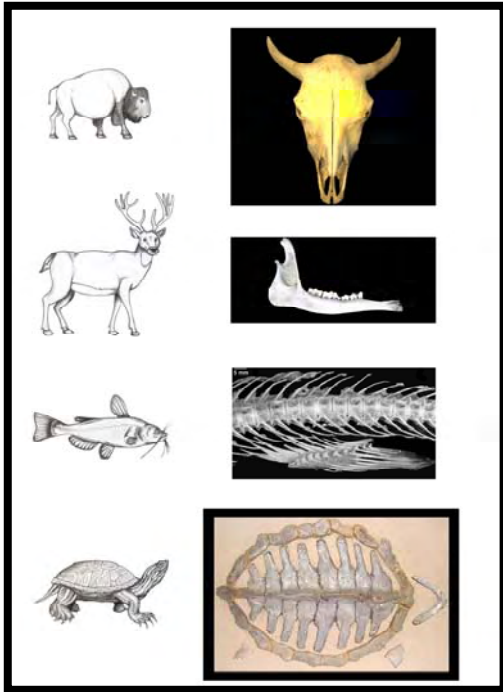
1. Study the drawing and make a timeline of how the house was built. What did the home builders do first? What did they do second? What did they do third? How long do you think it took a family to build their house?
2. The pithouse was dug a little way into the ground. Why would you want part of your house to be underground?
3. Can you identify where the pits for storing food are in the drawing? Can you find the fireplace?

# 4 Visual Evidence: Images and Tables

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**Photo 2: Animal Bones**



*Animal drawings by Tony Schommer*

When archaeologists find parts of animals, they usually are talking about bones. But every bone does not equal one animal. Every animal has a large number of bones in its body. For example, if an archaeologist finds one right front leg bone and one left front leg bone of a deer, then those bones might only have come from one deer.

On the other hand, if an archaeologist finds one right front leg bone and a second right front leg bone of a deer, then those bones came from two deer. When counting animals, archaeologists figure out the Minimum Number of Individuals of each animal species at the site. This is called the MNI for short. An MNI of 2 antelope means that there were bones from AT LEAST two antelope found.

**Table of Animal Bones**

Kinds of Animals	Bones from House 1		Bones from House 3		Bones from House 4	
	MNI	Meat weight (kg)	MNI	Meat weight (kg)	MNI	Meat weight (kg)
Bison	0	0.00	0	0.00	1	450.00
Deer	1	6.00	1	45.50	2	68.00
Antelope	2	49.90	0	0.00	0	0.00
Mollusk	7	0.20	30	1.24	8	0.10
Fish	74	9.10	183	15.27	4	0.60
Birds	11	11.80	28	16.27	2	3.00
Turtles	1	2.27	4	3.62	1	0.45
Gophers,	17	5.52	30	10.83	1	0.68
Cottontails & Squirrels						
<b>Totals</b>	<b>113</b>	<b>84.79</b>	<b>276</b>	<b>92.73</b>	<b>19</b>	<b>522.83</b>

**Questions on Next Page**



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Visual Evidence: Images and Tables

