

The background of the cover is a painting. It depicts a river or stream flowing through a lush, green landscape. In the foreground, there are several large, vibrant purple flowers, possibly iris-like, with green leaves. The water is rendered in shades of blue and white, suggesting movement and reflection. The overall style is impressionistic, with visible brushstrokes and a rich, textured appearance.

Discovering The Genesee

Written by the
Third Grade Class
of the
Genesee Community Charter School

Contents

WHO WERE THE PEOPLE OF THE GENESEE VALLEY?

The Seneca	6
Farmers of the Genesee Valley	8
The War of 1812: Life of Soldiers	10
Black History	12
Austin Steward	14
Folk Heroes	16

WHY DID PEOPLE COME HERE TO LIVE?

Travel to Rochester	20
Pioneer Transportation	22
1687 French/Seneca	24
Revolutionary War	26
War of 1812	28

WHAT WAS LIFE LIKE FOR THE PEOPLE WHO LIVED HERE?

Pioneer and Native American Shelter	32
How Did the Settlers Use the River?	34
Pioneer Life	36
Food of the Pioneers	38
Pioneer Animals	40
Pioneer Farming	42
Early Settler's Games	44

Contents

WHAT IS THE SCIENCE OF THE GENESEE RIVER?

Spring Water	48
Flora of the River	50
Animals that Live by the Rivers	52
Meandering	54
Erosion	56
Natural Resources	58
Mills	60
Water Quality in the Genesee River	62
Water Testing	64
Mount Morris Dam	66
Genesee River Flooding of 1972	68
The Mouth of the River	70
Author's Notes	73



Who Were the People of the Genesee Valley?



The Seneca

The Seneca were one of five Indian Nations at Ganondagan by Canandaigua Lake. The Seneca believed that they rose out of two hills near Canandaigua Lake: South Hill and Bear Hill. They first settled in the Canandaigua area. The Seneca people moved their village every 30 to 50 years because their resources would run out. They eventually settled at Ganondagan. Some Senecas did settle along the Genesee River but Ganondagan was better because it was up on a hill where they could see all around them. They could watch for enemies.



The French were the first Europeans to meet the Indians of this area. The French met the Indians in the 1600s. The French came to trade fur with the Native Americans. They wanted beaver pelt the most. First it was friendly. Then the French became greedy. They wanted Lake Ontario so they would not have the Seneca in the way and wanted to control the fur trade.

Then they attacked Ganondagan. For more information about the attack you can check out page 24. Red Jacket (1758-1830) was an Indian tribal commander who lent support to the British



My name is Matthew Denk. I have one sister and a Mom and a Dad. I have no pets. I like to do X-games and soccer. I want to learn about planes and flight, and be a computer expert. My favorite part of this expedition was writing my rough draft—my long rough draft. It was hard finding information.

in the Revolutionary War. Red Jacket worked to prevent Iroquois conversions to Christianity.



Today the Seneca are Americans. They live in regular houses and live like a regular American like you and me. Sometimes they have traditional dances and remember how they lived long ago.

This is the area of Canada and some of the United States. The Seneca lived in the boxed area in New York State.



