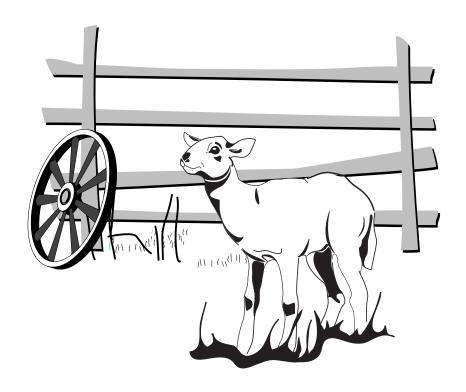
The Sheep and Cattle Industry in Montana





User Guide 2002 Montana Historical Society https://mhs.mt.gov/
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Inventory

1 Lariat

Bo	rrower:		Booking Period:								
the da bo co fo	The borrower is responsible for the safe use of the footlocker and all its contents during the designated booking period. Replacement and/or repair for any lost items and/or damage (other than normal wear and tear) to the footlocker and its contents while in the borrower's care will be charged to the borrower's school. Please have an adult complete the footlocker inventory checklist below, both when you receive the footlocker and when you repack it for shipping, to ensure that all of the contents are intact.										
	ITEM	BEFORE USE	AFTER USE	CONDITION OF ITEM	MHS USE						
1	workshirt										
1	Pair chaps										
1	Bandana										
1	Pair cowboy boots										
1	Cowboy hat										
1	Enamel coffee pot										
1	Tin cup										
1	Tin plate										
1	spur with strap										
1	Branding iron										

Inventory (continued)

	ITEM	BEFORE USE	AFTER USE	CONDITION OF ITEM	MHS USE
1	Pair of wool cards w/ fleece				
1	sheep shears				
12	Photographs				
1	CD of cowboy songs				
1	Horse with western tack				
1	User guide				
2	padlocks				



Footlocker Contents



Left: Hat, Chaps, Shirt, Bandana, and Boots

Right: Tin Plate, **Enamel Coffee** Pot, Tin Cup

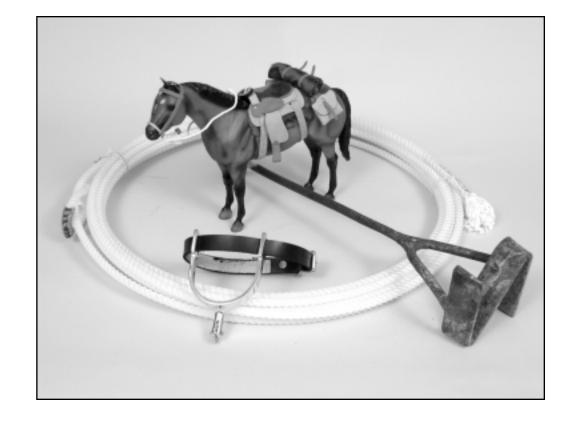


Footlocker Contents (continued)



Left:Wool Cards,
Sheep Shears,
Fleece

Right: Lariat, Model Horse, Spur, Branding Iron



The Sheep and Cattle Industry in Montana



Footlocker Use-Some Advice for Instructors

How do I make the best use of the footlocker?

In this User Guide you will find many tools for teaching with objects and primary sources. We have included teacher and student level narratives, as well as a classroom outline, to provide you with background knowledge on the topic. In section one there are introductory worksheets on how to look at/read maps, primary documents, photographs, and artifacts. These will provide you and your students valuable tools for future study. Section three contains lesson plans for exploration of the topic in your classroom—these lessons utilize the objects, photographs, and documents in the footlocker. The "Resources and Reference Materials" section contains short activities and further exploration activities, as well as bibliographies.

What do I do when I receive the footlocker?

IMMEDIATELY upon receiving the footlocker, take an inventory form from the envelope inside and inventory the contents in the "before use" column. Save the form for your "after use" inventory. This helps us keep track of the items in the footlockers, and enables us to trace back and find where an item might have been lost.

What do I do when it is time to send the footlocker on to the next person?

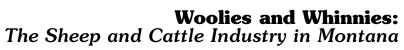
Carefully inventory all of the items again as you put them in the footlocker. If any items show up missing or broken at the next site, your school will be charged for the item(s). Leave the completed form in the folder.

Who do I send the footlocker to?

You will be receiving a mailing label via email to use to send the footlocker on to its next destination.

What do I do if something is missing or broken when the footlocker arrives, or is missing or broken when it leaves my classroom?

If an item is missing or broken when you initially inventory the footlocker, CONTACT US IMMEDIATELY (406-444-9553 or email kwhite@mt.gov). This allows us to track down the missing item. It may also release your school from the responsibility of paying to replace a missing item. If something is broken during its time in your classroom, please call or email us and let us know so we know it needs repairing. If an item turns up missing when you inventory before sending it on, please search your classroom. If you cannot find it, your school will be charged for the missing item.





Footlocker Evaluation Form

Evaluator's Name		Footlocker Name
School Name		Phone
Address	City	Zip Code
1. How did you use the materi	al? (choose all that	apply)
☐ School-wide exhibit ☐ Classro	oom exhibit	ands-on" classroom discussion
☐ Supplement to curriculum ☐	Other	
2. How would you describe the		• • • •
☐ College students ☐ Senio		
☐ Other		
2a. How many people viewed/used	the toottocker:	
3. Which of the footlocker mat	erials were most	engaging?
☐ Artifacts ☐ Documents	□ Photographs	\square Lessons \square Video
\square Audio Cassette \square Books	□ Slides	□ Other
4. Which of the User Guide ma	toriale wore most	· neoful?
 □ Narratives □ Other 	Resource Materials	☐ Biographies/Vocabulary
5. How many class periods did	you devote to us	sing the footlocker?
□ 1-3 □ 4-6	\square More than 6	□ Other
6. What activities or materials to this footlocker?	would you like to	see added

7. Would you request this footlocker again? If not, why? 8. What subject areas do you think should be addressed in future footlockers? 9. What were the least useful aspects of the footlocker/User Guide? 10. Other comments.

Woolies and Whinnies: The Sheep and Cattle Industry in Montana

Footlocker Evaluation Form (continued)



Montana Historical Society Educational Resources

Hands-on History Footlockers

The Montana Historical Society's Footlocker program offers thematic "traveling trunks" focused on a wide variety of topics. Each footlocker is filled with reproductions of clothing, tools, everyday objects, maps, photographs, and documents. User Guides with lesson plans and standards alignment accompany each footlocker.

Availability and Cost: Footlockers are available to Montana educators for two weeks at a time. Schools pay a \$25 rental fee, while the Montana Historical Society covers the cost of shipping to the next venue. In an effort to provide equitable access, reservations are limited to four per year per teacher.

For more information and to order a footlocker, visit https://mhs.mt.gov/education/HandsonHistory.

Available Titles

Cavalry and Infantry: The U.S. Military on the Montana Frontier—Illustrates the function of the U.S. military and the life of an enlisted man on Montana's frontier, 1860 to 1890.

Coming to Montana: Immigrants from Around the World—Showcases the culture, countries, traditions, and foodways of Montana's immigrants through reproduction clothing, toys, and activities.

Discover Lewis and Clark—Traces the Corps' journey through Montana and their encounters with American Indians. Includes bison hide, trade goods, books, and more!

East Meets West: The Chinese Experience in Montana—Explores the lives of the Chinese who came to Montana, the customs that they brought with them to America, how they contributed to Montana communities, and why they left.

From Traps to Caps: The Montana Fur Trade—Gives students a glimpse at how fur traders lived and made their living along the creeks and valleys of Montana, 1810-1860.

Gold, Silver, and Coal Oh My!: Mining Montana's Wealth—Chronicles the discoveries that drew people to Montana in the late19th century and how the mining industry developed and declined.

The Home Fires: Montana and World War II—Describes aspects of everyday life in Montana during the 1941-1945 war years. Illustrates little-known government projects such as the Fort Missoula Alien Detention Center and Civilian Public Service Camps.

