

NEW MEXICO
FARM & RANCH
HERITAGE
MUSEUM



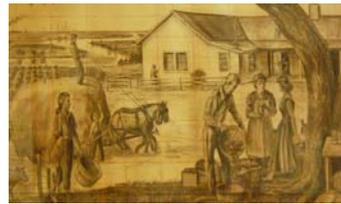
Self-guided tour booklet

WELCOME!

Welcome to the New Mexico Farm & Ranch Heritage Museum! We hope you enjoy your visit. This tour will guide you through many different exhibits in the main building and on the grounds where you will learn about farming, ranching and rural heritage.

Several other groups may also be touring today. Please check the daily schedule for demonstrations, and cart ride times. Most of our animal exhibits are visible on a short and easy walk or a cart ride. A map showing the location of each exhibit is included at the back of this pamphlet. If you need staff assistance, let the receptionist in the lobby know.

Bruce King Building Exhibits:



Hurd Mural (North Hallway)

New Mexico artist Peter Hurd was hired to paint a large mural for a new building in Houston, Texas, in 1952. This exhibit displays several of the charcoal studies he made as he prepared to paint the final mural. The large study you see here is one-fourth the size of the final mural. In creating this study, he worked out the size, balance, and location of the compositional elements.

The mural's title, "The Future Belongs to Those Who Prepare For It," was the company logo for Prudential, the building's owner. Hurd used his personal experiences to depict a fictional but realistic scene of West Texas or Eastern New Mexico in the mid-1900s.

- What examples do you see of this family preparing for their future? [canning, putting up hay, gathering fruits and vegetables, herding cattle, land surveying]
- What items depict farming in this drawing? [hay, fruit, vegetables, orchard, ...]
- What items depict ranching in this drawing? [cattle, windmill, stock tank, ...]
- How did the artist separate farming and ranching activities? Where do they meet in this image? What divides them (and the picture)?
- Do you see where Hurd erased or redrew characters in the large study?

Heritage Gallery

This gallery offers a detailed view of 4,000 years of New Mexico agriculture from the first American Indian farmers to modern crop cultivation and ranching here in the Mesilla Valley. As you enter the gallery from the west end of the north hallway, you'll first encounter a timeline of New Mexico history and a map of the state. Use the graphics to acquaint yourself with New Mexico's rich history and amazing topography.

Beginnings of Agriculture

This exhibit opens with a review of the origins and agricultural practices of ancient farmers in New Mexico. Look closely at the mural, peak inside the pithouse, and try your hand at corn grinding with a mano and metate.

- What kind of homes did these groups have?

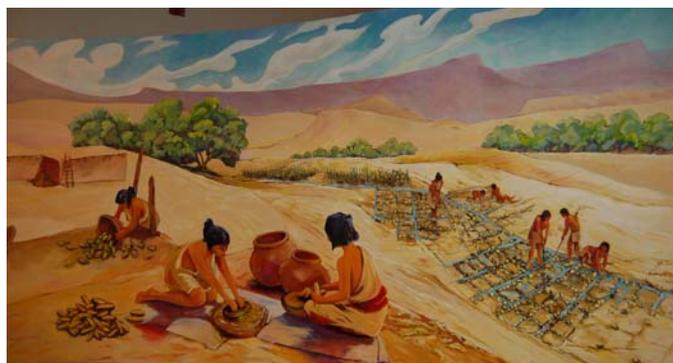
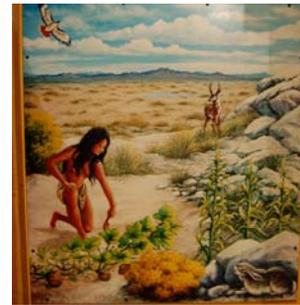
[Early Mogollon—pithouses;

Pueblo—surface structures]

- What were their homes made of?

[Mogollon—adobe and sticks; Pueblo—shaped stone]

- Where did these early people store their food? [Mogollon—in pits covered with large stones; Pueblo—in large rooms inside the pueblo]
- What three main crops did they grow? [corn, beans, squash]
- How did they capture water to grow their crops? [dug ditches to direct water (irrigation); created diversion dams, check dams; made waffle gardens; bordered gardens with gravel mulch; used terracing]
- Can you imagine living in a pithouse or a pueblo?



Heritage Art Gallery

Ascend the ramp behind the corn grinding station and peruse the display of artwork. The current long-term exhibit, *The Cowboy Way: Drawings by Robert Shoofly Shufelt*, provides visitors with an insightful glimpse of modern cowboys and their way of life.

- Shufelt utilized giclée, duotone offset lithography and stone lithography to create his depiction of the “spirit of ranching.”

