



**KIDS  
DISCOVER**

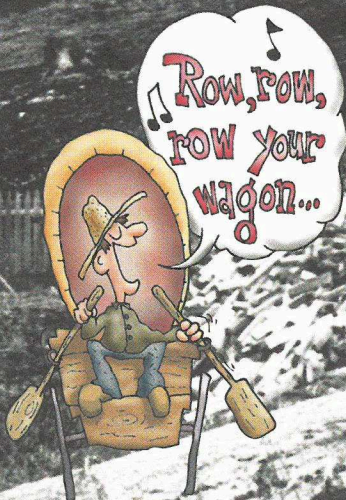
# Pioneers

**THE  
INSIDER DIRT ON  
SOD HOUSES**

**DID DANIEL  
BOONE GET  
LOST?**

**EARLY  
AMERICAN  
ROOF GARDENS**

**TO BEE OR  
NOT TO BEE?**



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# What Is a Pioneer?

History tells us that pioneers settled the American West. But history also tells us that people as different as John Glenn, Rosa Parks, and Christiaan Barnard are pioneers. So what, exactly, is a pioneer?

One dictionary says a pioneer is someone who opens a new area of research. It's also someone who gives others a chance. So John Glenn is a U.S. space pioneer because he was the first American to orbit Earth. Rosa Parks is a human-rights pioneer because she wouldn't give up her seat on a public bus in 1955, and this helped start the fight for equal treatment of African Americans. Dr. Christiaan Barnard is a pioneer in medicine because he was the first person to transplant a human heart.

The pioneers you will read about here are of another kind – people who settle a new territory. These are the thousands of pioneers who settled the American West. Proof of their determination, hard work, and groundbreaking effort is everywhere in the towns and cities they helped build.

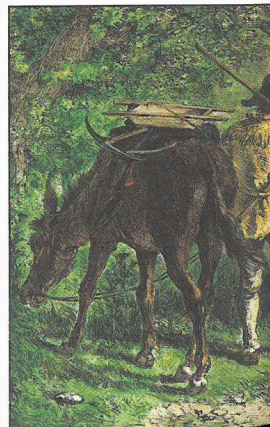
*"[Father] told us about the great Pacific Ocean, the Columbia River and beautiful Willamette Valley, the great forests and the snowcapped mountains. He then explained the hardships and dangers, the sufferings and the dreary long days we would journey on and on before we would reach Oregon."*

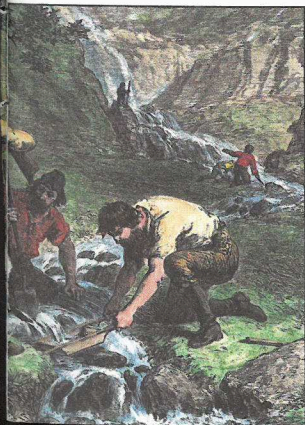
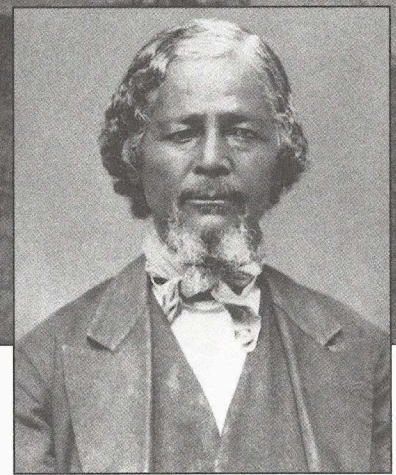
–Martha Gay, 1851



◀ **THE LAND THE** pioneers settled was not empty. Much of it was home to Native Americans like these Mandan people (left). The Great Plains were their buffalo-hunting grounds. They lived

off these lands. For many Native Americans, the pioneer settlement of the West led to broken treaties and loss of lands. It also put an end to their traditional ways of life.





◀ **EARLY PIONEERS** were looking for more and better farmland. Or they were simply looking for land of their own. After gold was discovered in California in 1848, thousands headed west in

hopes of striking it rich. Some even came from China and stayed on to help build the first railroad across the U.S. Others came west because they had broken the law and wanted a fresh start.

▶ **AFTER THE CIVIL** War ended, many formerly enslaved men and women decided to start their lives as free people far from the South. Benjamin Singleton (shown here) was born into slavery in Tennessee. In 1877,

Singleton founded an all-black community in Kansas. He led many African Americans freed from slavery in an exodus

(mass migration) from the South. These pioneers became known as Exodusters.

# Early Pioneers

Americans moved west in several huge waves. The first movement took place from the 1760s through the early 1800s. These pioneers crossed the Appalachian Mountains. They settled in the Mississippi and Ohio river valleys. The second movement took place between the 1840s and 1860s. It brought settlers from Europe, the East Coast of the U.S., and the Midwest. They went all the way across the prairies to the fertile valleys of Oregon and the goldfields of California. The last westward move began in the 1860s. These pioneers settled the Great Plains and turned the grasslands into farmland.

Many of the early pioneers (in the first wave) were looking for cheaper farmland. Cities and towns along the East Coast were getting more crowded, and good farmland was becoming rare and costly.



▲ **DANIEL BOONE** spent his life blazing trails across the frontier. In 1775, Boone and a band of 30 woodsmen set out to connect some of the Native American trails. These stretched from North Carolina across the

Appalachians into Kentucky. The road they made is called the Wilderness Road. For many decades it was the only usable route through the mountains to Kentucky. By 1800, this road had taken 200,000 pioneers west.

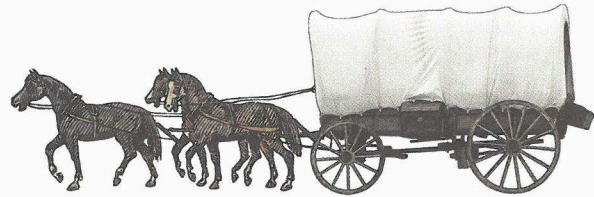
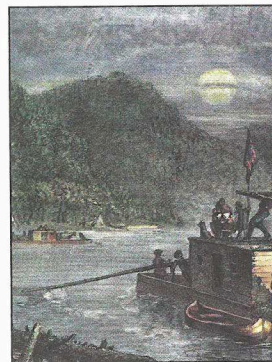


**SOMEONE ONCE ASKED DANIEL BOONE IF HE HAD EVER BEEN LOST. HE REPLIED:**

*"No, I can't say as I was ever lost, but I was bewildered once for three days."*

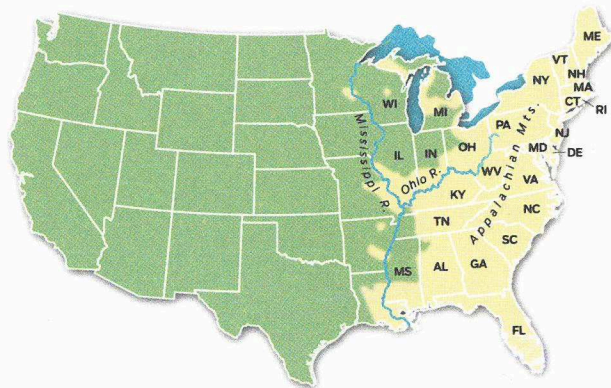
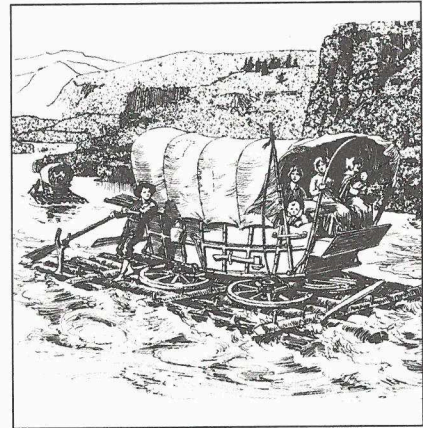
► **IN AREAS WHERE** no trails or roads existed, pioneers depended on rivers as their highways through the forests. Pioneers floated down the Ohio River on crafts like this flatboat (right). A boat could carry one family, a wagon, and several horses or other animals. Once a family reached its new home, it might

take its boat apart and then reuse the wood for building.