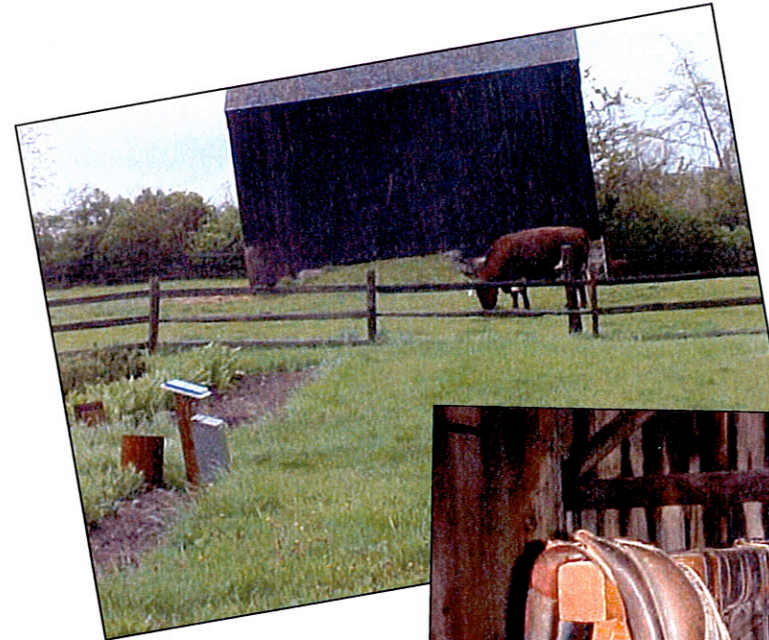
Farmers of the Genesee Valley



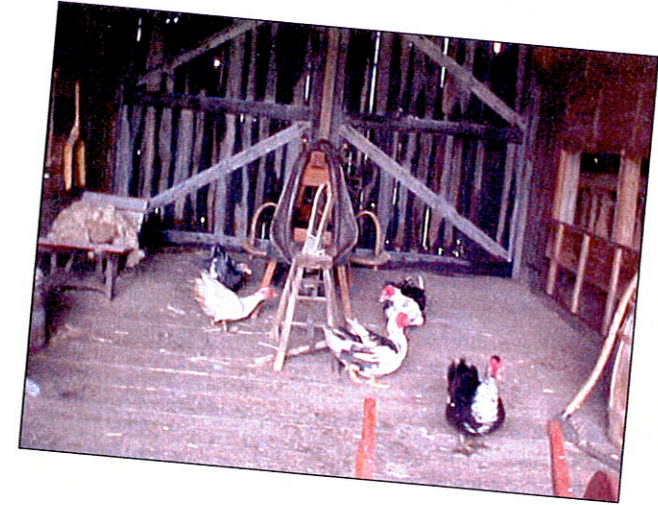
Farming was a major occupation in the Rochester area. The soil was fertile along the Genesee River. It was very good for growing crops like wheat. Many of the farmers grew wheat. They cut the grain with a cradle scythe. Wheat can make flour. The wheat was made into flour at a flour mill. Growing wheat became a large job for farmers. Flour milling became a large industry for Rochester, NY. That's how Rochester became known as the "Flour City".

The adults taught the children how to do chores. They gathered small logs to build school a house. They arrived in the wilderness. They cleared the land. They worked until sunset.

My name is Shawn Phillips. I am 9 years old and I like to ride my bike. My family includes two brothers, one sister, one dad and one mom. I have a dog. My hobby is picking up the garbage. When I grow up I want to be a bowling pro. The best part of writing this book was typing on the computer.



Ox in the Field.



Chickens in the barn.



Harness and other farm things.

Photos taken by Shawn Phillips at the Genesee Country Museum, a living history museum.

The War of 1812: The Life of Soldiers

Most of the War of 1812 took place in the Genesee River Valley and on the shores of Lake Ontario. Neighbors would fight neighbors and families were torn apart. Sometimes entire communities were burnt down.

Sometimes it was very awful being an American soldier during the War of 1812. There wasn't enough food, weapons or uniforms for all the American soldiers. I feel bad for many of these soldiers because they could not escape the war. There wasn't enough soldiers and many didn't want to fight but they really had to to protect their country.

FOOD AND DRINK

American soldiers didn't always get much food. Often they went hungry because they didn't have enough to eat. Soldiers were given meat, bread, and salt and vinegar to eat, and four ounces of rum, brandy or whiskey a day to drink. Sometimes local residents would give them food or sometimes the soldiers would steal food.

UNIFORMS

At the start of the war, the American soldiers wore uniforms that looked like the British enemy. They had very little supplies to make uniforms, so American soldiers often had to come up with their own uniforms. American soldiers were given a wooden water canteen, a linen haversack for food, and a knapsack to hold a blanket and extra clothes. The soldiers in the north sometimes didn't have heavy enough clothes to keep them warm in winter.