The Spanish Colonial Period

The Spanish colonists arrived in New Mexico in the 1500s and markedly changed the social, political, and religious landscape. Look into the display case, explore the Spanish Colonial Home and gaze upon the depictions of Santa Fe in the early 1800s.

- What agricultural products did they introduce into New Mexico?

[Wheat, grapes, alfalfa and many more- view the panel near the illuminated display cases.]

- What areas of the world did their goods and materials come from?

[Spain, France, the Orient- see map in carreta.]

- Once in Mexico, how were the goods transported to *Nuevo Mexico*? [in carretas (two-wheeled carts) and carromatos (large wagons), via El Camino Real de Tierra Adentro]
- Where did El Camino Real de Tierra Adentro originate? [Mexico City]
- Other than new crops and livestock, what did the Spanish transport up the trail? [Read the panel above the map.]
- Imagine traveling in a Spanish caravan for months as you make your way to Santa Fe. What do you think were some of the dangers you would encounter?



Generations: New Mexicans since 1840

This exhibit includes biographies of actual people; their stories illustrate how different ethnic and cultural groups make up the rich heritage of New Mexico.

(Ascend the ramp and move forward in time to another era in the settlement of the Southwest.)

- The chuck wagon, such as the one on display here, served as a portable kitchen for cattle drives and annual round-ups.
- Typically, what time did the cook rise to prepare breakfast? [2am]
- Imagine eating at the chuck wagon after a hard day droving cattle. What would you eat? [biscuits, stew, flapjacks...]
- Shepherds use many tools as they tend their sheep. How was the slingshot used? [To throw a stone in front of sheep, provoking them to change direction.]
- Fabian Garcia is best remembered for his work with what crop? [Chile]
- What was the name of Margaret Miller Laumbach and her husband's ranch? [Eagle Trail]
- What did Pablo Bernal do in 1926 to keep his ranch afloat? [Sold his cattle and bought sheep.]



Toward the end of the exhibit are descriptions of several groups involved in agriculture in New Mexico from the early 1900s to today.

- What old-time ranch activity is depicted in the entertainers section that today is considered a professional sport? [rodeo]
- Who helps introduce modern science and technology to farmers and ranchers? [4-H, university extension specialist]
- What agricultural group for school children is depicted in the youth section? [FFA (Future Farmers of America)]

Farm Life Then & Now (Heritage Gallery)

Farmers utilized a wide variety of vehicles, tools, and equipment to produce food, fiber, feed and other agricultural products and these devices have changed over time. As they went about their daily lives living in rural communities, establishing their homes, and working in their fields, new technologies saved them time, energy and brought about higher crop yields. From past to present, farmers have left us an amazing legacy!
(Enter the exhibit where the mule is pulling the “Piano Box” buggy.)

As you begin, you will see a variety of vehicles used in rural areas in New Mexico’s past. These predecessors to cars and trucks were a critical means of transportation in the nineteenth century. Wagons were used to transport farm goods or large items. Carriages were designed to carry people. Think about how long it would have taken to hitch up a team of animals, load the wagon and travel from one place to another. Spanish colonists used carromatos and carretas to transport their goods on El Camino Real de Tierra Adentro. Westward settlers used Conestoga wagons and stagecoaches to move across the country or from town to town. Today we can just jump into a car, take off and arrive at our destination in a few hours!

- The carretta wheel hub on display was found at White Sands National Monument.

What was this caretta’s likely use?

[Hauling salt that was mined in the area of the gypsum dunes.]

- What did the long springs on the canopy-top surrey do? [Provided a more comfortable ride.]
- What are the names of the wood pieces that support the canvas top of the covered wagon? [bows]



Wheels & Gears

Farmers and ranchers used a variety of machines which evolved over time to help fulfill tasks such as the transportation of people and equipment, help with harvesting crops, bringing food to farmers and ranchers in the field, and a wide variety of other uses. Throughout the 1800s and to the present, these vehicles have evolved from stagecoaches and piano box buggies to automobile and pickup trucks. Despite technological changes, one thing remains the same, the vehicles that farmers and ranchers use need to be reliable and sturdy! (Enter the exhibit by going left as you leave the Spanish Colonial Home and walking under the “Wheels & Gears” sign.)



At the beginning of the exhibit you will notice a display of the various materials needed to make and repair wagon wheels. Despite looking like simple objects, wagon wheels were prone to all sorts of different breakdowns and you will see different tools used to fix the wheels. You will also see a chuckwagon used to prepare food for cowboys as well as haul supplies, bedrolls, and tools. Alongside horse-powered vehicles, you will see gasoline-powered automobiles such as the Model T Ford and a pickup truck. There is also an early 1900s-style gasoline pump. These helped farmers and ranchers become more efficient because unlike a horse, automobiles could work for longer hours, only needed gasoline to run, and were not prone to illnesses.