Inside and Outside the Home: Homesteading in Montana 1900-1920—Focuses on the thousands of people who came to Montana's plains in the early 20th century in hope of make a living through dry-land farming.

Land of Many Stories: The People and Histories of Glacier National Park—
Focuses on the commemoration of the centennial anniversary of Glacier National Park. It is thematically tied to the MHS' exhibit The Land of Many Stories: The People and Histories of Glacier National Park. It examines the human experience in the area new known as

of Glacier National Park. It examines the human experience in the area now known as Glacier National Park, from pre-contact to the recent past, focusing on human-environmental interaction.

Montana Indian Stories Lit Kit—Immerses students in storytelling and the oral tradition with seven class sets of Montana Indian stories collected for the Indian Reading Series (1972) and reprinted by the Montana Historical Society Press. The lit kit includes animal puppets and User Guide. NOTE: Out of respect for the storytelling customs of many Montana Indian people, this kit will be made available for use in the winter months (November through March.)

Montana Place Names Mini Footlocker—Consists of ten copies of the book, Montana Place Names: from Alzada to Zortman, and the lesson plan "Mapping Montana, A to Z." Teachers will need to order classroom sets of Montana maps separately from Travel Montana or by calling 406-841-2870.

Montana State Symbols—Provides students the opportunity to explore hands-on educational activities to gain a greater appreciation of our state's symbols and their meanings.

Montana's First Peoples: Essential Understandings—Explores the Seven Essential Understandings Regarding Montana Indians. Includes pre-contact and contact-era trade items, a parfleche, drum, elk tooth dress, horse model, ration coupon bag, boarding school outfits, beaver pelt and bison hide, maps, illustrations, tribal flags, and more.

Oral History in the Classroom Mini Footlocker—Includes eight Sony IC Audio Recorders, batteries and chargers, useful reference material, and detailed lesson plans for creating a classroom-based oral history project.

Prehistoric Life in Montana—Exposes Montana prehistory (10,000-12,000 years ago) and archaeology through a study of the Pictograph Cave site in eastern Montana.

Stones and Bones—Uncovers the earliest evidence of Montana's human history through a study of casts and reproduction stone and bone tools, including replica artifacts from the Anzick collection found in Wilsall, Montana.

Through a Child's Eyes: The Stewart Family in Turbulent Times, 1913-1921—Investigates life and politics, 1913-1921, as well as the history and architecture of a magnificent building.

To Learn a New Way—Through a child's voice, as much as possible, this footlocker explores the late 1800's and early 1900's time in which Montana Indians were moved to reservations, experienced allotment and boarding schools - all of which resulted in dramatic changes in their lands, languages, and way of life.

Tools of the Trade: Montana Industry and Technology—Surveys the evolution of tools and technology in Montana from late 1700s to the present.

Woolies and Whinnies: The Sheep and Cattle Industry in Montana—Reveals the fascinating stories of cattle, horse, and sheep ranching in Montana, 1870 to 1920.

Other Resources From the Montana Historical Society

In addition to the hands-on history footlockers, the Montana Historical Society offers a large number of <u>online resources</u> and lesson plans for grades K-12 at http://mhs.mt.gov/education/index7. Resources include:

Montana: A History of Our Home Designed for grades fourth through sixth, this comprehensive curriculum includes a student textbook and hands-on, interactive lesson plans. It contains six distinct, interdisciplinary units that focus on Montana geography, government, and history from 12,500 years ago to the present.

Montana: Stories of the Land Designed for grades 7-12, this comprehensive Montana history curriculum covers over twelve thousand years of Montana history with a student textbook and a companion website with links to lesson plans, worksheets, tests, and primary source activities.

<u>Civics and Geography</u> **Lesson Plans** Looking for a lesson that explains the electoral process, provides an example of how laws affect individuals' lives, or introduces your students to Montana geography while improving their map reading skills? Find it here.

<u>Indian Education for All</u> Lesson Plans From examining early trade routes to analyzing primary sources relating to the Marias Massacre, these lesson plans will help your students grasp the Essential Understandings Regarding Montana Indians while learning more about specific Montana history topics.

<u>Integrating Art and History</u> Lesson Plans Material on Charlie Russell, Montana's Cowboy Artist; Plains Indian pictographic art; and Plateau Indian beaded bags provide a beautiful way to approach Montana history.

<u>Teaching with Primary Sources</u> <u>Lesson Plans</u> The Montana Historical Society has created a number of lesson plans that provide students an opportunity to analyze primary source material, including artwork, photographs, letters, diary entries, and historic newspapers.

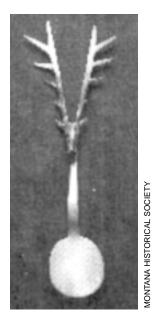
<u>Teaching with Biographies</u> Resources and Lesson Plans Find links to online biographies as well as lesson plans that guide students to investigate remarkable Montanans.

<u>Women's History</u> **Resources and Lesson Plans** Discover an abundance of material on Montana's women's history, including fascinating stories, intriguing photographs, and detailed lesson plans.



Primary Sources and How to Use Them

The Montana Historical Society Education Office has prepared a series of worksheets to introduce you and your students to the techniques of investigating historical items: artifacts, documents, maps, and photographs. The worksheets introduce students to the common practice of using artifacts, documents, maps, and photographs to reveal historical information. Through the use of these worksheets, students will acquire skills that will help them better understand the lessons in the User Guide. Students will also be able to take these skills with them to future learning, i.e. research and museum visits. These worksheets help unveil the secrets of artifacts, documents, maps, and photographs.



See the examples below for insight into using these worksheets.

Artifacts

Pictured at left is an elk-handled spoon, one of 50,000 artifacts preserved by the Montana Historical Society Museum. Here are some things we can decipher just by observing it: It was hand-carved from an animal horn. It looks very delicate.

From these observations, we might conclude that the spoon was probably not for everyday use, but for special occasions. Further research has told us that it was made by a Sioux Indian around 1900. This artifact tells us that the Sioux people carved ornamental items, they used spoons, and they had a spiritual relationship with elk.

Photographs

This photograph is one of 350,000 in the Montana Historical Society Photographic Archives. After looking at the photograph, some of the small "secrets" that we can find in it include: the shadow of the photographer, the rough fence in the background, the belt on the woman's skirt, and the English-style riding saddle.

Questions that might be asked of the woman in the photo are: Does it take a lot of balance to stand on a horse, is it hard? Was it a hot day? Why are you using an English-style riding saddle?



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Documents

This document is part of the Montana Historical Society's archival collection. Reading the document can give us a lot of information: It is an oath pledging to catch thieves. It was signed by 23 men in December of 1863. It mentions secrecy, so obviously this document was only meant to be read by the signers.

Further investigation tell us that this is the original Vigilante Oath signed by the Virginia City Vigilantes in 1863. The two things this document tell us about life in Montana in the 1860s are: there were lots of thieves in Virginia City and that traditional law enforcement was not enough, so citizens took to vigilance to clean up their community.

Maps

This map is part of the map collection of the Library of Congress. Information that can be gathered from observing the map includes: The subject of the map is the northwestern region of the United States—west of the Mississippi River. The map is dated 1810 and was drawn by William Clark. The three things that are important about this map are: it shows that there is no all-water route to the Pacific Ocean, it documents the Rocky Mountains, and it shows the many tributaries of the Missouri River.





How to Look at an Artifact

(Adapted from the National Archives and Records Administration Artifact Analysis Worksheet.)