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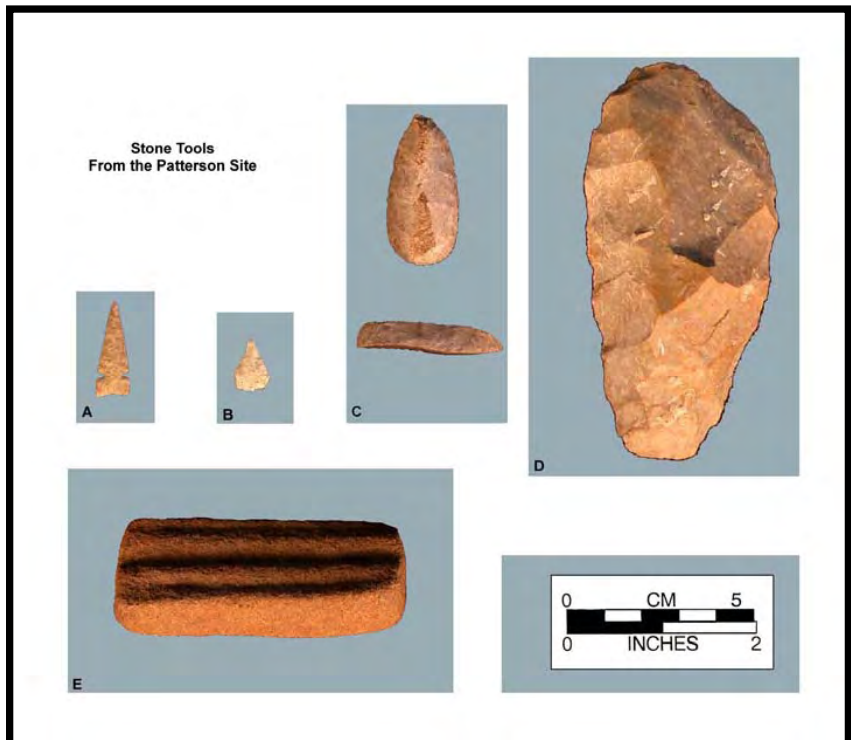
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Questions about Photo 2 and Table of Animal Bones

1. What kinds of animals produced the most meat at the site?
2. Where would the Patterson site people have to go to get each type of food? A river? A forest? A grassland?
3. After you have dinner, the bones probably go into the trash. And the trash is usually taken away from the house. Why do you think that some animal bones were found in the Patterson site houses?

Photo 3: Stone Tools

The tools to the left are made from stone. When they are smooth, they are called ground stone tools. They were made by grinding one harder rock against a softer rock until the right shape was produced. The other tools are called flaked stone tools. They were made by chipping away pieces of stone until the right shape was produced.



Questions about Photo 3

Using the letters in the photograph, match the tool to the task. Why do you think the tools you chose would be useful for a certain task?

TASK

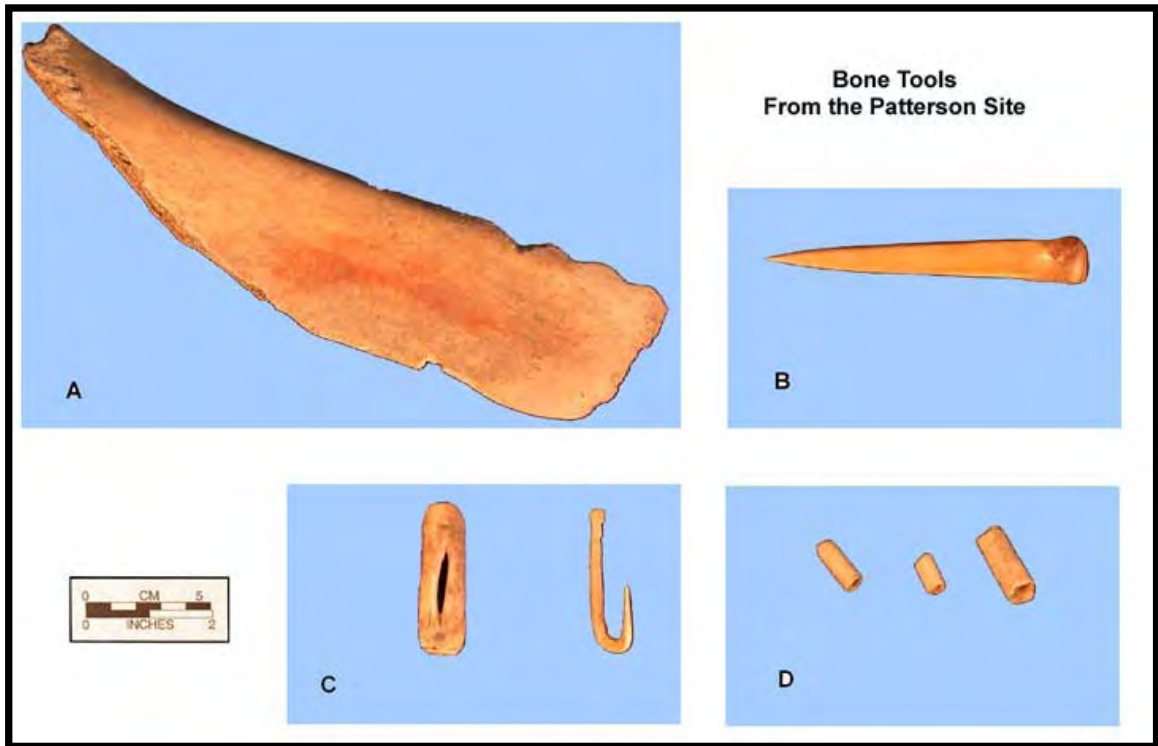
1. You need to go hunting deer with a bow and arrow. What tool do you use for your arrow tip?
2. You need to scrape some deer hides to make clothes. You need to scrape off all the blood and muscles so that you have some nice, soft hide to make your leather clothes. What tool do you use?
3. You need to make some holes in some bone to make bone beads. What tool do you use?
4. You need to make some new arrows. You want the arrow shaft to be perfectly smooth so they fly straight. What tool do you use to smooth out your arrow shafts?
5. You need to cut up the hide of an animal. What tool do you use as your knife?