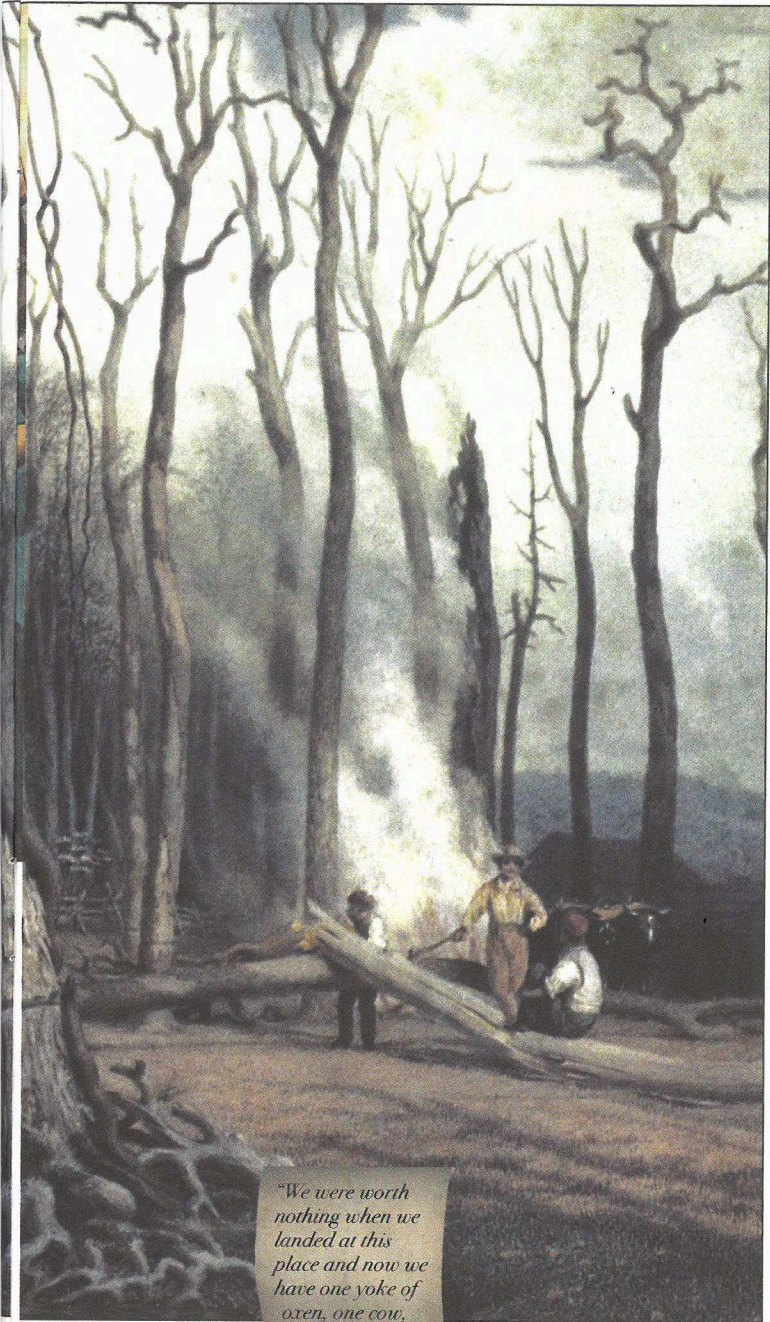
▲ **ONCE WOODSMEN** had blazed trails wide enough for wagons, many pioneers headed west in covered wagons called Conestogas. The wagons were named for the Conestoga Valley in Pennsylvania, where they were made. These large, heavy wagons hauled the first wave of settlers over the Appalachian Mountains.

▼ **PIONEERS COULD** take the wheels off their Conestogas and float the wagons across rivers on rafts.



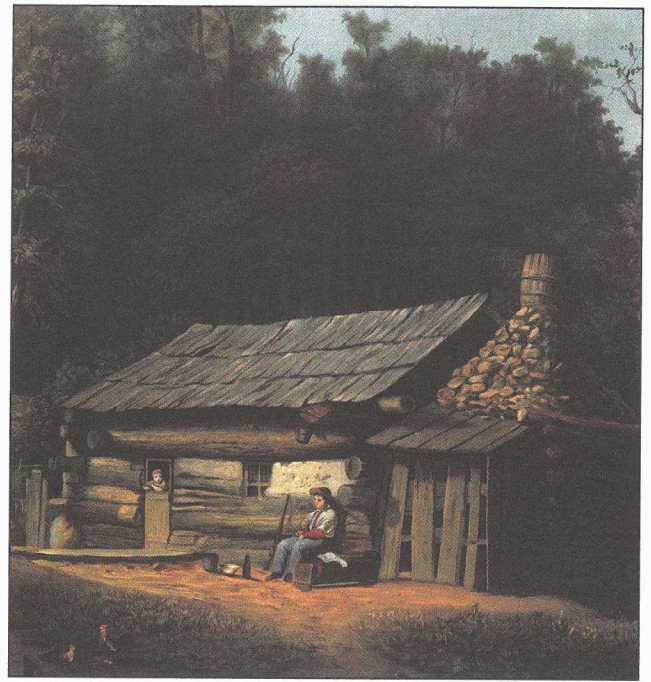
**IN THE 1820s, PLACES SUCH AS KENTUCKY, OHIO, AND TENNESSEE WERE THE "FAR WEST." PIONEERS HAD NOT YET SETTLED THE GREEN AREAS ON THIS MAP.**





*"We were worth nothing when we landed at this place and now we have one yoke of oxen, one cow, nine hogs."*

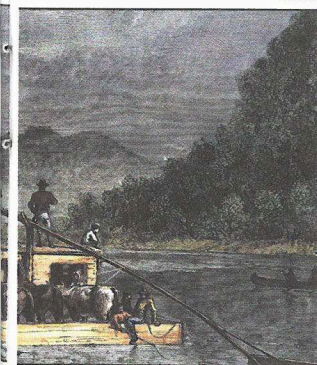
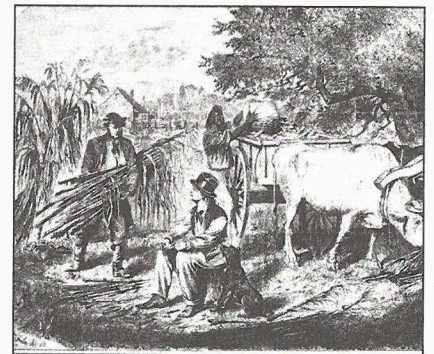
**—John Watson, Indiana, 1823**



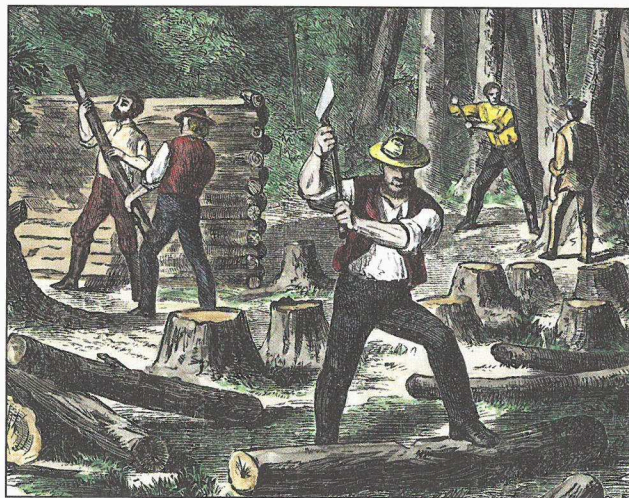
◀ **THICK FORESTS** covered the land between the Appalachian Mountains and the Mississippi River. These forests were very dense. People said that a squirrel could jump from tree to tree for hundreds of miles without ever touching the ground. The first pioneer families cleared land for their farms by girdling trees (cutting a ring around a tree, causing it to die). Burning removed the stumps.