Artifact: An object produced or shaped by human workmanship of archaeological or historical interest.

nistor	ical interest.		
1. What mate	rials were used t	o make this artif	act?
☐ Bone	\square Wood	Glass	☐ Cotton
Pottery	Stone	Paper	☐ Plastic
☐ Metal	\Box Leather	☐ Cardboard	Other
2. Describe h	ow it looks and f	eels:	
Shape		Weight_	
Color		Moveab	le Parts
Texture		Anythin	g written, printed, or stamped on it
Size			
Draw and colo	_	object from the a	top, bottom, and side views. Side

Woolies and Whinnies: The Sheep and Cattle Industry in Montana **How to Look at an Artifact** (continued)

3. U	ses of the Artifacts.
A.	How was this artifact used?
B.	Who might have used it?
C.	When might it have been used?
D.	Can you name a similar item used today?
4. S	ketch the object you listed in question 3.D.
5. C	lassroom Discussion
A.	What does the artifact tell us about technology of the time in which it was made and used?
В.	What does the artifact tell us about the life and times of the people who made and used it?



How to Look at a Photograph

(Adapted from the National Archives and Records Administration Photograph Analysis Worksheet.)

Photograph: an image recorded by a camera and reproduced on a photosensitive surface.

Ā	That secrets do you see?
	an you find people, objects, or activities in the photograph? ist them below.
•	eople
_	bjects
	ctivities
	What questions would you like to ask of one of the people in the hotograph?



How to Look at a Written Document

(Adapted from the National Archives and Records Administration Written Analysis Worksheet.)

Document: A written paper bearing the original, official, or legal form of something and which can be used to furnish decisive evidence or information.

1.	Type of docume	nt:							
	Newspaper		Journal		Press Release		Diary		
	Letter		Мар		Advertisement		Census Record		
	Patent		Telegram		Other				
2.	Which of the fol	low	ing is on the do	cum	ent:				
	Letterhead		Typed Letters		Stamps				
	Handwriting		Seal		Other				
3.	Date or dates of	f do	cument:						
4.	Author or creator:								
5.	Who was suppos	sed	to read the doc	ume	nt?				
6.	List two things the author said that you think are important:								
	1								
	2								
7.	List two things this document tells you about life in Montana at the								
	time it was written:								
	1								
	2								
8.	Write a question	ı to	the author left	unaı	nswered by the d	locu	ment:		





How to Look at a Map

(Adapted from the National Archives and Records Administration Map Analysis Worksheet.)

Map: A representation of a region of the earth or stars.

1. W	hat is the subj	ect of the map?	
	River	Stars/Sky	☐ Mountains
	Prairie	☐ Town	☐ Other
2. W	hich of the foll	owing items is on	the map?
Prairie Town Other			
	Date	☐ Key	Other
	Notes	☐ Title	
3.	Date of map:		
4	Manmakar		
4.	маршакег:		
5.	Where was the	e map made:	
6.			-
7.	River		
8.	Write a questi	ion to the mapmak	er that is left unanswered by the map.





Standards and Skills

State 4th Grade Social Studies Standards

Lesson Number:	1	2	3	4	5	6
Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.	~	~	•	•	•	/
Students analyze how people create and change structures of power, authority, and governance to understand the operation of government and to demonstrate civic responsibility.	•	•	•		•	
Students apply geographic knowledge and skill (e.g., location, place, human/environment interactions, movement, and regions).	/	/	•	•	•	
Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships.	•	•	•		•	
Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.	•	~				
Students demonstrate an understanding of the impact of human interaction and cultural diversity on societies.	~	~	•	•	•	

Skill Areas

Lesson Number:	1	2	3	4	5	6
Using primary documents	·	~	~	'	/	
Using objects		'	/	~	/	'
Using photographs	✓	'	'	/	~	
Art			/		~	
Science		'				
Math	·	'				
Reading/writing	·		~	/	~	
Map Skills		~				
Drama, performance, re-creation					~	
Group work	·	~	~	/	~	'
Research	·	~	~	/	~	
Music					~	
Bodily/Kinesthetic			~	~		/
Field Trip						

The Sheep and Cattle Industry in Montana



Historical Narrative for Fourth Graders

The First People

For Montana's First People this land was a paradise. Food, water, clothing, shelter and the inspiration of a beautiful place surrounded them each day. They traveled frequently, following herds of buffalo, elk, deer and other animals that provided meat to eat. They ate roots, berries and some plants. All the foods they found and harvested were nutritious and plentiful. Montana's First People did not need to plant seeds or grow crops; they did not raise cows or sheep. It was not necessary for their lifestyle.

The Newcomers

Euro-Americans came west looking for furs and then for gold. They traveled across lands belonging to Montana's First People – the Indians. With the whites came their ideas of government, architecture, wealth, clothing



Cowboy wearing a ten-gallon hat, 1910.

and food. Because there were no stores at first, the new comers raised their own food. They tried to plant seeds, grow crops and raise animals to eat. They paid large sums of money to purchase supplies and fresh meat from local providers.

Early Ranchers

The earliest ranchers in Montana lived in the western part of the state in protected and lush valleys like the Bitterroot, the Beaverhead and the Deerlodge. A man named Johnny Grant traded one of his strong and healthy oxen for two worn-out and sickly ones from a wagon train moving west. He returned to his ranch with the two tired oxen to feed, water and rest them. Pretty soon his herd grew to thousands of head.

Sheepherders also enjoyed the early years in Montana. Henry Sieben began his sheep business as early as 1872 in the Helena valley where miners paid high prices for the pleasure of eating lamb. The sheep's wool also made fine coats and blankets.

The Cowboy

Cowboys worked hard and were paid about \$1 a day. During roundups, cowboys traveled great distances from the ranch looking for wandering cattle. Over a period of weeks, these young men branded and notched the ears of the young cows, and moved the cows to train cars waiting to transport the beef to market. Cowboys often slept on the ground or in tents, and they ate meals provided by the camp cook.

Sheepherders had similar lives. They did not need to ride horses all day, but they had to protect the sheep from predators like wolves or bobcats and even large birds.

Sheepherders depended upon good dogs that could chase and corral wandering sheep and alert the sheepherder to danger. Sheepherders had specially designed, horse-pulled wagons. Each sheep wagon was a "home away from home," complete with bunk, stove, cupboards and supplies. Sheepherders could spend several weeks or months in comfort in their wagon, following the grazing sheep.

Dangers on the Range

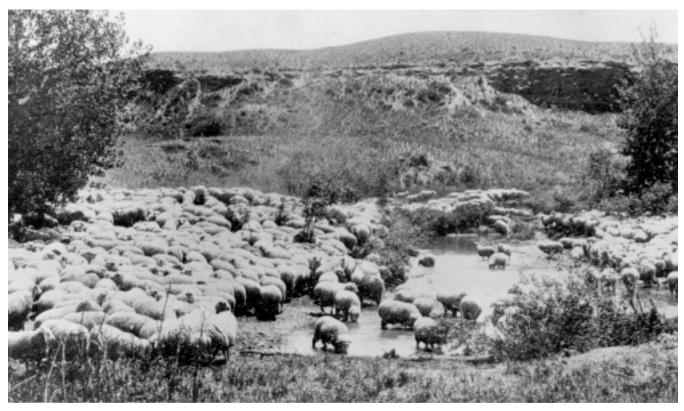
Rattlesnakes, gopher holes, alkali water, and bad weather caused problems for all ranchers. Sometimes there was little water to drink, or little grass to feed the cattle. Perhaps you have heard the story about the "Hard Winter of 1886 and 1887," when cattlemen lost from 50% to 90% of their herds due to freezing snow and wind. To document the harsh conditions, Charlie Russell painted a picture, called "Waiting for

a Chinook," of a starving cow and a hungry wolf, standing in the cold and snow.

After 1887 the open range was phased out, and many ranchers began to fence their property. These ranchers grew hay, timothy or other grasses. They improved the breeds of cattle. The cowboy changed from herd driver to fence builder.

The Modern Era

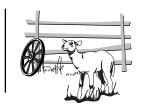
Ranchers today have learned to diversify their ranches. Many do not raise just cattle or sheep, but also grow grasses to feed their livestock. Their ranches are fenced, and water is provided by irrigation or deep wells. Cattle are shipped most often by truck. Roundups still happen. Today's cowboys and herders move cattle within the boundaries of the ranches, rather than for hundreds of miles across state.