# 4 Visual Evidence: Images and Tables

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Photo 4: Bone Tools



The tools above are made from animal bone. Central Plains tradition people hunted animals for food, but they also used animal hide to make clothes and animal bones and antlers to make other tools.

### Questions about Photo 4

Using the letters in the photograph, match the tool to the task. Why do you think the tools you chose would be useful for a certain task?

### TASK

1. You are making a new shirt out of leather. While making the shirtsleeves, you realize that you need to punch a lot of little holes in the leather so that you can sew the shirtsleeve up. What tool would you use?
2. You are doing some gardening. You need to make a hoe. You get a good-sized branch to make the handle. What kind of tool would you use to make the blade of the hoe?
3. You need to go do some fishing. What tool do you use?
4. You are making a present for your mom. You are going to make her a necklace or a bracelet with all kinds of beads. What tool do you use?

## L1

## LESSON PLAN

## Patterson Site: Prehistoric Farm Families in Nebraska

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## Putting It All Together: Possible Activities

**Activity 1: Life Today and Yesterday**

Have your students make a list of their basic life needs: food, shelter, family, friends, medicine, clothing, water, learning, and whatever else your students believe are essential human needs. Working in small groups, they should make a chart with each need listed down one side of the chart, one need per row. Then have your students make 3 columns, one labeled today, one labeled 1800s pioneers, and one labeled Central Plains tradition. Have the students write down how human needs are fulfilled in our time and in our culture. Then fill in the chart for the 1800s Euro-American pioneers and the Central Plains tradition. For example, farmers grow our food but send that food (after many steps) to grocery stores, where we buy food products for our families. The Central Plains tradition families and 1800s pioneers grew their own food, and stored that food for lean months. We hire contractors to build our homes. Pioneer families excavated dug-outs, and later built wooden homes, often with lumber brought by train from other states. Central Plains tradition families built their own pithouses dug into the ground and used wood from our wooded streams and river valleys. Differences and similarities should be emphasized. Students should consider how our interactions with the land today are different from the interactions of ancient people with the landscape.

**Activity 2: Understanding how Ruins get to be Ruins**

Part of understanding the information gathered from an excavation requires us to think about how and why people abandon old buildings. It also requires an understanding of what happens to abandoned buildings due to natural forces. As a class or in small groups, have your students find an abandoned structure. For safety reasons—make sure they do not approach or enter into an unsafe building environment. A lot can be learned from a safe distance when examining an abandoned farm, house, or business. Ask students to write down what seems to be left in the yard around the structure. The class can take pictures and explain the process of collapse. With an eye to safety, students can make a sketch map of the falling down building. If the structure is safe to approach, they can make a drawing with real measurements and a scale. Students should consider these questions: Is the property gathering the litter of people walking and driving by? Why? What did the people who abandoned the structure leave behind? Why those things? What objects were taken away when the people left? Students will have to imagine what objects might have been in the building while it was in use. What parts of the building has fallen down first? Why do your students think people abandoned the structure?