- What were some of the tools on display for fixing wagon wheels and what were their uses? [Drawknife: helped shape wagon wheel spokes and wooden items, Wagon wrench: Used to remove wagon wheel axle nut, Traveler: Used for measuring circumference of wagon wheels, Mallet: Used for setting spokes into hub.]
- What were windmills such as the Aermotor Windmill used for? [Used to pump water from the ground which helped farmers get access to water in places they normally couldn't.]

- Why was the “Nut tree knocker” invented and used? [To quicken the harvesting of pecans by hitting the tree, causing the pecans to fall simultaneously and removing the need to pick the pecans one by one.]



- Using a moving assembly line, how many Model T's was Ford able to produce through 1927? [Close to 15 million]
- Why was a moving assembly line important for getting more cars to Americans? [It allowed more vehicles to be produced quicker and with more efficiency, allowing the cost of the vehicles to be lowered and more people could then afford them.]
- How many gallons can the Shell Gasoline Pump in the exhibit hold in its glass container? [10 gallons.]
- What is a “buggy”? [A buggy is a two-person carriage which is pulled by one horse.]

Visiting Town

When you leave “Wheels & Gears” you will enter an area we call “Visiting Town.” You will see a train station and a mercantile similar to what may have existed in the early 1900s. General stores were very important on the western frontier because they provided supplies for new settlers, travelers and inhabitants. They were also communication centers and community meeting places and often had mail, banking, and transportation services. General stores eliminated the need for communities to produce all of the things they needed themselves. This changed the way people lived and worked. The arrival of the railroad in the late 1800s also transformed the way of life by bringing new people, new opportunities, and new goods.

Look around at the railroad station.

- Why is the bucket conical in shape? [to deter theft]

Walk through the Mercantile.



- Does it remind you of any store we have today? How does it differ?
- Can you find the ice cream maker, a can of marshmallows, a coffee grinder?

Home Sweet Home

There is no place like home! Walk through *Home Sweet Home's* farm house kitchen and parlor.

- What items do you recognize? How does the kitchen compare with yours at home?
- Do you see a toaster, a scale and a telephone?
Are they different from the ones you use today?



Don't forget to go out the back door
and look at the laundry area.

- Can you imagine how hard it was to wash clothes in the early 20th century?

Tool Shed

No farm was complete without tools and farm equipment. The farm implements you see were used by farmers to prepare the soil, to plant and to cultivate their crops. Don't forget to look into the nearby tool shed.

- Do any of these tools look familiar? How many are still used today?

Living History (Heritage Gallery)

Occasionally you might encounter people portraying characters from history. They will talk about their experiences and their lives in New Mexico's past. Be sure to ask them who they are and where they come from!

Adventure Corral (East end of North Hallway)

The Adventure Corral is a children's playroom featuring various interactive components. Children can climb into a hayloft and slide back down, plant imaginary crops, drive a tractor, or just sit quietly and read a book.



Demonstrations (Hallways and lobby)

Fiber art demonstrations take place throughout the week. You might see someone spinning wool, operating a loom or quilting. Take a moment to stop and watch what they're doing. Ask them about the process and the history of their craft!



Don't miss the outstanding temporary exhibits in the Legacy and Traditions Galleries, the North Hallway, and the Art Corridor. Check at the front desk for more information about what is happening in those areas.



Outdoor Exhibits (Near the Bruce King Building):

Heritage Garden (Near Bruce King Building)

Located in front of the main building, the Heritage Garden has several different plants and trees such as Cotton Wood, Crepe Myrtle, Crab Apple, Mesquite, and Bermuda Grass. Also located in the Heritage Garden is the "Friends Wall", run by the Friends of New Mexico Farm and Ranch Heritage Museum, which has plaques honoring various supporters of the Museum or of Farming or Ranching.

Discovery Garden (Near the Bruce King Building)

The Discovery Garden is located north of the cactus garden and includes a swing set and a playhouse for younger children.



Blacksmith Shop and Witte Cabin

(Located at the south end of the main building near the windmill.)

The blacksmith was an important person in a community. He made tools, nails, repaired vehicles and farm equipment, and handled lots of other metal work.



Some blacksmiths (not all) did the work of a farrier—shoeing horses. The blacksmith uses a forge to heat metal and then uses a hammer and anvil to pound, twist, or adjust the hot pliable metal. Through this process he hardens and shapes metal.