A band of sheep near Billings, Montana.

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The Sheep and Cattle Industry in Montana



Historical Narrative for Instructors

In the days before horses, Indians hunted buffalo, elk and deer on foot, traveling great distances to find herds. These early people of the Montana landscape found food plentiful: roots, herbs, berries, grasses and wild game. Once the horse arrived, around the mid-eighteenth century, hunting grounds expanded, and tribes met and sometimes conflicted as they hunted for the same animals.

The practice of raising cattle or sheep for food was not a notion entertained by Montana's First People. It was not necessary, since the land yielded an adequate food supply. The cattle industry began as white people moved west, looking for new homes in the distant valleys of California and Oregon.

One enterprising individual, Johnny Grant, assessed the situation and determined to trade one of his healthy and strong oxen for two of a traveler's worn and tired beasts. The immigrants were relieved to have fresh animals, and Johnny Grant soon built a herd in the Deer Lodge Valley in south-central Montana. By 1862, when gold was discovered and miners swarmed to the area, hard-working people needed food. They were willing to pay high prices for beef and sheep meat. Local ranchers were eager to provide the meat for them.

Soon ranches filled the western valleys, supplying cattle to military posts and booming mining camps. Major G.G. Kimball was among the first ranchers to trail a large herd of sheep from California, and Henry Sieben of the Helena valley began his operation in 1872. The western Montana valleys filled, and ranchers looked to the eastern plains. The grass that grew naturally there and fed thousands of buffalo, nourished the imported cattle. Called native bunchgrass

or "gramma," the natural grass was nutritious all year long, even when dried and dormant during the winter months.

Investors, or "speculators", soon realized the advantages of transporting large herds of cattle great distances, like from Texas for instance, to feed on Montana's wonderful and plentiful grass. The longhorn cattle, fit to make the tough journey, traveled along with cowhands trained in the Southwest and Mexico. These cowboys wore wide-brimmed hats, bandannas, chaps and perhaps a pistol and knife. They endured long days, monotonous meals and backbreaking work. Teddy Blue Abbott, both a storyteller and a cowboy, told tales that he would rub tobacco juice in his eyes to stay awake during night patrol.

Most work was accomplished on horseback. A cowboy's horse was not only his closest companion, but also an important "tool" in getting work done. The cowboy came to depend upon his horse for his life. On a roundup, each wrangler used seven to ten horses, one at a time. Each day he rode a fresh and rested mount. The other horses, not being used, formed a "cavvy". They trailed with the cook wagon and were picketed at night. Depending on the number of wranglers working during a roundup, a "cavvy" could easily include 150 horses.

For years the Montana plains were "open" country. Cowboys gathered herds in cooperation with other wranglers representing many ranching outfits. They trailed cattle for hundreds of miles, from the foothills of the Rockies to the Yellowstone River and beyond. In 1886 and 1887, Montana endured a particularly dry summer and subsequent harsh winter. The landscape, water and grass froze for five months, and the open-range cattle succumbed. Anywhere from 50% to 90% of

the herds died. It was on this occasion that a young cowpuncher penciled an illustration of a skinny longhorn, with wolves surrounding, and titled the scene "Waiting for a Chinook". ("Chinook" refers to the warm, thawing, southwest, spring wind, which sporadically comes to the Montana plains.) The young cowboy was Charles M. Russell who painted many scenes reminiscent of his days working cattle in Montana.

The "Hard Winter of 1886 and 1887" marked a new trend in Montana cattle ranching. "Speculators" could no longer rationalize their absentee investments in Montana, and local ranchers realized that their future lay in fenced ranges, cultivated food sources, and stronger bloodlines. As ranchers fenced their lands, they diversified their operations as well. Some raised other animals in addition to cattle (such as sheep, hogs, poultry) and grew hay, alfalfa or other nutritious grasses. Cowboys rode fewer long trails and fixed more fences.

The work of the cowhand was still wearisome and difficult. During the spring and fall roundups, cowhands sorted cattle, separating branded cattle. Calves born in the early spring usually stayed with their mothers and could be identified by association, rather than by brand. Cowboys not only branded young cattle, but also notched ears so the cattle could be easily identified at distances. The herds were counted and brands recorded; cattle were castrated and inoculated against common diseases.

Diversified cattle and sheep operations became the ranch of the future. Those with a good water supply had the best chance for economic survival. The modern cattle ranch may represent several smaller ranches joined into one, called a corporate ranch. Like the "family farm," the family-owned Montana ranch is challenging and difficult to run. It is a Montana culture that is steeped in tradition.

The Sheep and Cattle Industry in Montana



Outline for Classroom Presentation

I. First People

- A. Where did they come from?
- B. Where did they live while in Montana?
- C. What did they do here?
 - 1. Hunters and gatherers
 - 2. Cultivators

II. Euro-Americans

- A. Who were they?
 - 1. Explorers and scientists
 - 2. Fur trappers and traders
 - 3. Miners
 - 4. Settlers
- B. What did they want?
 - 1. Riches and resources
 - 2. Land and permanence

III. Ranching - Cattle and Sheep

- A. Where did they go?
 - 1. Cattle Ranching
 - a. starting in the western valleys
 - b. serving travelers and mining communities
 - c. huge demand for meat, so ranchers built huge herds
 - 2. Sheep Ranching
 - a. west to east
 - b. mining boom demand for meat
- B. What were the challenges?
 - 1. Winter
 - 2. Water
 - 3. Feed

IV. Ranchers, Herders, and Cowboys

- A. What was the Montana cowboy like?
 - 1. Age, background
 - 2. Clothing and why he wore such things
 - 3. Tools and equipment

Outline for Classroom Presentation (continued)

- B. What was a day's work?
 - 1. Sort
 - 2. Brand
 - 3. Ear notch
 - 4. Count
 - 5. Record brands
 - 6. Roundup and night herd
 - 7. Fixing fences introduction of barbwire
- C. Who was a sheepherder? And what was he like?
 - 1. Lonely
 - 2. Basque and other nationalities
- D. How was sheep ranching different?
 - 1. Protection predators
 - 2. Dogs
 - 3. Sheep herder and crew
 - 4. Shearing

V. Problems Facing Ranchers

- A. What were some problems?
 - 1. Cattle rustling
 - 2. Overcrowding on range
 - 3. Bad winters 1886, 1887 and 1906, 1907
- B. What were the solutions?
 - 1. Loss of speculators
 - 2. Fencing end of open range
 - 3. Diversification in crop
 - 4. Re-introduction of breeds

VI. Conclusion

- A. First people had buffalo
- B. Immigrants needed healthy livestock
- C. Miners wanted beef and lamb
- D. Work was hard and still is
- E. Montana ranches today diversify in order to succeed.

The Sheep and Cattle Industry in Montana



Amazing Montanans—Biographies

Oscar Anderson—Rancher

My name is Oscar Anderson, and I grew up on my father's ranch near Lewistown, Montana. I was born in 1889, just when Montana became a state and at the beginning of the end of the "open range". I had two older brothers and two younger sisters, but my brothers were not well. I enjoyed the company of the animals on the ranch and learned to ride just about any horse my parents put me on.

My parents, Peter and Marie, came to America from Norway. They met and married in Montana, and they soon acquired homestead land on which to build their ranch and family. It was hard work, but the land was beautiful. The Judith River watered the lowlands. We had gardens and rangeland suitable for large herds of Hereford cattle. My folks were surprised to learn that my hopes and dreams did not rest with the ranch or with horses or cattle. I really wanted to go to college and learn to be a lawyer.

By the time I was 18, I was a skilled roper and could remember the brands and earmarks of all the cattle from surrounding ranches. That meant I could remember about 250 brands. My dad insisted I help run the ranch, so college was not a possibility for me. I was very disappointed, but I decided to do the best I could with the job that life handed me.