Now return to the Patterson Site houses. No one wants to live in their own trash. So why do students think that trash was found inside the homes, like animal bones and plant parts? Why do the students think people might have abandoned their homes? What part of the houses probably fell down first, what second? Students can present their conclusions about why people abandoned homes, farms, and businesses in the past and present by displaying photos of the falling down structures and making a class presentation. They could also make a pithouse model to illustrate the process of collapse.

L1

LESSON PLAN

**Patterson Site: Prehistoric Farm Families in Nebraska**

Activity Grade Level

4 8

**Activity 3: New Homes and Old Homes—What to do?**

Have your students discuss what can be learned from old buildings, buried ruins, and artifacts. Then ask them how they feel about building new homes, bridges, or roads, knowing that many of those projects have to destroy old buildings and ruins. Have the class role play a discussion surrounding such issues. Have one group represent the safety and economic concerns of the state, and their decision as a state agency to improve a highway. The benefits for safety and economy are important to them. Have a second group role play a group of citizens who are concerned about the destruction of an archaeological site. The benefits of preserving the past are evident to them. Have a third group represent archaeologists. This group can discuss the benefits of excavating the archaeological site before the highway construction project destroys it.

Wrap up the activity by discussing current projects in your county, town, or city that will result in the damage or destruction of a historical building or archaeological site. Have your students research the issues surrounding that project as a way of understanding the roles they are playing in the classroom activity. How has the Patterson Site excavation, triggered by housing and road development projects, benefitted Nebraska's people?



## L1

### LESSON PLAN

## Patterson Site: Prehistoric Farm Families in Nebraska

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### Supplementary Resources for Teachers

- <http://nebraskastudies.org/pre-1500/first-farmers/central-plains-villages/>
- <http://nebraskastudies.org/pre-1500/first-farmers/>
- <https://history.nebraska.gov/archeology>
- [https://www.archaeolink.com/nebraska\\_archaeology.htm](https://www.archaeolink.com/nebraska_archaeology.htm)

### Some Basic References

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1989 On Estimating Household Populations in Archaeological Sites, with an Example from the Nebraska Phase. *Plains Anthropologist* 34(124, part 2):3-16.

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1999 *Archeology of the Patterson Site: Native American Life in the Lower Platte Valley A.D. 1000-1300*. Nebraska State Historical Society, Lincoln, Nebraska.

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Strong, William Duncan

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Wedel, Waldo R.

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# Pre-1500 Patterson Site: Prehistoric Farm Families in Nebraska

## resources

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Nebraska Department of Education Academic Standards  
<https://www.education.ne.gov/contentareastandards/>

Nebraska Department of Education Social Studies Standards  
<https://cdn.education.ne.gov/wp-content/uploads/2019/11/Nebraska-Social-Studies-Standards-Final-11-2019.pdf>

National Archives <http://www.archives.gov/index.html>

Library of Congress Learning Page Lesson Plans <http://www.loc.gov/teachers/index.html>

resources

# National Archives: Map Analysis Worksheet

### 1. TYPE OF MAP (check one)

- .... Raised relief map
- .... Topographic map
- .... Political map
- .... Contour-line map
- .... Natural resource map
- .... Military map
- .... Bird's-eye view
- .... Artifact map
- .... Satellite photograph/mosaic
- .... Pictograph
- .... Weather map
- .... Other ( )

### 2. PHYSICAL QUALITIES OF THE MAP (check one or more)

- .... Compass
- .... Handwritten
- .... Date
- .... Notations
- .... Scale
- .... Name of mapmaker
- .... Title
- .... Legend (key)
- .... Other

### 3. DATE OF MAP

.....

### 4. CREATOR OF MAP

.....

.....

### 5. WHERE WAS THE MAP PRODUCED?

.....

### 6. MAP INFORMATION

A. List three things in this map that you think are important:

- 1. ....
- 2. ....
- 3. ....