▲ **AS SOON AS THEY** could, pioneers replaced temporary shelters with log cabins. Settlers cut notches close to the ends of the logs. That way

the logs fit together to make the cabin walls. Once the logs were stacked, empty spaces were filled with moss and mud.



► **EARLY PIONEERS** depended on rifles and axes. The rifle gave them protection. It was also used to hunt for food. The ax was used to turn trees into logs. Logs were used to build rafts or cabins.



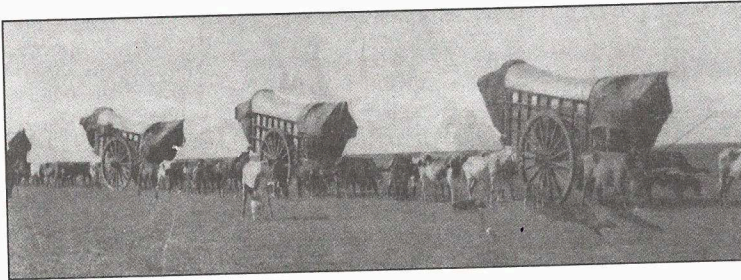
▲ **BECAUSE CORN** was easy to grow and store, it was a main part of the early pioneers' diet. Families ate cornbread, corn mush, and cornmeal pancakes. Leftovers were fed to hogs, sheep, and chickens.

# Pioneers Move West

By the 1840s, pioneers were again on the move. In 1848, miners found gold in California. Americans caught gold fever. They headed west, hoping to get rich quick. Few did, but many went back east and told their friends about the unsettled country they had seen. Some pioneers sought fortunes in timber, fur, or precious metals. Others hoped for better health in the mild Pacific coast climate or came west for other reasons. From the 1840s to

the 1860s, more than 300,000 people crossed the Great Plains and the Rocky Mountains to reach the Pacific coast. The route they took was called the Oregon Trail. Before pioneers began their 2,000-mile journey, they had to buy a wagon. They also had to pack it full of supplies. Then they had to join a wagon train.

The covered wagons that carried them became known as prairie schooners or ships of the plains. That's because the wind blew their canvas tops in and out like a ship's sails.



◀ **A GROUP OF WAGONS** formed a wagon train. Traveling together offered protection from robbers and help in case of a breakdown. Wagon trains consisted of anywhere from 30 to 200 wagons.

## PRAIRIE SCHOONER PARTICULARS

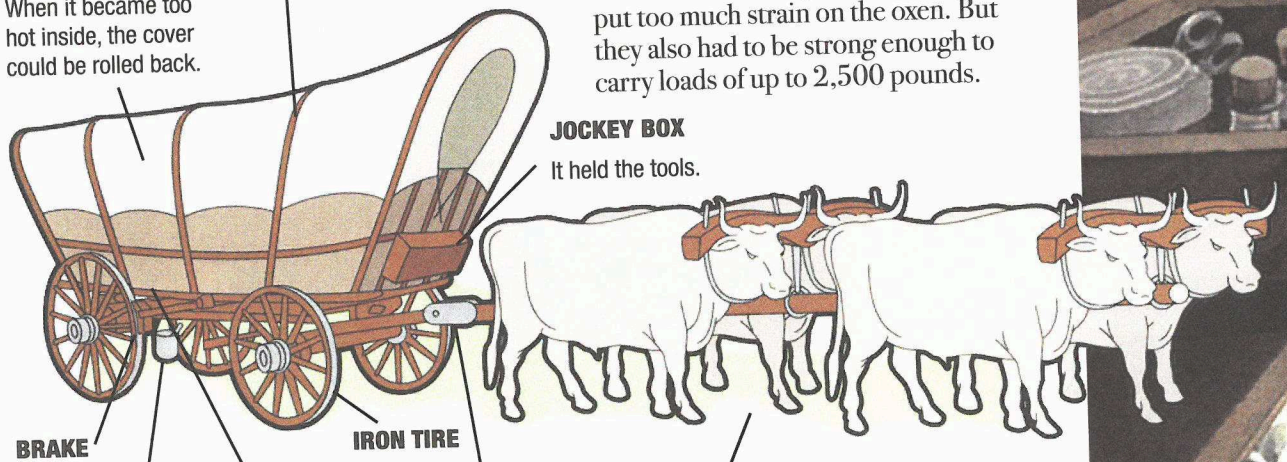
The Conestoga wagons that settlers used to cross the Appalachians were too big and heavy to make it over the steep Rockies. Prairie schooners had to be smaller and lighter so they didn't put too much strain on the oxen. But they also had to be strong enough to carry loads of up to 2,500 pounds.

### COVER

This was made of canvas or cotton. Tied to the sides of the wagon bed, it protected travelers from rain and dust. When it became too hot inside, the cover could be rolled back.

### BOWS

These were made of hickory wood. They supported the canvas.



### JOCKEY BOX

It held the tools.

### BRAKE

### GREASE BUCKET

It held the grease used to oil the wheels.

### WAGON BED

This was a wooden box. It was usually about 4 feet wide and 10 to 12 feet long.

### TONGUE

It connected the animals' harnesses to the wagon.

### OXEN

They moved slowly (about two miles per hour). But oxen were steady and easier to manage

than horses or mules. After they got settled, pioneers used oxen to pull plows.

## PACKING THE WAGON

Once a family had a wagon, they filled it with supplies for the three- to five-month journey. Every bit of space was used. To outfit a wagon train took many hundreds of dollars. Back then, most people earned only a few dollars a week. Many families got loans from relatives.

### BEDDING

At night, people slept in tents, on the ground, or inside the wagon. Bedding consisted of wool blankets, feather beds, ground cloths, and pillows.

**WEAPONS**

A rifle or other fire-arm, like a double-barreled shotgun, was a must. Men carried their guns with them as they walked alongside the wagons.

**COOKING UTENSILS**

Supplies included a butter churn, kettle, coffee grinder, coffeepot, butcher knife, tin forks and knives, and a ladle. A three-legged skillet was handy for cooking over a campfire on the trail.

**TOOLS**

Pioneers brought equipment they would need for farming once they reached their new home. This included a drill, ax, hammer, and hoe. They also needed a shovel, spade, heavy rope, and chains.

**FOOD**

Pioneers packed flour, bacon, sugar, baking soda, and yeast powders for making bread. They also brought lard, dried beans, dried beef, cornmeal, molasses, salt, rice, and coffee. They carried a 10-gallon wooden barrel of water to refill along the way.

**HOUSEHOLD SUPPLIES**

Pioneers took along a lantern, matches, candles, and soap. They also carried scissors, needles, pins, thread, bandages, and medicines, like a kit of herbal remedies.

**TREASURES**

Every person hoped his or her favorite treasures could fit into the wagon. China dishes, books, favorite toys, and even family pictures were luxury items in a crowded wagon. They were the first to go if the wagon's load got too heavy.

**WAGON PARTS**

Pioneers carried such spare parts as axles, wagon tongues, and spokes. Constant bumping made axles break, and iron tires came off frequently. If a wagon couldn't be fixed, a pioneer family had to load its belongings onto other wagons.