In 1910 I was hired to help with a spring roundup. I was only 21 years old, but the ranchers around us had heard stories about me and my abilities with a horse and brands. Even though many ranches had been fenced, there was still a lot of open range around the Judith River country. Our neighbor was a photographer, and I invited him to come along and to take pictures of the roundup.



Oscar Anderson on "Blue Dog", 1910.

I was photographed on my favorite horse, "Blue Dog," and his coloring was a speckled gray. That horse was so smart! Blue Dog would recognize the animal I wanted to cut from the herd even before I knew it. All I had to do was hang on. It seemed that horse could jump sideways five feet to head off a critter trying to go where he shouldn't. One time Blue Dog and I took some steers to another ranch. It started to storm just as we tried to return to camp. We could not see a foot in front of us, and we became hopelessly lost. I was about to give up and hunker down for a cold, wet night when ol' Blue Dog caught the scent of the trail and was off at a trot to reach camp.

Later in life I married and had one son, Keith. Keith loved animals just as I did, and he learned a lot about the ranch and handling cattle. Keith decided to go to college and learn to be an accountant. I was happy that he made that decision. We sold the ranch, and I spent the rest of my days in Lewistown. My family still has the photographs that were taken of the 1910 spring roundup near the Judith. It was an exciting time to live.

The Sheep and Cattle Industry in Montana



Vocabulary List

Alkali Water – water that has been spoiled by alkali, a powdery mineral, that leaves the water-soaked ground a white color. This water is not fit to drink.

Barbed Wire – a kind of wire used for fencing. It comes in all kinds of designs, but most have small bits of pointed wire sticking out. Animals learned to keep away from the wire because the "barbs" stung an unsuspecting critter that ran into it. Cowboys strung barbed wire fences in the West because wood was scarce and expensive.

Black Angus – Angus is a kind of cattle commonly found in Montana. They can survive the long, cold winters, and provide tender meat when butchered. Many times you will see black dots on the western landscape. Those dots would be the Black Angus.

Brand – a mark made with a hot iron burned into the hide of an animal that indicated ownership. Each rancher had at



Hereford bull.

least one brand with which he marked his animals. Brands and owners are registered with the state or cattlemen's association.

Chaps – leather leggings worn to protect a cowhand's legs from scrapes, brush, fences or weather. Chaps (pronounced with a soft "ch") come in many styles, some which wrap all around, or others that are one-sided.



Wranglers on the Blackfeet Indian Reservation, 1910.

continued

Vocabulary List (continued)

Cowboy – men who are hired to care for cattle and all the things associated with their feeding, branding, ear notching, inoculations and herding. There are many women cowpunchers as well. Cowhands need to be very capable of riding and managing a horse.

Ear Notch – a way of identifying the owner of cattle, just as a brand does. The ears are cut or clipped. Many cattle are branded and ear marked. Some cowhands find it easier to identify an earmark at a distance than to read a brand. Today, many cattle wear ear tags.

Hereford – probably the most popular kind of cattle brought to Montana from England. They are red colored with white faces.

Open Range – unfenced cattle country, available for anyone to use.

Oxen – the plural of ox; a male bovine of any breed that is not castrated till it's three-years-old and trained to pull wagons; though slow walkers, oxen could stand the long journey West by just eating grass and drinking a little water.

Predator – an animal that chases, stalks and kills other animals. The wolf is a predator to sheep.

Roundup – the gathering of cattle usually twice a year in the spring and fall. The cattle

were gathered to be branded, notched, and castrated, inoculated against disease, and then shipped to market. During the open range, the roundup covered hundreds of miles and many brands and cattle. Fencing limited the size of the roundup.

Sheepherder – someone who looks after flocks of sheep; these people often worked with dogs in order to protect the sheep while they spent the spring and summer months grazing in mountain pastures. Often a sheepherder would not see other people for weeks.

Texas Longhorn – the cattle found in Texas best known by their incredibly long horns. These animals could live off the scruffy vegetation found in hot, dry places in the West. They were brought to Montana in the 1880's on long cattle drives from Texas. They were usually ill-tempered and did not produce good meat. Ranchers bred the longhorns with Herefords in hopes of producing better tasting meat and cattle that could withstand the cold winters.

Wrangler – the name given to someone who could manage or "wrangle" horses. During a cattle drive, the wrangler watched over the "cavvy" or the extra string of horses. It was often a job given to the youngest and least experienced.



Supper on a roundup.

The Sheep and Cattle Industry in Montana



Lesson 1: Pay Day at the A.B. Cook Stock Farm

Objective:

At the conclusion of this lesson, students will be able to:

- read and decode the payroll forms printed in 1915;
- use some simple math to calculate pay per day.

Time:

30 minutes

Materials:

- Footlocker Materials: none
- User Guide Materials: 3 transparencies (A, B, C) plus hard copy of each document
- Teacher Provided
 Materials: equipment to
 project transparencies

Pre-Lesson Preparation:

A.B. Cook was a successful businessman who owned several ranches in the Townsend area at the turn of the century. The Montana Historical Society stores most of his business records including the payroll statistics for several years. These documents are very interesting. Your students will learn much about the operation of a ranch just by looking at these records. Mr. Cook was especially fond of "show cattle." Note the category "Feeding Show Cattle at Bedford Ranch." How can you tell that this operation was important to Mr. Cook?

A.B. Cook's ranch is now covered by the Canyon Ferry reservoir. However, the Bedford Ranch House still survives because it was moved to a site near Highway 12 before the waters covered other outbuildings. If you ever drive to Townsend from Helena, you can see the big, white house alongside the road a couple of miles west of town. It is now a bed and breakfast.



continued

Procedure:

- Project the transparencies (A and B) of the payroll, August 8th to August 15, 1915. Acquaint your students with the columns and the figures. Reading from left to right, you will note:
- Occupation describes the job
- Hrs. (hours) the number of hours worked during one week; a workday was 10 hours long
- Rate means how much this person was paid per month; for instance 45/31 means the Head Cowman received \$45 in one month
- Am't (amount) refers to the amount this person was paid for this particular week
- Total This Re. (Total This Remittance)
- Bal. Forw. (Balance Forward)
- Total to Date

Further Exploration:

• Look at the transparency (C) of the Cook Stock Farm Payroll listing the names of the employees for this week. Check back to the other transparency and see if Tom Quinlin received the correct paycheck. What about Stanley Smith? How much did he earn? How did he earn his wage? How many employees are on the payroll for this week? Do you think these are pretty good wages?

Discussion Questions:

- 1. Who was the highest paid employee? What did he/she do?
- 2. Who was the lowest paid employee? What did he/she do?
- 3. What was the total amount paid to employees this week? At this rate, what would be the payroll for one year?
- 4. What is a "teamster?"
- 5. Which job do you want?
- 6. Who was E.E. Koehler?



Fanny Speary Steele, World Champion Lady Bronco Rider, about 1919.

MONTANA HISTORICAL SOCIETY

The Sheep and Cattle Industry in Montana



Lesson 2: Marks and Brands

Objective:

At the conclusion of this lesson, students will be able to:

 explain how brands are recorded and why they are important.

Time:

30 minutes

Materials:

- Footlocker Materials: branding iron, photographs
- User Guide Materials: transparencies (D, E, F), refer also to the description of primary documents
- Teacher Provided
 Materials: equipment
 to project
 transparencies; map
 of Montana; white
 paper; black marker

Pre-Lesson Preparation:

Ranchers must register their brands and marks with the State of Montana. If a cow, horse or sheep is sold, the new owner needs to re-brand the animal. Even the place where the animal is branded needs to be stipulated and registered. Students will probably already know that brands and marks are ways of distinguishing an owner's herds. During the roundups when lots of animals from neighboring ranches mingle together, it is important to be able to tell one animal from another. Cowhands become very adept at reading brands and ear notches at distances. It is illegal to steal a cow that does not belong to you, and it is illegal to change a brand to look like your own.