B. Why do you think this map was drawn?

.....

C. What evidence in the map suggests why it was drawn?

.....

D. What information does the map add to the textbook's account of this event?

.....

E. Does the information in this map support or contradict information that you have read about this event? Explain.

.....  
.....

# National Archives: Photograph Analysis Worksheet

## STEP 1. OBSERVATION

A. Study the photograph for 2 minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.

B. Use the chart below to list people, objects, and activities in the photograph.

PEOPLE	OBJECTS	ACTIVITIES

## STEP 2. INFERENCE

Based on what you have observed above, list three things you might infer from this photograph.

.....

.....

.....

## STEP 3. QUESTIONS

A. What questions does this photograph raise in your mind?

.....

.....

B. Where could you find answers to them?

.....

.....



## Nebraska Department of Education Content Area Standards

### Social Studies Standards

4

**SS 4.3.1** Explore where (spatial) and why people, places, and environments are organized in the state and around the world.

**SS 4.3.2** Compare the characteristics of places and regions and their impact on human decisions.

**SS 4.3.3** Explain how human and natural forces have modified different environments in Nebraska and how humans have adapted.

**SS 4.3.4** Compare and contrast the characteristics of culture statewide.

**SS 4.3.5** Use geographic skills to make connections to issues and events.

**SS 4.4.1** Investigate patterns of continuity and change over time in Nebraska.

**SS 4.4.2** Analyze and explain multiple perspectives of events in Nebraska, including historically marginalized and underrepresented groups.

**SS 4.4.5** Develop historical inquiry and research skills.

8

**SS 8.3.2** Examine how regions form and change over time.

**SS 8.3.3** Determine how the natural environment is changed by natural and human forces and how humans adapt to their surroundings.

**SS 8.4.1** Analyze patterns of continuity and change over time in the United States history.

**SS 8.4.2** Use multiple perspectives to evaluate the historical, social, and cultural context of past and current events.

**SS 8.4.4** Evaluate and interpret sources for perspective and historical context.

**SS 8.4.5** Students will develop historical research skills.

## Nebraska Department of Education Content Area Standards

### ■ Language Arts Standards

4

**LA 4.1.5** Vocabulary: Students will build and use conversational, academic, and content-specific grade-level vocabulary.

**LA 4.1.6** Comprehension: Students will construct meaning by using prior knowledge and text information while reading grade-level literary and informational text.

**LA 4.2.1** Writing Process: Students will apply the writing process to plan, draft, revise, edit, and publish writing using correct spelling, grammar, punctuation, and other conventions of standard English appropriate for grade-level.

**LA 4.3.3** Reciprocal Communication: Students will develop, apply, and adapt reciprocal communication skills.

8

**LA 8.1.6** Comprehension: Students will construct meaning by applying prior knowledge, using text information, and monitoring comprehension while reading increasingly complex grade-level literary and informational text.

**LA 8.2.1** Writing Process: Students will apply the writing process to plan, draft, revise, edit, and publish writing using correct spelling, grammar, punctuation, and other conventions of standard English appropriate for grade-level.

**LA 8.3.3** Reciprocal Communication: Students will develop, apply, and adapt reciprocal communication skills.

## Nebraska Department of Education Content Area Standards

### ■ Science Standards

#### 8

**SC 8.1.1** Students will design and conduct investigations that will lead to descriptions of relationships between evidence and explanations.

**SC 8.1.2** Students will apply the nature of science to their own investigations.

**SC 8.3.1** Students will investigate and describe the structure and function of living organisms.

## Nebraska Department of Education Content Area Standards

### ■ Math Standards

4

**MA 4.1.1** Numeric Relationships: Students will demonstrate, represent, and show relationships among fractions and decimals within the base-ten number system.

**MA 4.3.3** Measurement: Students will perform and compare measurements and apply formulas.

**MA 4.4.3** Probability: Students will interpret and apply concepts of probability.

8

**MA 8.4.1** Representations: Students will create displays that represent data.

**MA 8.4.3** Probability: Students will interpret and apply concepts of probability.