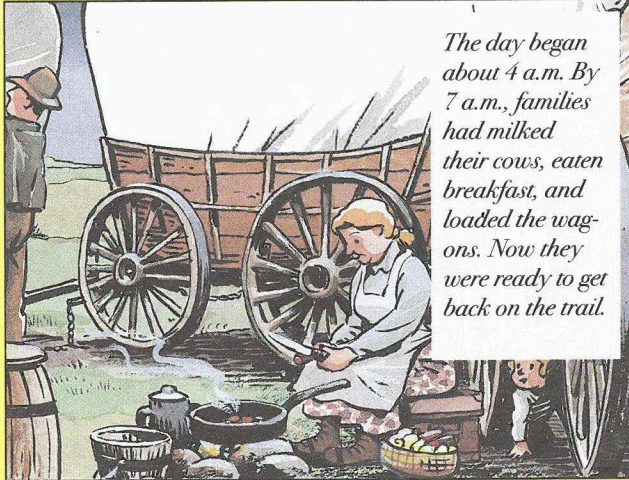


# On the Trail

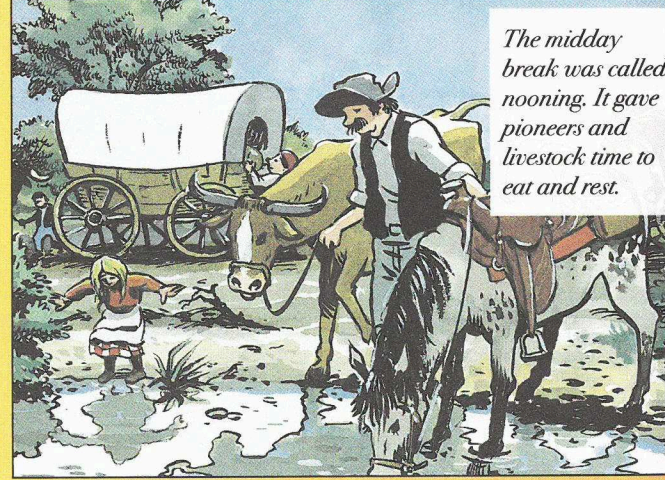
In the jumping-off town, the newly formed wagon train looked for an experienced guide who knew the route. No detailed road or trail maps existed. Each wagon train elected a leader called the wagon master. Most wagon trains left in late spring so they could get through the mountains before snow blocked the passes. They tried to reach Oregon in time to build homes before winter came. They couldn't leave much earlier than April or May, because grass had to be growing on the plains for their livestock to eat.



## FROM DAWN TO DUSK



*The day began about 4 a.m. By 7 a.m., families had milked their cows, eaten breakfast, and loaded the wagons. Now they were ready to get back on the trail.*

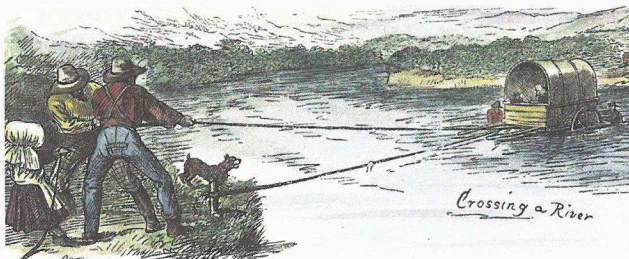


*The midday break was called nooning. It gave pioneers and livestock time to eat and rest.*

## DANGER AHEAD!

Between 1835 and 1855, more than 10,000 people died on the Oregon Trail. Most died from accidents or diseases. They fell from wagons and got crushed under the heavy wheels. They drowned crossing rivers. Or they were shot in firearm accidents. Others died from drinking bad water or from such diseases as cholera, measles, or smallpox.

▼ **RIVER CROSSINGS** could be deadly. Hidden holes in a shallow riverbed could make an ox fall. Then a wagon might tip over. It could take hours to get it up again.



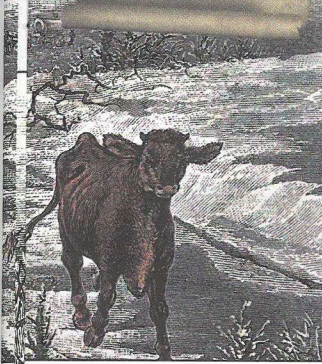
◀ **GOING UP A** mountain in a covered wagon was tricky. Wagons tipped over easily.

► **GOING DOWN,** wagons would go faster. Sometimes they rolled right over the animals before stopping. To slow them down, a driver could tie a heavy log to the back of the wagon. When a mountain was too steep to ride down, wagon parts were lowered piece by piece.



*"We crossed the most desolate piece of ground that was ever made - not a drop of water, nor a spear of grass; nothing but barren hills, bare and broken rock, sand and dust."*

*-Amelia Knight, June 11, 1853*



◀ **WAGON TRAINS** traveled up to 20 miles a day. The distance depended on the landscape. On days when the trains crossed rivers or climbed steep mountains, they might go only a mile or two. Most people walked beside the slow-moving wagons. Only the old, sick, and very young rode inside.

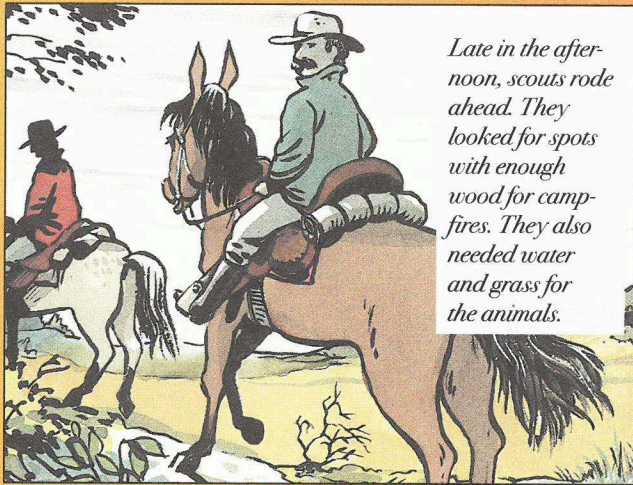
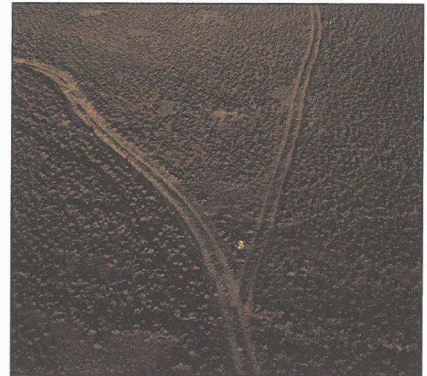


▲ **THE OREGON** Trail crossed buffalo-hunting grounds. These had been "given" by the U.S. government to various Native American nations. As more wagon

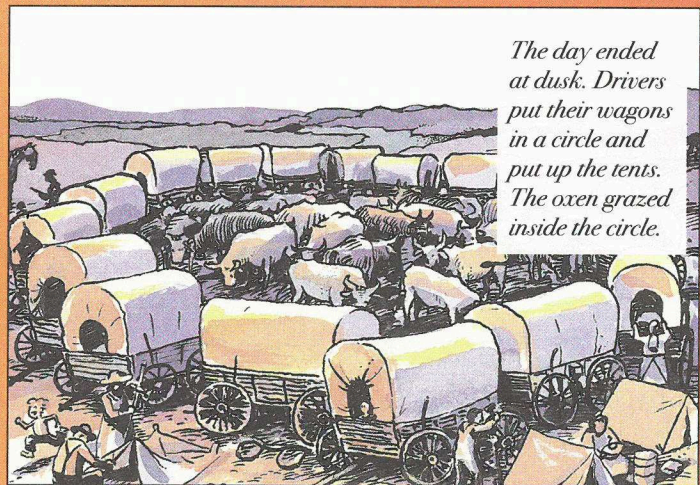
trains went west, the buffalo herds grew smaller. Because the Plains Indians needed these herds to survive, their way of life was destroyed.