Procedure:

- 1. Look at the transparency of the document "General Recorder of Marks and Brands" (D). Ask your students to read the information and answer the discussion questions about the document.
- 2. Then look at the transparency of "Certificate of Re-Recorded Brand" (E) and answer the discussion questions.
- 3. Look at the transparency of the letter written to Granville Stewart in 1884. Read the letter together (F) and answer the discussion questions.

Discussion Questions:

- 1. Who is the General Recorder of Marks and Brands? What is the brand being recorded? What do you think it stands for?
- 2. On what part of the animal was the brand placed? What happened to the brand in 1921?
- 3. Who was the General Recorder of Marks and Brands in 1921?
- 4. Who wrote the letter to Granville Stewart?
- 5. Look on a map and find Utica, Montana.
- 6. What was the problem in the letter? What did the writer propose to do?

Further Exploration:

• Have students design their own brand. Look in the Resources and References section for the worksheet on brands. It will give them some ideas. You may want the students to sketch their brand on 8½ inch x 11-inch white paper and finalize their marks with black marker.

The Sheep and Cattle Industry in Montana



Lesson 3: Branding at Roundup

Objective:

At the conclusion of this lesson students will be able to:

 decode a brand and to create their own.

Time:

30 minutes for activity sheet, 45 minutes for art project

Materials:

- Footlocker Materials: branding iron, photographs
- User Guide Materials: Building Brands worksheet, transparency of photograph (G)
- Teacher Provided
 Materials: brown craft
 paper, poster paint, thin
 sponges, scissors, thick,
 black-marking pens.

Pre-Lesson Preparation:

Project the transparency of the photograph (G) so that all students can easily see. The photograph shows a calf being branded. Two cowhands have lassoed the calf and are holding the ropes taut while the other cowhands work or watch as the brand is being applied. Brands on sheep, horses and cows were necessary so that Montana's ranchers could identify their herds one from the other. Each rancher had his/her own set of brands. Branding irons were made of a long-handled metal (iron) which when placed in an open fire would heat up. The hot iron was applied to the calf's hind end. The brand singed the hide of the animal, but did not hurt it. The location of the brand (right hip, left side, etc.) also indicated the owner's preference.

Procedure:

- 1. Use the transparency provided showing a calf being branded. With the students' help, discuss the photograph using the questions below and all the things we can learn from it if we look carefully.
- 2. Refer to the "Building Brands" worksheet provided. Discuss the brand symbols and how they are read.

Discussion questions:

- 1. How many cowhands do you see? How many horses? How many cows? Did everyone remember to wear his hat?
- 2. What keeps the cows from running away?
- 3. Do you think there are too many helpers?
- 4. Where might have this photograph been taken? Do you see mountains, trees or water?
- 5. Are any women helping with the chore? What might a woman have been doing to help on this ranch?

continued

Further Exploration:

• Distribute thin sponges, one per student. Instruct them to carefully cut a "brand" shape in the sponge. Remember that simple designs will work best. Caution students that letter shapes are harder and must be cut in reverse. Cut a long piece of brown craft paper. Place on the floor and have your students draw large animals on the paper: cows, sheep or horses. While they are completing this task, pour small amounts of poster paint in several pie tins. Use at least three different colors. Once the animals are complete, instruct your students to dip their sponge-brands into the paint and then apply to the side of the animal they drew and press lightly. Once dry, hang the paper on the classroom wall or bulletin board.

The Sheep and Cattle Industry in Montana



Lesson 4: Horse Feathers

Objective:

At the conclusion of this lesson students will be able to

 identify horse tack and know where each piece belongs on a horse.

Time:

approximately 30 minutes

Materials:

- Footlocker Materials: model horse with tack.
- User Guide Materials: transparency of photograph (H), newspaper clipping, Oscar Anderson biography
- Teacher Provided
 Materials: equipment to
 project transparency

Pre-Lesson Preparation:

A good horse is worth his weight in gold to a rancher. There are many stories of horses that possessed intelligence, gentle spirit and a keen sense of smell. Cowhands working on a roundup may take along as many as 12 horses for each cowhand. Horses, like people, can develop a certain expertise. Some were good at "cutting" calves; others could ride for long distances; still others knew instinctively which cows caused trouble. If each cowhand had 10 horses and there were 60 men working a roundup, there might be as many as 600 horses trailing a herd. These horses form a "cavvy" or "remuda," and they were guarded, penned or picketed, watered and fed just as a household pet may have been. They were that important. Many ranchers used quarter horses for their work with cows. Others preferred the endurance of a wild horse like a mustang or Cayuse. The Appaloosa, with speckled coat, was a wonderful cow horse as well. It was the horse bred by the Nez Perce Indians of Idaho.



Three cowboys at a 1910 roundup near Lewistown, Montana.

Procedure:

- 1. Project the transparency (H). With the class note the equipment worn by the horse. Point to the saddle; stirrup, saddle blanket; reins, bridle, bit and saddle bag.
- 2. In the footlocker is a Breyer quarter horse, the kind that was commonly used by Montana cowhands. On the horse is handmade, miniature "tack". Identify the pieces of tack. Do not remove tack from horse.

Discussion Questions:

- 1. Do any of your students own horses? Ask questions of them about the care of their horse.
- 2. What is his name and what kind of horse is he? What special things does your student do in order to care for the horse? How is the horse used?
- 3. Encourage students to tell stories they have heard about horses. On the right is a horse story printed in the Great Falls Tribune in 1953. Also be sure to read the Oscar Anderson biography.

Further Exploration:

 Students may be interested in researching the breeds of horses used in Montana over the years. Learn the names and the characteristics possessed by each breed. Investigate the "Pryor Horses" and learn how they came to Montana. See what you can find out about the horses that Lewis and Clark procured from the Shoshone on their way to the west coast. (Hint: Some were branded!) Great Falls Tribune • January 14, 1953.

Flathead Horse Travels 283 Miles to Get Home

Ronan—Homing pigeons have nothing on Sally a six-year-old pack horse owned by Calvin Chaffin, Ronan farmer.

Sally, left tied to a feed rack in a hunting camp 20 miles north of Monida, broke away when she sensed a blizzard coming, then used her "homing instinct" for 20 days to travel 283 miles over strange country before she returned to the Chaffin farm, three miles east of Ronan. Chaffin and Ross Stanback started on their elk hunting trip Nov. 12. Chaffin drove a truck carrying Sally and two saddle horses while Stanback pulled a trailer house with a pickup truck.

pickup truck.
They arrived at their hunting area north of Monida Nov. 13. They hurriedly made coffee, ate some sandwiches and prepared to go hunting. Chaffin suggested they untie Sally and let her follow the saddle horses but Stanback thought she might prove a nuisance so they left her alone in the camp.

After Chaffin and Stanback left camp, Sally apparently sensed that a blizzard was coming and struggled with the rope until she broke loose. When the hunters returned to camp, they searched for Sally but were forced to cut their search short because of the weather. The blizzard forced them out of the hunting area and Chaffin thought it was hopeless to expect to get Sally back. He said about 20 days later, he was surprised to see her standing in front of his garage. Chaffin said he still doesn't understand how Sally found her way back to the ranch and stranger still that she didn't stop at Dixon where she lived until Chaffin took her to Ronan two years ago.

The horseshoes, put on Sally just before the hunting trip, were worn thin when she returned to the farm. She was thin but now has regained her lost weight.

The Sheep and Cattle Industry in Montana



Lesson 5: When the Work is Done Next Fall

Objective:

At the conclusion of this lesson, students will be able to:

- discuss the significance of cowboy songs;
- sing "When The Work Is Done Next Fall."