MEDICAL CARE

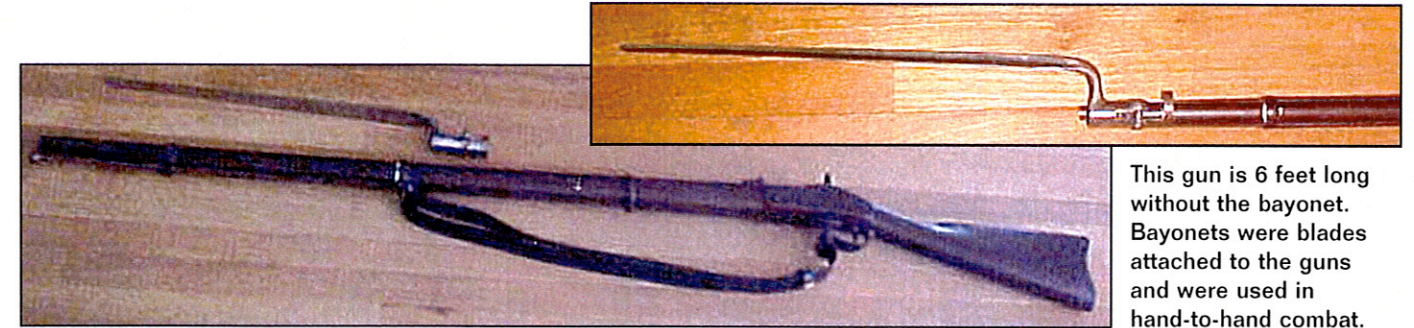
Hundreds of soldiers died from getting sick. They got sick because they were tired, things were not kept clean and they were often starved. More soldiers died from illness than from bullets. There were few doctors that could help.

WEAPONS AND WAR TACTICS

Most American soldiers were new and really didn't know war strategies. Some of them barely



My name is Jamie Peel. My family includes my mom, my cats Cuddles and Peanut, my brothers and sisters, my Dad, my Aunt Titi, my cousins, my uncle, my grandparents and my nieces and nephew. My hobbies include playing video games, doing flips on my monkey bars, soccer, skateboarding, riding my bike, learning martial arts and playing with my friends. When I grow up I want to be a video game designer and video game tester.



This gun is 6 feet long without the bayonet. Bayonets were blades attached to the guns and were used in hand-to-hand combat.

knew how to hold a gun. Officers had to give their troops special training before battles. In the spring of 1814 Brigadier General Winfield Scott started the first military training camp in Buffalo, NY.

At the start of the war there were not enough guns. The United States had to buy muskets from the French, some British and other Americans. Soldiers had a musket and a bayonet. Some soldiers used rifles, which were more accurate than muskets.

Native Americans were soldiers for both the British and American sides. They were very good warriors. Some people believed, one Native American warrior could do the job of three white soldiers. Their tactics were to surprise their enemy or to lay a trap to confuse the enemy soldiers.

WOMEN IN THE WAR

There were women in the War of 1812 who helped on both the American and British sides. Women helped in many ways. On the battlefield they helped to pass out water to the soldiers. In the camps they cooked, they did the laundry and they even made the uniforms. They also helped as nurses to those men who were sick.

The Genesee River Valley area was the place where most of the War of 1812 was fought. Life for the soldiers was very hard because they were not prepared to battle. They had very limited weapons and supplies. Many of the soldiers died from sickness. The Native Americans were sometimes considered the best warriors and fought on both the American and British sides.

Black History

Ebenezer Allen was half black and he was half white. He was a man with lots of land. Nathaniel Rochester bought some land from Ebenezer "Indian" Allen. When Nathaniel bought the land he called it "Rochester."

This is the Black History of Rochester. There was a lot of slavery in this period. Most of the slaves wanted freedom, and they were angry. Many runaway slaves got a job in Rochester.

All black people were important to white people in Rochester because there were slaves. They were also important because everybody is important. They were important in Rochester because their homes are in Rochester.

Some slave owners came from another place and brought their slaves and came to Rochester. Nathaniel Rochester and Captain William Helm were slave owners. Austin Stewart and Thomas James were runaway slaves. They came to Rochester because they wanted to be free and they hated slavery. There weren't a lot of role models. Mostly all the runaways from slavery were role models. There wasn't as much black people than white.



This is what I think Thomas James looked like after he was free - happy!

Thomas James ran away from slavery. And then he came to Rochester. He studied ministry and then he became a minister. Thomas James joined with William Bloss and Dr. J.W. to hold anti-slavery meetings.

A mulatto man named Asa Dunbar had, in 1795, opened a clearing of Irondequoit Bay. It would later become the northeast corner of the city.

Austin Stewart was Rochester's first black businessman. He had come to town in 1816. Two years later he opened a meat market. He moved to Canandaigua, New York. Then he died there.

Early African Americans had different kinds of jobs. Black people's jobs were horrible. They didn't get paid very much. That's a reason black people were angry. Most adults found jobs. A survey in 1832 said that there was a cabinet maker, a shoemaker, masons, stonecutters, a butcher, ministers and laborers (people who carried the heavy things). Black teachers could only teach black students. There was at least one black school on the west side. Black people's and white people's schools were mixed starting in 1857 in Rochester. There were no black police officers but there could be. There was one black doctor in 1835.