▼ **THE THOUSANDS** of wagons that traveled the Oregon Trail made deep ruts. There

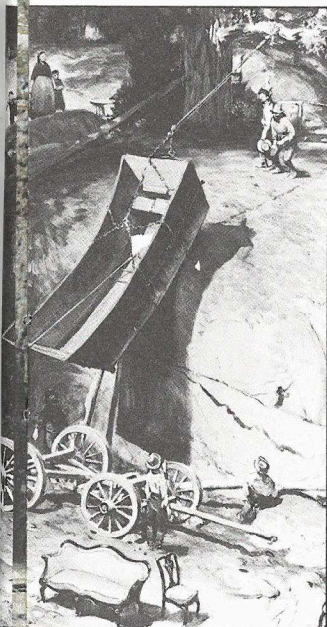
are some places along the trail where you can still see them.



*Late in the afternoon, scouts rode ahead. They looked for spots with enough wood for campfires. They also needed water and grass for the animals.*



*The day ended at dusk. Drivers put their wagons in a circle and put up the tents. The oxen grazed inside the circle.*



▼ **ON THE TRIP WEST,** time was the enemy. When wagons broke down, oxen died,

or a horse or child wandered away, everything came to a complete stop. If too much time

was lost, travelers found themselves crossing mountain passes in swirling blizzards.



FROM THE FILM *DANCES WITH WOLVES*

▲ **FAR FEWER** pioneers died from American Indian attacks than most people think. Movies, stories, and TV shows about the West made Native Americans seem

like a serious threat. But they weren't. About 10,000 pioneers died on the Oregon Trail between 1835 and 1855. Only about 400 were killed in such attacks.

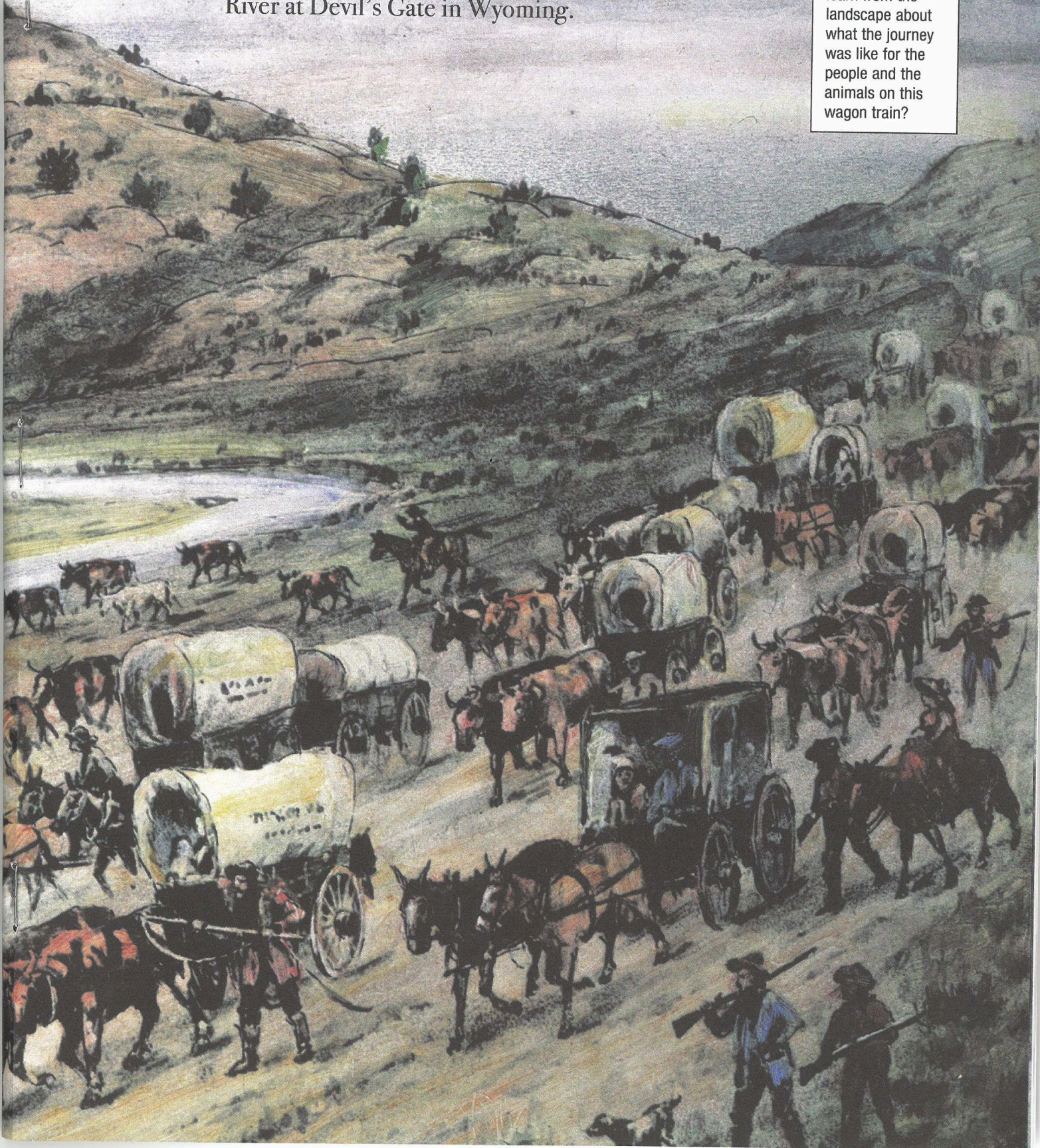
# Wagon Train

This picture, by William Henry Jackson, is called *Oregon Trail Emigrants*. It shows a wagon train on the Oregon Trail following the Sweetwater River at Devil's Gate in Wyoming.

## THINK PIECE!



What does this picture tell you about life on the Oregon Trail? What can you learn from the landscape about what the journey was like for the people and the animals on this wagon train?



# Sodbusters of the Great Plains

The early pioneers, those who crossed the Appalachian Mountains, depended on trees and forests for food and shelter. Imagine starting over in a place with almost no trees – a place with blizzards in winter and swarms

of grasshoppers in summer. For some pioneers, the hardest part of life was getting to their new home. But for the settlers of the Great Plains, known as sodbusters, getting there was easy compared to what came next.

▼ **FOR MANY** decades, the Great Plains attracted few settlers.

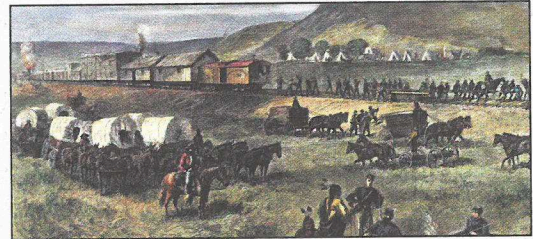


That's because most Americans thought it was too dry for farming. Some maps labeled the area the Great American Desert. Parts of the Great Plains were so dry that no trees grew there. The sod (the top layer of soil) had thickly matted roots almost 15 feet deep.

► **IN 1862, THE** U.S. government passed the Homestead Act. This offered 160 acres of land to any adult who built a house on the property. The homesteader had to live in the house for at least five years. A lot of this land had poor soil, and the weather was harsh. But families eager to have a farm of their own headed west.



▼ **THE FIRST TRANS-**continental railroad was built in the 1860s. Pioneers could now travel west by train. That made the journey much faster, safer, and cheaper.