- Our historic blacksmith shop, the Witte Cabin, built in 1921, was originally used as a garage for a Model A vehicle. It was converted to a blacksmith shop in late 1922 and used on a ranch east of Santa Fe by the Witte family. They did their own blacksmith work repairing tools and machinery used for farming or ranching.
- The Museum blacksmith is in his shop on Fridays, Saturdays and Sundays unless otherwise noted at the front desk. On these days, make sure you stop by and watch him work. Ask him about what he's doing to learn more about blacksmithing. You can also buy a variety of metal works made utilizing the traditional hand forged method.

Windmill

The windmill opposite the Blacksmith Shop is an Aermotor model 702 with a 20 foot wheel. Windmills were utilized by farmers to pump water from underground for field irrigation while ranchers employed them to fill stock tanks (to provide water for livestock). The windmill was donated by New Mexico State University's Jornada Experimental Range. The lumber used to construct the tower was donated by the Mescalero Apache lumber mill.



Woodstove and Horno (Cross the traffic circle with care and proceed southwest)

Woodstoves were introduced to New Mexico Territory upon the opening of the Santa Fe Trail in 1830 and were prominent in rural homes until the arrival of electricity in the early to mid-1900s. Various types of materials were used to fuel woodstoves including such woods as cedar, juniper, mesquite, and when absolutely necessary, cow chips (dried cow dung).

Also known as a beehive oven, the adobe brick-making method of horno construction was introduced by the Spanish. Hornos were found outside many Spanish Colonial homes. They were used to bake bread, parch corn, and roast or dry various foods.

Hornos were quickly adopted by the Pueblo people and are still prevalent outside homes on the Pueblos in northern New Mexico.



Outdoor Exhibits (The Historic Green Bridge and the South 20):

The Historic Green Bridge

The bridge you are standing on was once part of the 1902 Pecos River Bridge east of Roswell. The middle span was dismantled and relocated to the Rio Hondo near Picacho, NM in 1943, where it remained in use until 1989. [It was placed at the Museum in 2007.]



The South 20

Dairy Barn

The dairy industry has recently become one of the most important businesses in New Mexico. Milk and dairy products, like cheese, are now the #1 commodities produced in the state, surpassing beef cattle a few years ago.

Dairies have become well established in New Mexico because land is cheap, regulation minimal, and the climate is ideal for raising large, healthy cattle herds. Because of this, New Mexico has some of the largest dairy herds in the country.



- If your schedule allows, you may be able to view the milking demonstration done daily at 10 a.m. and 3 p.m. This will provide more detailed information about dairies, as well as give you an opportunity to watch the modern method of milking a dairy cow using a milking claw and vacuum system. If you cannot be in the barn during these times, you can still enjoy the exhibits in the Dairy Barn. (Note: During certain times of the year, the dairy demonstrations are suspended. Check the front desk to confirm that a demonstration is going to take place.)
- Dairying in New Mexico has a long history. It began with milking and making cheese from goats by Spanish colonists. After the American Civil War, more people began using cattle for their milk and cheese. At about the same time, a host of new products were developed to help store and process milk. Some of these are exhibited in the Dairy Barn and include the cream separator, milk cans, and the milk wagon.
- Where was the first ice cream factory? [Baltimore, MD]
- While all cows give milk for their calves, dairy producers are most interested in only a few cattle breeds because they give so much milk.
- What is the most common breed of dairy cattle? [Holstein]
- In 2011, New Mexico ranked 9th in the nation in milk production and 4th in the nation in cheese.

Greenhouse

To the east of the dairy barn is the Museum's Greenhouse. The Greenhouse provides a climate-controlled environment where various types of cacti and vegetables are produced. You may purchase plants here Monday thru Friday unless noted otherwise. Check at the front desk for sale closure notices.

- What makes New Mexico an ideal location for greenhouse vegetable production (especially tomatoes and cucumbers)? [The state's high winter light intensity, moderate winter temperatures, and low humidity.]
- Greenhouse/ nursery products have been lucrative in N.M. since the early 1900s.



Antique Farm Equipment

You will see numerous pieces of antique farm equipment as you explore the Museum's South 20. Look for plows, manure spreaders, row-crop planters, harrows, cultivators, threshers, and various hay implements. All were once integral to successful farming in New Mexico.

"Watering Place"

"Watering Place" is a sculpture created for the Museum by artist Armando Alvarez. The project was part of the State of New Mexico's Art in Public Places program and was dedicated in May 2000. It took 80,000 pounds of steel to create the circular structure and about ten months to complete the project. The cutout figures represent the history of agriculture in New Mexico. Mr. Alvarez described his vision for the sculpture, "Water is the essence of all life, and farming is the cornerstone of all civilization."