Time:

30 minutes

Materials:

- Footlocker Materials: artifacts, costumes and musical tape
- User Guide Materials: lyrics to "When The Work Is Done Next Fall"
- Teacher Provided Materials: copies of the lyrics

Pre-Lesson Preparation:

A Montana cowboy wrote the lyrics to this popular tune in 1893. Dominick J. O'Mallev was born in 1867 to Dominick and Margaret O'Malley. His father was a Civil War veteran who died while surgeons attempted to removed a mini-ball the veteran received in service. Margaret remarried a soldier, Charles H. White, and the family proceeded to move from army post to army post, from Texas and Kansas to Wyoming. In September 1877, they moved to Fort Keogh, Montana Territory. In 1881, Charles White was discharged from service and abandoned his family. In order to provide food for his mother and siblings, young Dominick at the age of 14 went to work on a ranch as a wrangler. For twenty years he trailed herds from Texas to Montana and worked on ranges in eastern Montana. During this time he began to write poetry and stories about his cowboy days. Much of his material was published. D. J. O'Malley died in 1943 in Wisconsin where he resided with his wife and family. His family archives were donated to the Montana Historical Society.



Musical cowboys on the Jackson Ranch on the Little Porcupine River, 1902.

(continued)

MONTANA HISTORICAL SOCIETY

Procedure:

- Distribute copies of the lyrics so that each student can easily read the words. Read together or assign readers to read the stanzas.
- 2. Talk about the story and what happened. Discuss with your students the reality of the scene depicted.
- 3. See if the music teacher can introduce the song and teach the class the music.

4. Listen to the other cowboy songs on the CD.

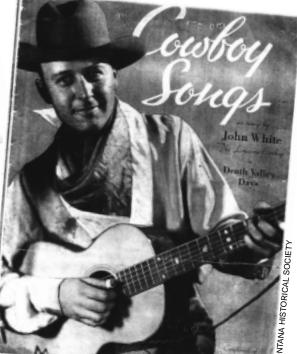
Discussion Questions:

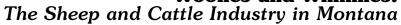
- 1. What main thing did the cowboy in the song want to do? Where was his home?
- 2. Why did he want to go there?
- 3. What happened to the cowboy? What happened to his possessions?
- 4. What was written on his tombstone?
- 5. What lessons does this song teach?

Further Exploration:

As a class project, prepare a skit, art show and reception about ranching.
 Assign parts to students in the class.
 Distribute costumes and other elements in the footlocker or encourage students to bring things from home. Stage a melodrama based on the words to O'Malley's material. Create a "campfire" and invite other students and parents to view the drama and to learn other things about ranching from your class. At the conclusion, serve refreshments. They may include things like coffee, beans, "rattlesnake", or other cowboy fare.









Cowboy Music

When The Work Is Done Next Fall

This bit of western folklore is a direct descendant of a set of verses which appeared in the Stock Growers' Journal at Miles City, Montana, on October 6, 1893. The author, D. J. O'Malley, called his original poem "After the Roundup" and says that he and his fellow cowboys sang it to the air of "After the Ball," a popular new song at the time.



Cowboy Music (continued)



- "I've got a home boys, a good one you all know, Although I haven't seen it since long long ago. But I'm going back to Dixie once more to see them all; I'm going to see my mother when the work is done next fall."
- 3. "After the roundup's over and after the shipping's done, I'm going right straight home boys, ere all my money's gone. Mother's heart is breaking, it's breaking for me, that's all, But with God's help I'll see her when the work is done next fall."
- 4. "When I left my home boys, my mother for me cried; She begged me not to go boys, for me she would have died. But I've changed my way boys, no more will I fall; I'm going to see my mother when the work is done next fall."
- That very night this cowboy went out to stand his guard;
 The weather it was stormy and raining very hard.
 The cattle they got frightened and rushed in wild stampede;
 The cowboy tried to head them while riding at full speed.
- 6. While riding in the darkness so loudly he did shout, Trying his best to head them and turn the herd about. His saddle horse did stumble and on him did fall, And he'll not see his mother when the work is done next fall.
- 7. The poor boy was so mangled they thought that he was dead; They picked him up so gently and laid him on his bed. He opened wide his blue eyes and looking all around He motioned to his comrades to sit near him on the ground.
- 8. "Boys, send mother my wages, the wages I have earned, For I am afraid boys, my last steer I have turned. I'm going to a new range; I hear my Master's call; And I'll not see my mother when the work is done next fall."
- 9. "Bill, you take my saddle; and George, you take my bed; And Fred, you take my pistol, after I am dead. Think of me kindly as you gaze upon them all, And give my love to mother when the work is done next fall."
- 10. Poor Charlie was buried at sunrise, no tombstone at his head. Nothing but a little board, and this is what it said: "Charlie died at daybreak, he died from a fall, And he'll not see his mother when the work is done next fall."

The Sheep and Cattle Industry in Montana



Lesson 6: Carding Wool

Objective:

At the conclusion of this lesson, students will be able to:

- demonstrate the use of wool cards and raw fleece;
- explain the process required to prepare the fleece for weaving.

Time:

30 minutes

Materials:

- Footlocker Materials: sheep shears, wool cards and fleece provided; if you would like each student to experience the process, arrange to acquire more fleece.
- User Guide Materials: illustration of "Steps for Carding Wool"
- Teacher Provided Materials: fleece

Pre-Lesson Preparation:

Montana sheep live in the hills and valleys, feeding on native grasses and drinking from streams or wells. Sheep are followers. In fact they may wander in dangerous directions. There are stories of sheep herds leaping to their deaths, blindly following the sheep in the lead. Their woolly coats picked up all kinds of grass, sticks and dirt throughout the months before spring shearing. Consequently, cleaning and combing the wool is a necessary step before the fibers can be spun.

Procedure:

- 1. Tease a handful of the fleece to prepare it for carding. Gently pull the fleece a bit at a time until it is all gathered together.
- 2. Load the wool card with the fleece and spread it evenly over the surface of the card.
- 3. Hold one wool card in your left hand. Place the left carder on your knee with the handle pointing away from your body. Hold the other carder in your right hand with the teeth facing down. Place the right hand held carder on top of the left hand held carder.
- 4. Gently pull the right carder downward across the left carder. At the same time pull the left carder slightly upward away from your body. Use a slight brushing motion while applying more pressure to the right carder. Repeat this several times until the fibers are in the same direction.
- 5. Carefully pull the carded fleece with your fingers. You are ready to spin. Refer to the illustrations on carding wool.

Discussion Questions:

- 1. Why does the wool need to be combed? What does combing do? What will happen next?
- 2. Is wool carding a new invention?
- 3. Is wool a good thing to wear in the winter? Is wool a good thing to wear in the summer? Why or why not?

(continued)

Lesson 6: Carding Wool (continued)

Further Exploration:

 Look at a wool fiber under a microscope. You may be able to observe that the ends of the fleece are hooked. When the fibers are spun, the ends hook together, creating a fairly strong link. Research the varieties of sheep in the world and determine the qualities in each variety. Contact the Montana Woolgrowers Association for information.



Sheep wagon on the Fort Peck Indian Reservation.

The Sheep and Cattle Industry in Montana



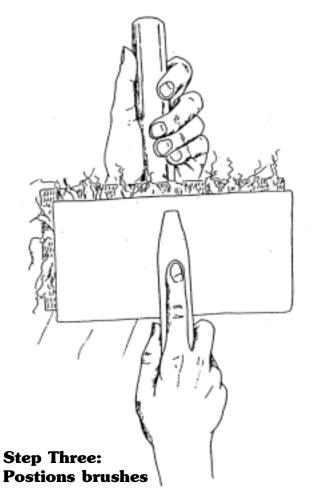
Steps for Carding Wool



Step One: Tease the wool.



Step Two: Load the carder.



Step Four: Brush fibers with gentle sweeping motion.