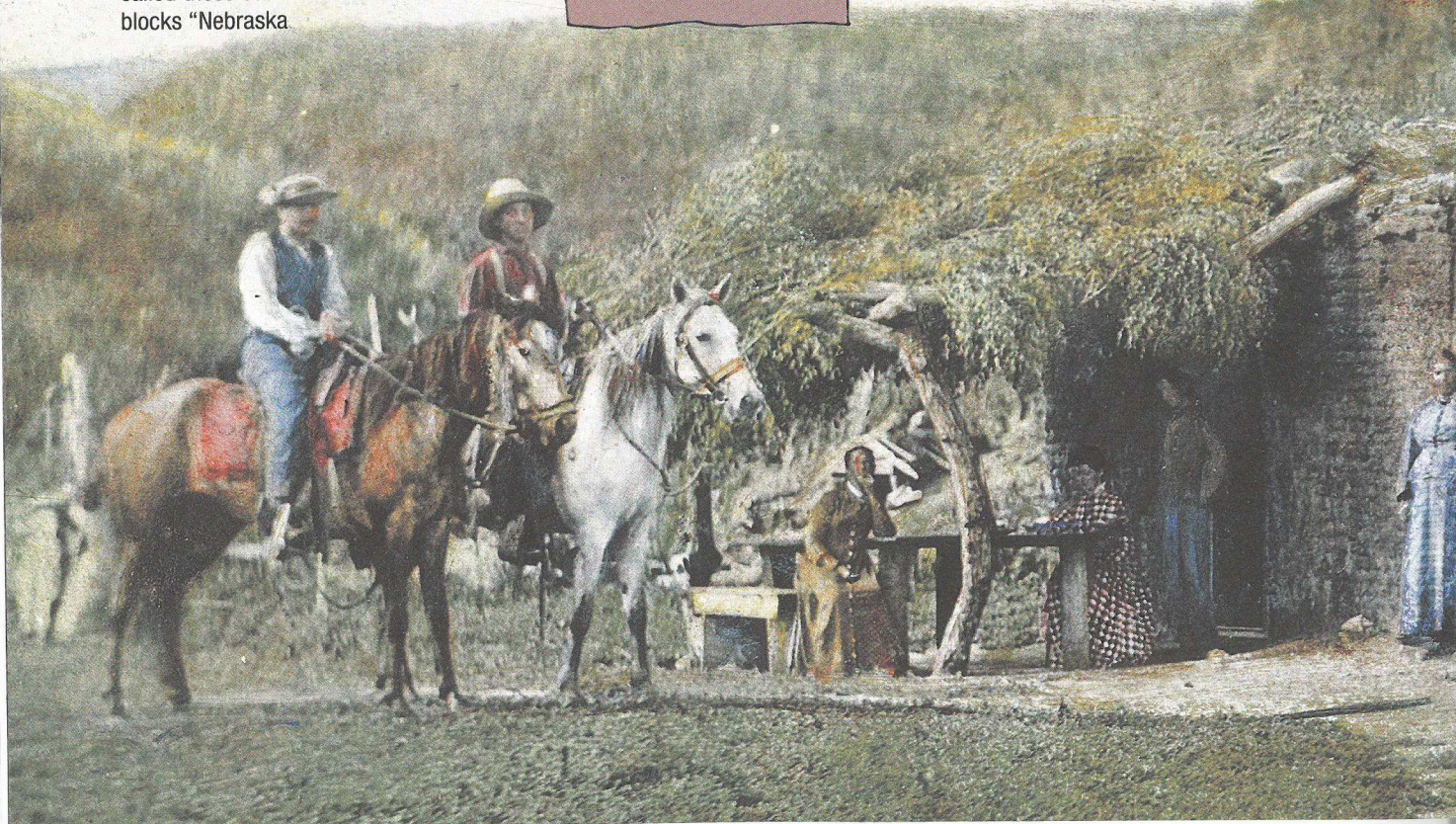


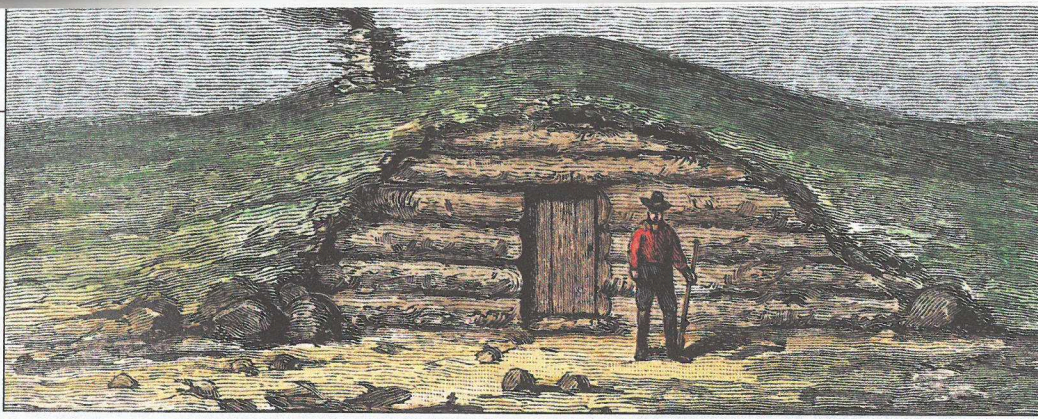
▼ **ONCE THE PIONEERS** saw that sod could be sliced into blocks, they began building homes out of it. They jokingly called these sod blocks "Nebraska

marble." Building a sod house, or soddy, was easy and cheap. It took about one acre of sod to make an average-size home.



◀ **THE SOD WALLS** and hay in the roof made a cozy home for field mice. Snakes crawled through the walls looking for rodents.





▼ **WISCONSIN-BORN** author Laura Ingalls Wilder grew up in the Midwest in the 1870s and 1880s. She brought the world of plains pioneers to life for generations of young readers in her nine *Little House* books.

◀ **THIS SETTLER** (left) is looking at a tiny cabin. He made this to get around a law that required building a house on newly claimed land. The law said the house had to be at least 12 by 12, but didn't say whether it had to be 12 feet or 12 inches. Some people built cabins on wheels and rolled them from claim to claim.

▲ **THE FIRST HOUSE** that many pioneers had was a dugout – a hole in the side of a grassy hill. The dirt roof could be dangerous. A cow might walk on it and fall through.



◀ **EARLY PIONEERS** made fires with twigs, grass, and corncobs. But mostly they used buffalo or cow chips (dried droppings). This Kansas woman (left) has a wheelbarrow filled with cow chips.



**PIONEERS RODE MILES** across the plains looking for cottonwood or willow trees that grew along riverbanks.

The trees were used to make roof poles. The poles were laid across the top of the house and then covered

with hay and grass. This layer was topped with clay and sod. In the spring, the roof bloomed with sunflowers.

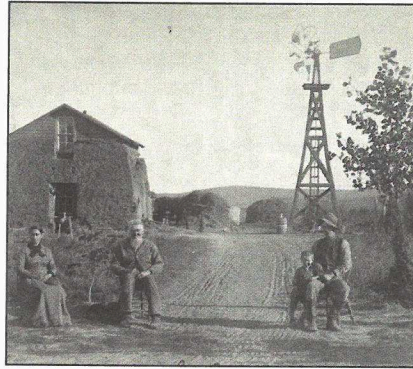


# Farming the Plains

It was backbreaking work, but the pioneers of the plains did it. They turned the grassy plains into fields of grain. Many of the farmers were from northern Europe. They came from cold-weather countries like

Sweden, Norway, Denmark, and Russia. These settlers shared in the grinding work of turning the rich but tough soil into farmland. High heat and summer droughts ruined promising corn crops. Subzero winter weather killed cows, pigs, and chickens. It also killed people.

► **THE WIND MADE** a constant, low moaning sound as it blew across the plains. The sound almost drove people crazy. But sodbusters were smart and learned how to use the wind. European immigrants knew how to use windmills for power. Sodbusters built them to pump water from deep wells. They also

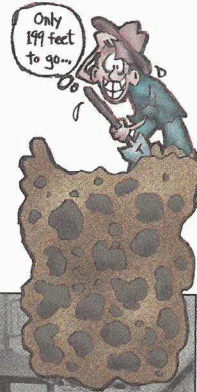


used them to grind grain. In western Nebraska and Colorado, farmers used windmills to

help water their fields. Without underground water, few crops survived.