Water in New Mexico has always been scarce. Finding, collecting, and distributing water has been a struggle throughout the region's history and has led to many conflicts.

- American Indian farmers used surface water to irrigate their crops and had an impressive system of check dams, irrigation ditches, and bordered gardens.
- During Spanish settlement, a formal system of irrigation ditches, the *acequias*, was established and expanded.
- In the late 19th and 20th centuries, irrigation increased the amount of land that could be put in agricultural production. Sources included tapping underground water with windmills, the discovery of artesian basins (Pecos Valley), and the establishment of large-scale irrigation projects by the Reclamation Service.

Pavilion (South of "Watering Place")

The Museum's outdoor pavilion is an ideal spot to take a break and perhaps enjoy a drink or a snack you packed earlier or bought at the Eagle Ranch Mercantile and Gift Shop. You can also take a moment to look at the antique tractor collection.

Animal Exhibits

Our animal exhibits include cattle, horses, ponies, donkeys, sheep, and goats. There are some exhibit panels that explain what you are looking at. **For your own safety, we ask that you do not touch or feed any of the cattle, donkeys, horses, sheep, or goats.**

Sheep and Goat Barn

The Spanish brought the first horses, sheep, goats, and cattle to New Mexico in the 1500s. Sheep were especially well suited to the arid conditions and became very important in New Mexico's history. Sheep remained the largest livestock commodity in New Mexico until cattle finally exceeded them in the 1950s. Sheep and goats are raised for food and clothing. Don't forget to look inside the sheep wagon and see how shepherders lived when they were watching their flocks.

Sheep and Goat Breeds

We currently have 3 breeds of sheep at the Museum: Navajo Churro (the original Spanish breed), Suffolk (a breed imported from England in the late 1800s), and Debouillet (A native New Mexican breed developed in the 1920s).

- What are male sheep called? [rams]
- What is the term for a female sheep? [ewe]
- What is a lamb? [a young male or female sheep]



Presently there are two goat breeds at the Museum: Angor mohair) and Boer (native to South Africa).

- What is the term for a male goat? [a buck or a billy]
- What do you call a female goat? [a doe]
- What are baby goats called? [kids]

Donkeys

Donkeys are used for mule breeding and can be ridden or driven just like horses although they are sometimes independent and hard to handle. “Burro” is the Spanish word for a working donkey. Donkeys can live as long as twenty-five years and have a raspy, brassy bray that sounds like EE-Aw, EE-Aw. They make good guard animals, as their bray can be heard two miles away!

- What are male donkeys called? [jacks]
- What are female donkeys called? [jennys]

Ponies

Ponies are a breed of horse that is shorter than 14.2 hands and often used as a children’s mount. They were originally developed in Northern Europe as a draft animal for harsh environments. The small but hardy build of ponies make them the perfect animal for small farms.

Our ponies enjoy transporting children on rides every Saturday from 10am to 12pm. Check at the front desk for weather cancellations.



Horse and Cattle Barn

Raising beef is big business! Ranchers work hard to raise healthy and productive animals. These animals are ruminants, meaning that they are hooved mammals that chew a cud and have stomachs with four compartments to aid in the digestion of the roughage they eat. All of their pens include a water tank or trough, a shade structure, cattle rubs, feeders, and mineral blocks. They each have ear tags that identify their breed, their mother, their gender, and their date of birth.

While you are in the Horse and Cattle Barn, check out the Slim Green Saddle Maker exhibit.

Cattle Breeds

We have seven breeds of beef cattle at the Museum: Corriente (the original Spanish breed brought here in the 1600s), Texas Longhorn (a descendant of the Corriente which developed in the United States), Hereford (imported from Herefordshire, England in the early 1800s), Angus (imported from Aberdeen, Scotland in the late 1800s), Charolais (imported from France into Mexico in the 1930s), Brangus (a cross breed which is 5/8 Angus and 3/8 Brahman), and American Brahman (the first beef breed developed in the United States).



- What is the term for a male bovine? [a bull]
- What do you call a castrated bull? [a steer]
- What is a cow? [a mature female bovine that has produced a calf]
- What is a heifer? [a cow that has not produced a calf and is under three years of age]
- What is the term for a young male or female bovine? [a calf]

Before you leave, ask at the front desk about upcoming events, theater presentations, workshops or classes taking place here at the Museum.

If you're traveling through, visit the gift shop and pick up a souvenir or grab a snack!



Thanks for exploring our Museum.

Come back soon. There's always something new!