Word Search

bandanna	beef	boot	brand	chaps	chuck	cowboy
crew	drought	filly	hat	holster	horse	lariat
pistol	ranch	range	roundup	saddle	slicker	spur
stampede	tenderfoot	wagon	wrangler			

N C D Q S E В X R \mathbf{o} C S N J M Y O T G R S 0 T K B R K R Z D N Q ZBGC \mathbf{D} O Z H E LDD SGKY U Q A T HVHOYWKWO IQXSWIYFOSPFYVVVHEPH



Building Brands

An animal is branded to identify its owner.	A long dash is a "rail".			
Notched ears, ear tags, and other methods	D			
can also mark animals. A rancher may use several brands, depending on the size of his	Read			
herd. Here is a way to read a brand.				
Always read left to right,	A curved line on the bottom is "rocking".			
just as you do when reading a book.	Δ			
A — L reads A Bar L	Read			
	/ is called a "slash."			
Read from top to bottom.	/ Read			
Reads	Meau			
Read from the outside to the inside.	Now one how you can do reading			
Read	Now see how you can do reading these brands. Fill in the blanks.			
A letter on its side is "lazy".	D/D			
S Read				
	(Circle Dash)			
A letter that looks like it is				
falling is "tumbling".	S_S			
\				
Read				
A letter with dashes on top is flying.	(Tumbling W)			
	Two Bar O			
V				
A short dash is a "bar"				
	(Slash Heart)			
Read				
I V				

The Sheep and Cattle Industry in Montana



Fill in the Blanks

Howdy, Partner! My name is Charlie Russell, but my friends just call me Kid Russell.

"I Rode Him" (detail) by Charles M. Russell.



My ______ is my best friend, and he is a quarter horse. With my _____ I can lasso the wildest mustang or the smallest calf. During _____ I work the hardest. I have to _____ cows which have scattered, bring them in, and _____ them

with a -R, the mark of my outfit. Sometimes I sleep in a _____ or a drafty _____. But most

often I sleep in a bedroll on the _____. The food

isn't too good. We mostly eat _____ and

drink _____. The cook and his kitchen travel in

a ______ to

_____ it is very hard work. Would you like to be

a cowboy or a cowgirl?

Word bank:

Beans

Brand

Bunkhouse

Coffee

Dawn

Dusk

Ground

Herd

Horse

Rope

Round-up

Tent

Wagon

The Sheep and Cattle Industry in Montana



Fill in the Blanks—answers

Howdy, Partner! My name is Charlie Russell, but my friends just call me Kid Russell.

a cowboy or a cowgirl?

"I Rode Him" (detail) by Charles M. Russell.



My __Horse__ is my best friend, and he is a quarter horse. With my __Rope__ I can lasso the wildest mustang or the smallest calf. During __Round-up__ I work the hardest. I have to __Herd_ cows which have scattered, bring them in, and __Brand__ them with a -R, the mark of my outfit. Sometimes I sleep in a __Bunkhouse_ or a drafty __Tent__. But most often I sleep in a bedroll on the __Ground_. The food isn't too good. We mostly eat __Beans___ and drink __Coffee__. The cook and his kitchen travel in a __Wagon_. Sometimes I work from __Dawn__ to __Dusk__ it is very hard work. Would you like to be

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Identify that Horse Part

There are some strange names given to a horse's anatomy. See if you can identify these parts by placing the correct number (located in front of the definition) on the horse.

- 1. forelock space between my eyes
- 2. muzzle soft and fuzzy, but I don't really like you to touch it.
- 3. elbow where my leg bends
- 4. chestnut the back of my front legs
- 5. fetlock sometimes a furry spot just above my hoof
- **6.** withers - end of my neck **7**. croup - about where my rider's bedroll would sit 8. hock - backside of my hind knees

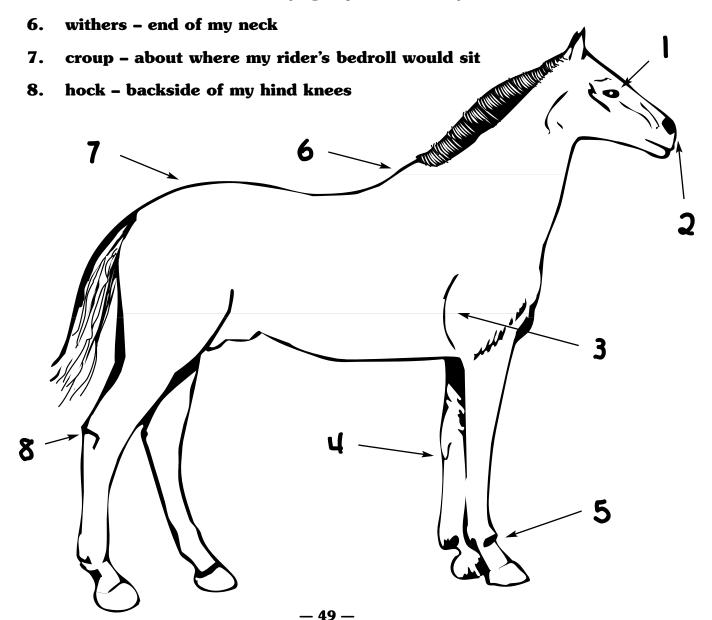
- 48 —



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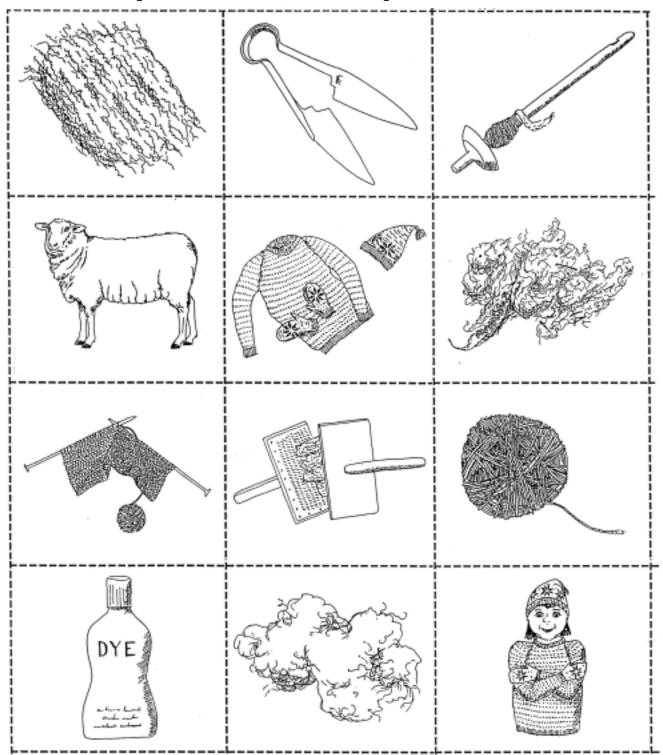
The Sheep and Cattle Industry in Montana



Sheep to Sweater

Sheep are shorn in the spring when the lambs are less likely to need their warm winter coats. The wool is cleaned, combed, spun, dyed, and then woven or knit into garments. Do you own anything that is 100% wool?

Color these sequence cards. Then cut along the dotted lines and put the pictures in order, from "sheep to sweater."



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The Sheep and Cattle Industry in Montana

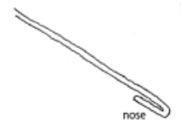


Making Pipe Cleaner Sheep

Materials

- Footlocker
 Materials:
 photographs of
 sheep
- User Guide Materials: illustration and directions
- Teacher Provided Materials: two 18-inch pipe cleaners per student and extra wool fleece

Steps to Make the Body:



1. Bend the end of the pipe cleaner to make the nose of the sheep.



2. Bend pipe cleaner at 90-degree angle to make an ear, then back straight across and past nose to make other ear.



Bend pipe cleaner back to nose and wrap over top and straight down to form neck.



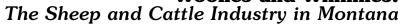
4. At base of neck, bend pipe cleaner out at 45 degree to make front leg. Then back to base of neck and out 45 degrees on the other side to form the other front leg.



5. Wrap the second pipe cleaner around the neck and straight back to form the sheep's back. Stop with enough pipe cleaner left to form the back legs the same way you formed the front. Now you are ready to add the wool.



6. Adding wool: Use very small pieces and wrap the wool around all parts of the sheep body. Leave the feet, nose and end of the ears sticking out.





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