According to different sources there were different possible numbers of black people in Rochester. One source stated that there were 70 black people in Rochester in 1834. A second source said that in the same year there were between 360 and 330 black people living in Rochester. At the end of the 18th Century it was a very large number of slaves in New York.

They celebrated July 5th, 1827 of the end of slavery in New York State. They started a vote to see if white people wanted to end slavery. There were about 600 black people before the Civil War in Rochester. Then there were 3,900 after. Most of the white people had better jobs than black people. White people and black people got along with Indians.

There used to be a lot of slavery. Now there is no slavery. There were a lot of runaways. They had jobs like ministers, butchers, and teachers. I feel that it was hard for black people back then.



My name is Jordan Smith. I'm eight years old. I want to be a rapper when I grow up. I like playing football and basketball. I am short and have an afro. I kind of like reading. I have three best friends. I'm good at math. I know my times tables. I'll play football until I'm 30 years old and I'm playing basketball until 18 years old.

Austin Steward (1793-1865)



Austin Steward was the first black businessman in Rochester, NY. He sold meat in his store. Both black people and white people bought it. He had a successful store.

Before he was a businessman he was born a slave in Virginia. In October, 1813 he escaped to Canandaigua, NY and went to work for a farmer in Farmington, NY. In 1817 he moved to Rochester.

After he was free he went to a school in Victor, NY. He decided to start a store to get some money. The farmer in Farmington sent fruit for him to sell in his store. He ran his store for a long time through the 1820's. Then some other black businessmen asked him to move away from Rochester to help them open up a store. He lost all his money down there.

In 1830 he moved back to Rochester. He did not open his store back up. He helped free other slaves. He finally died of old age.



My name is Sterling Johnson. I'm 9. My favorite food is eggs. I'm in the third grade. My favorite sport is wrestling. I also like music. I like to tell funny jokes and I'm a fast runner.



Austin Steward drawn by Sterling Johnson.

Folk Heroes



My name is Melanie L. Cope. I have one brother named Ryan. I have a mother and a father. I have two pet newts, two pet fish, two pet guinea pigs. I enjoy horse back ridding, swimming and running. I like learning about pre-history, folk heroes and horses. I want to be an equine (horse) vet.

Folk heroes are people who entertained early settlers. Folk heroes are people who have done brave things and people will always be remembered. Some folk heroes were not from Rochester but were talked about in Rochester. You may have heard of Davy Crockett the man with 3 wives. Davy Crockett's parents, Rebecca and John built the real Crockett tavern in 1793 on their 300 feet of land. Davy's motto was "be sure you're right then move ahead."



Drawing by M. Cope

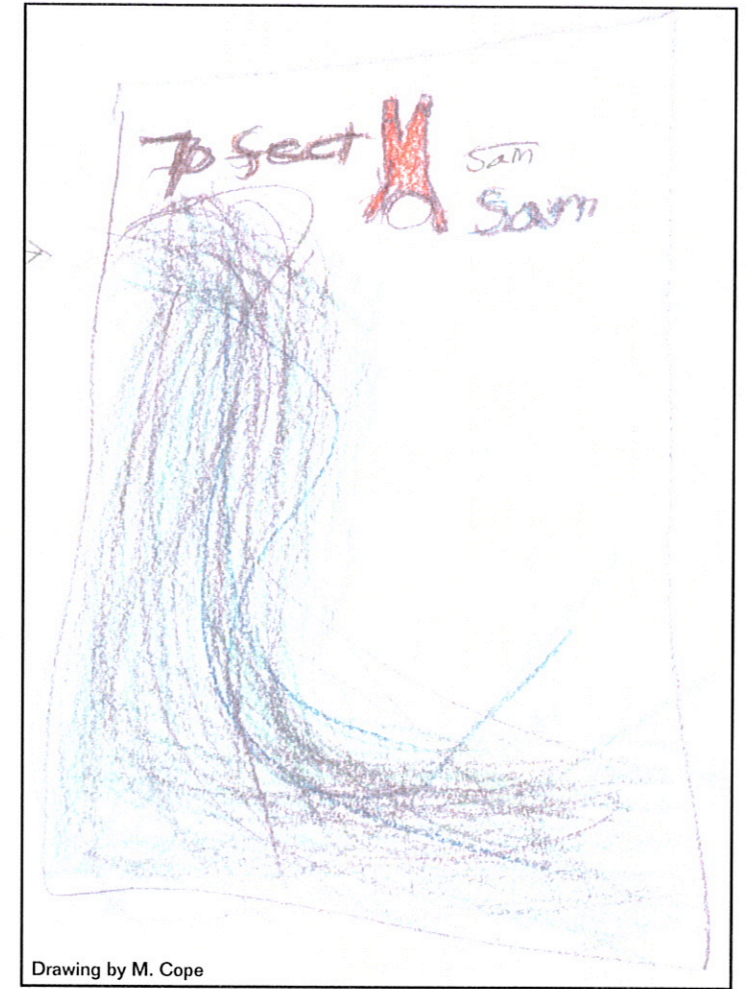
Mike Fink shot 3 bullets in 1 hole.