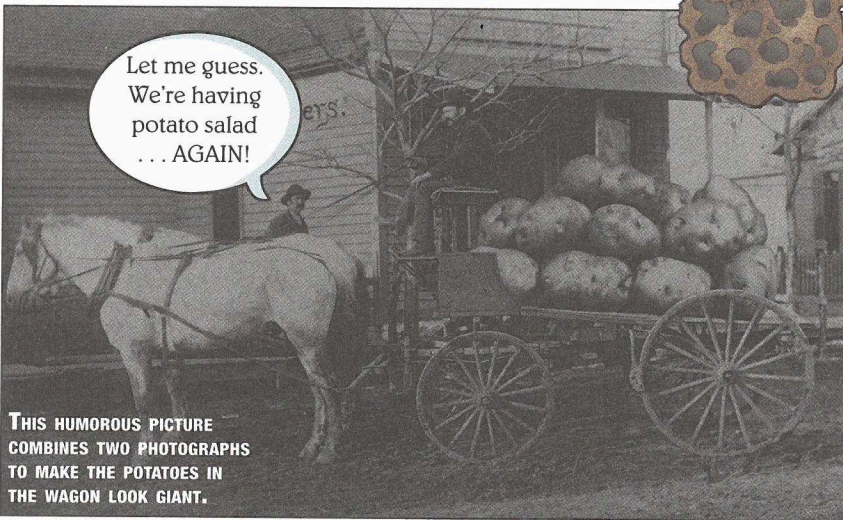
▼ **IN WESTERN** Kansas and Nebraska, the ground gets less than 20 inches of rain a year. That's not enough to grow most crops. To

find water, most pioneers had to dig wells as deep as 200 feet. And they did most of that digging by hand.



▲ **AN ORDINARY** cast-iron plow would get caught in the matted roots of the sod or skip across its surface. By the 1860s, sodbusters were using a new steel plow invented by Vermont farm boy John Deere. It sliced right through the sod.

◀ **OVER TIME,** farmers learned which crops grew best in prairie soil. That's why they grew wheat, corn, alfalfa, oats, barley, and potatoes.



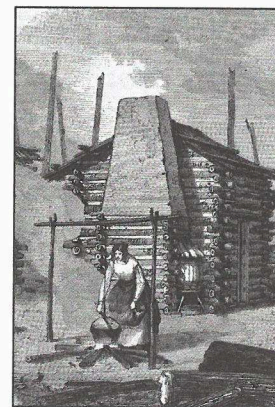
**THIS HUMOROUS PICTURE** COMBINES TWO PHOTOGRAPHS TO MAKE THE POTATOES IN THE WAGON LOOK GIANT.

► **CHILDREN DID** farm work, just like the adults. Small children fed the chickens and picked wild nuts and berries. They also helped their mothers gather fuel from the plains. Older children helped with plowing and planting, and



pitched hay. They also hauled water from the well and did laundry and kitchen chores.

► **WOMEN LOOKED** after the children, fed chickens, gathered eggs, tended a vegetable garden, and milked cows. They also helped with plowing and hauling water and acted as the family doctor.



## SNOW STORM

► **DURING THE** winter, blizzards came quickly. Some sodbusters lost their way walking between the house and the barn and froze to death.

## PRAIRIE FIRES

► **AS GRASSES** became drier, autumn brought the risk of prairie fires. Lightning or sparks from a campfire could send a wall of flame racing across the plain. A pioneer's sod house usually didn't burn, but the fields turned to ashes.

# The Perils of the Plains

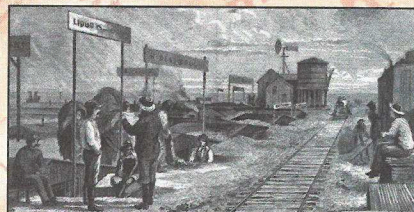
*"With a sinking feeling, I realized that I was entering a new kind of life, as rough and full of ups and downs as the road over which we traveled. Would I have the courage and fortitude to stick it out?"*

*—Katherine Kirk, bound for South Dakota\**

## DUST STORMS

◀ **IN THE HOT, DRY** summer months, long periods without rain turned soil to dust. High winds brought dust storms that turned the sky black.

▼ **TO PROTECT THEM-** selves from dust storms, settlers built temporary underground shelters.



## TORNADOES

▼ **THESE WHIRLING** winds and funnel-shaped clouds drove settlers to

find shelter anywhere they could. They often didn't have much luck.



*Let's HOP till we DROP!*

## LOCUSTS!

◀ **IN THE 1870s,** swarms of short-horned grasshoppers, also called locusts, covered the plains. They chewed through fields of grain. They also chomped on

leather boots and harness straps. The only cure was to gather the infested grass and crops and burn them before the insects could do more harm.



◀ **THERE CAN BE** billions of grasshoppers in a swarm. In some places on the plains, they piled up six inches deep. Their combined weight snapped the branches off cottonwood trees.



\*From *Westering Women and the Frontier Experience, 1800–1915* by Sandra L. Myres. University of New Mexico Press, 1982.

# Time for Fun

Slick down your hair with butter. Polish your dancing shoes with spit and bear grease or soot from the stove. It's time to party! Even pioneers had to relax sometimes.

In the mountains and on the dry, windy plains, pioneers worked hard all day every day. Farm animals had to be fed and crops tended, even on weekends. Still, families found time for fun. In the summer, children climbed trees and went swimming in lakes and streams. Picnics were another summer treat. At harvest time, children hitched rides on hay wagons. Dancing and card playing were year-round favorites.



*Hayride*

▲ **NO NEED FOR** video games – a hayride is lots of fun!

► **THESE COUPLES** (right) are having a toe-tapping good time at a western hoe-down. A dance could be held indoors or out. Almost every community had a fiddle player to provide music. Wherever pioneers gathered on the frontier, music and dance were a part of life.

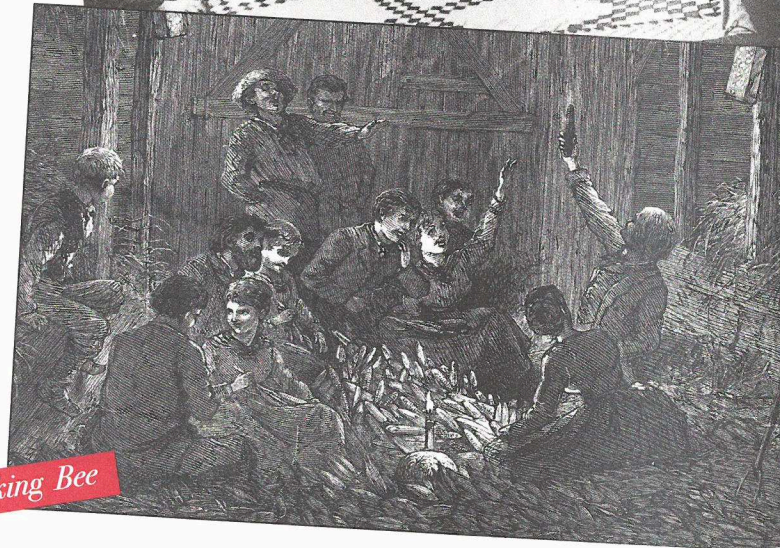
▼ **NEIGHBORS ON** the plains got together to share chores, a type of gathering called a bee. A corn-husking contest was a husking bee. Women stitched cloth into blankets at quilting bees.