Or Mike Fink a very strong keel boatmen. When Mike Fink was 2 days old he ran away. Then people said he worked with a group of acrobatic frogs. His grandfather got him and he told Mike Fink that he would have to behave. He did not listen. One day he was jumping on his bed then jumped right through the ceiling. He saw his first keel boatmen. From then on he wanted to be a Keelboat man. So his family moved to the frontier. One day their ox passed away. So Mike did the ox's work. He once entered a rifle shooting contest. He shot three bullets. They were all lined up in one hole. One day he saw Jack Carpenter the head of the keel

boatmen. Jack said if Mike could beat him, he could have a job. Mike lost. Then Mike started to wrestle bears. Finally he wrestled with the biggest bear and won. Mike beat Jack. Mike learned so fast he became captain. Then steam boats were invented. The steamboat captain attacked. Mike lived.

Also Sam Patch the great jumper. Sam jumped from the top of 70 foot Passaic falls in New Jersey in the September of 1827 just for the fun of it. Patch's nickname was the Yankee Leaper. As if that was not enough, he made the 120 foot dive into the Genesee River with his pet the bear. Then he did it again this time without the bear and did not survive. Sam's body was found four months later in Lake Ontario. Sam was born in 1807. He died on November 13, 1829 because of a bad dive. Sam often said "some things can be done as well as others". Sam's poster said Sam's last jump [meaning last jump of the season] but it really was his last jump because he died.

Folk tales are, for the most part true. Many times they get a bit untrue. But they are mostly true.



Drawing by M. Cope

Sam Patch jumped off the 70 foot Passiac Falls.

Why Did People Come Here to Live?



Travel To Rochester



My name is Sydney Teng. My family includes a dad, a mom and a sister. I have no pets, but I used to have two turtles (speedy and slowy). My hobbies include soccer, reading, four square and swimming. When I grow up I want to be a soccer player. I live in Rochester, NY. I take Kung Fu (a martial arts) and I go to girl scouts. My favorite part of this expedition was going to Gold, PA.

Why did people pack-up everything and move to Rochester? I mean who would want to pack-up everything and possibly sell all of your furniture and risk your life just to move? Well, the pioneers did. Back then almost everybody was a farmer so they needed good soil (Rochester had that). The second reason they moved was the land was available. If the pioneers wanted to go farther west a "land agent" might stop them and convince them to settle here. A land agent is someone who sells land and says "Why keep going when you could settle here?"

Later job opportunities was another reason why people moved here. There was one job that was popular. It was called "Carpenters and Joiners," (they built houses).

If you were traveling to Rochester you couldn't just take a car, you would take a wagon. There were quite a lot of types of wagons. Types of wagons are: the light wagon, the Conestoga wagon, and the prairie sheotend. The light wagon was used for travel. Its 8 feet long, 12 feet tall and about 5 feet wide. The Conestoga wagon was used for freight (rarely used for travel.) The Conestoga wagon was German designed. The Germans painted parts different

PRINCIPAL OCCUPATIONS.		
7 Clergymen,	124 Shoemakers,	17 Coachmakers,
25 Physicians,	20 Hatters,	67 Blacksmiths,
28 Lawyers,	73 Coopers,	14 Gunsmiths,
74 Merchants,	23 Clothiers,	10 Chairmakers,
89 Clerks,	20 Millers,	95 Masons,
84 Grocers,	21 Millwrights,	25 Cabinet-mkrs,
33 Butchers,	304 Carpenters & Joiners,	5 Combmakers,
48 Tailors,		26 Painters,
24 Wheelwrights,	23 Tanners,	16 Inn-keepers,
21 Saddlers,	29 Tanners,	16 Goldsmiths,
8 Tallow-chandlers,	14 Bakers,	8 Bookbinders,
	423 Labourers,	31 Printers.