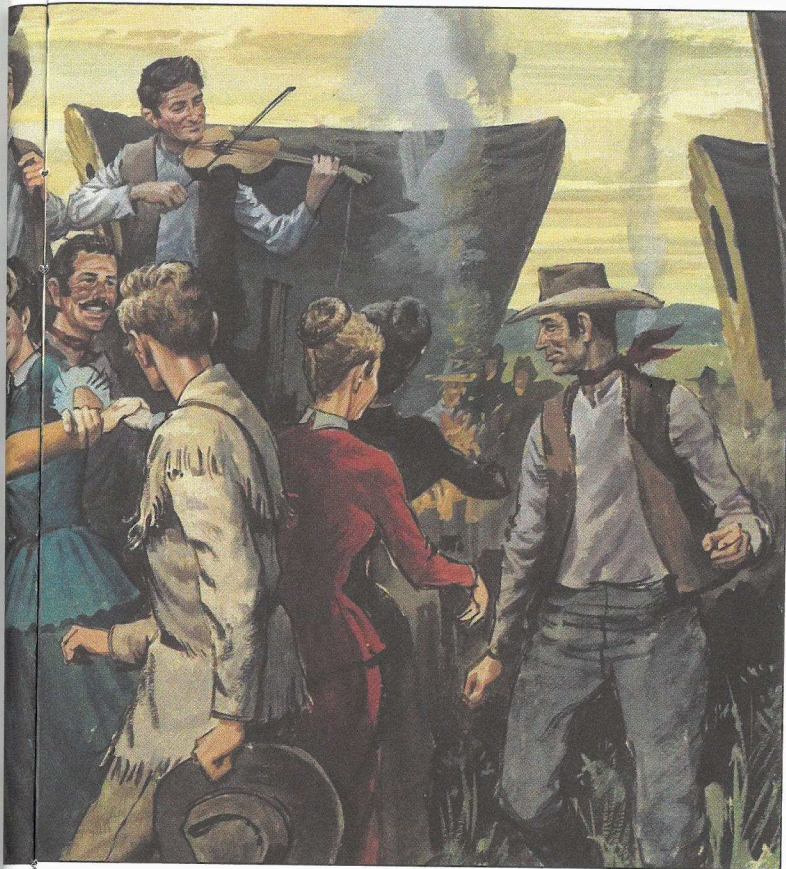
*Square Dance*



*Quilting Bee*



*Husking Bee*

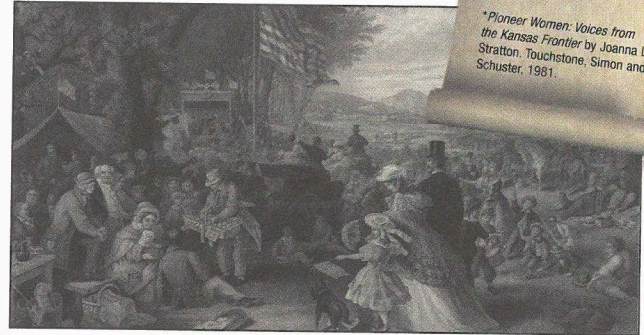


▼ **A TOWN WAS JUST** about ready to leave its pioneer past behind when it held its first Fourth of July celebration. Independence Day was a time

for people from all over to gather. Bigger towns had parades and speeches. Even the smallest town had a picnic and fireworks.

*"The Fourth of July celebrations were the meeting place of the whole county, where once a year old friends met and new settlers were welcomed to the county."*

*—Diary of a pioneer woman, around 1875\**



\*Pioneer Women: Voices from the Kansas Frontier by Joanna L. Stratton, Touchstone, Simon and Schuster, 1981.

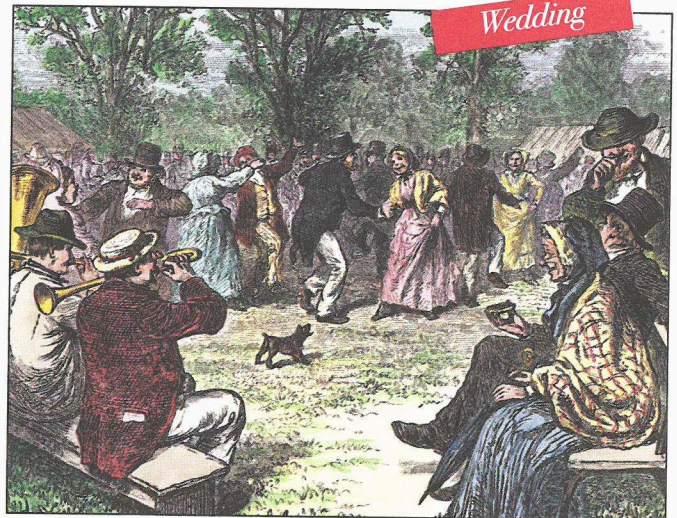
▼ **IT WASN'T LIKE** going to the mall, but it sure beat staying home. A trip to town was a special treat for farm families. New towns usually had a general store, a hotel, and one or more saloons. Children could enjoy penny candy at the general store, while parents chatted with neighbors whom they didn't see very often.

▼ **AT BARN AND** house raisings, also called building bees, men took

time off to run races or hold wrestling matches.



*Barn Raising*



*Wedding*

▼ **FAMILY CELEBRATIONS** like weddings were a good way to bring people together. Younger guests enjoyed play-

ing tricks on the couple. Friends might "kidnap" the bride or groom. They released the person in time for the ceremony.

▼ **NEIGHBORS** helped each other bring in the harvest or set aside feed for cattle at a haying party.



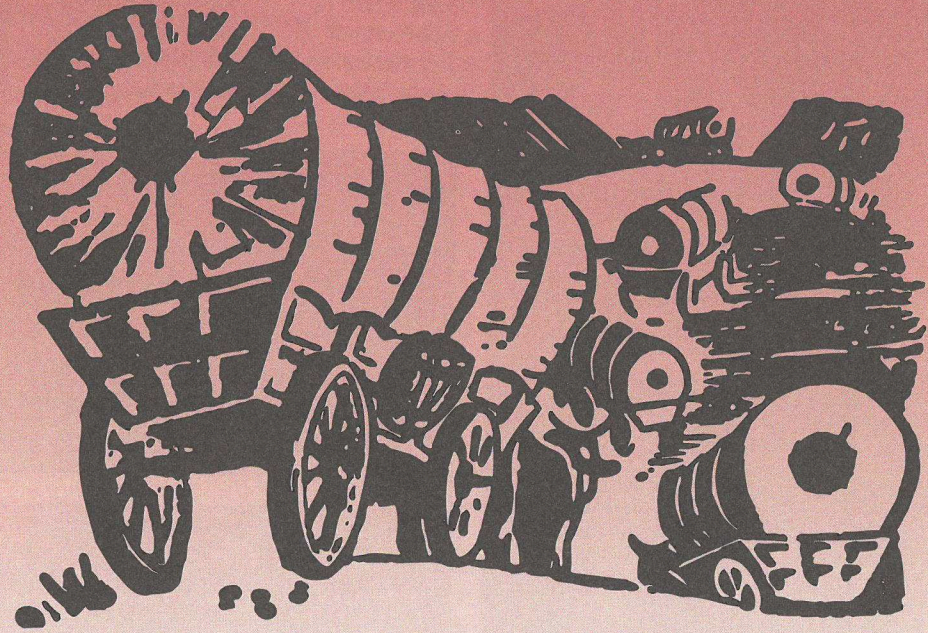
*Shopping*

*Haying Party*





# Activities



## WRITE A JOURNAL

Imagine you're traveling on the Oregon Trail. It is the biggest and most exciting experience of your life, and you want to remember as many details as you can. Write a journal about your experiences. Think about what you would want to remember about the trip. Describe important happenings. Tell about the people in your group. Explain the challenges. Include sketches if you can. You'll be happy to have something to look back on later to jog your memory.

## PANEL PRESENTATION

Take part in a panel presentation in which pioneers and Native Americans offer their point of view about the wagon trains headed for Oregon and California. Work with a group of classmates. Decide whether your group will present the pioneer point of view or the point of view of Native Americans. Imagine being on a pioneer wagon train or in a Native Americans community watching the wagon train pass through. What is your reaction? What thoughts and ideas cross your mind? Organize your ideas into a few main points. Then share them in the panel discussion.