Jobs people did in Rochester according to a Directory in 1812.

colors. The metal was black, the body was light blue, and the wheels were red. The biggest Conestoga wagon could hold 8 tons, the smallest could hold 3 tons. The prairie sheotend was a smaller version of the Conestoga wagon. The prairie sheotend could hold 2 tons.

The basic parts of any wagon are the body, wheels, oil canvas and the tongue. In the winter the pioneers would take off the wheels and put runners on it.

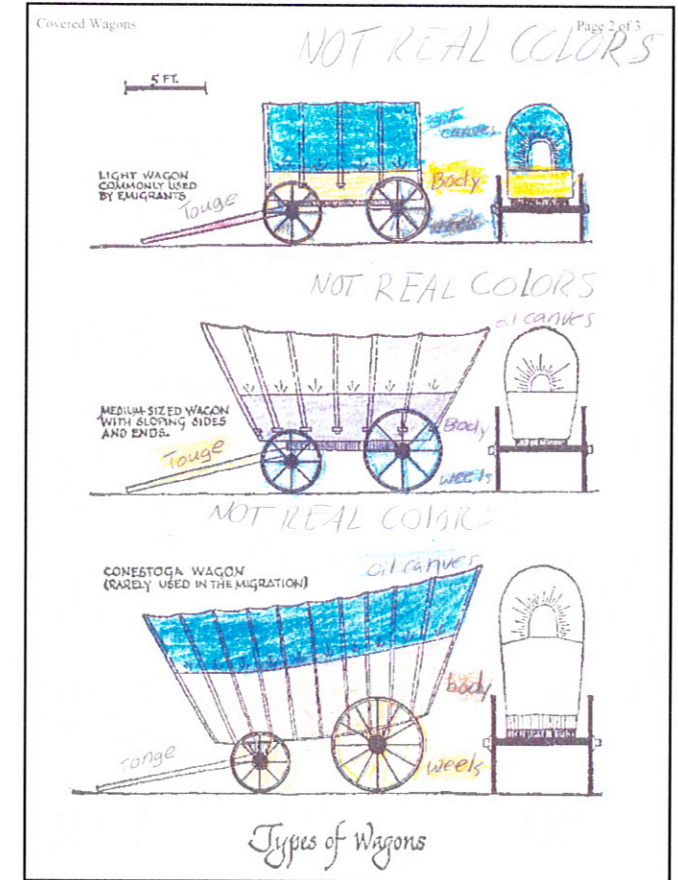
How long did it take to build a wagon? If the blacksmith had all the parts already built (a wagon maker's job) and he built it all by himself it would take one week.

If you had a wagon what would pull it? Oxen were better especially if it was a long way because oxen are easier to feed. To control oxen farmers would call out words like "Gee" (left), "Haw" (right), and "whoa" (stop).

Some of the people who traveled here are Enos Stone, Nathaniel Rochester, Hamlet Scranton and Abelard Reynolds.

The places where some people came from were mostly New England. Other people came from England, Ireland, Scotland, Switzerland, Germany, Canada, Norway, Pennsylvania and Connecticut.

One of the sicknesses people caught commonly was Malaria (also known as the Genesee Fever). Malaria was caught from mosquitoes. Another was Cholera (caught by bad water). And Small Pox. Today none of these sicknesses still exist in Rochester.



These are the three wagons I know of, the light wagon (top) was used for traveling to Rochester. The others were used for freight.

Pioneer Transportation

In the time of the pioneers, mud was a big problem for transportation. Bumps in the roads were terrible too. When it rained, the mud oozed out of the road. Everybody and everything slithered around. Ruts became so deep often wagons and stagecoaches sank to the hubs of their wheels. It took hours to get anywhere. Swamp-like road conditions made it almost impossible to get anywhere. Some pioneers even called this place the “city of mud”. It was clear that something had to be done. So the pioneers sank tree trunks side by side to make a wooden road. Some of these roads passed through downtown Rochester like East Avenue and Main Street. These streets were once Indian trails that the pioneers turned into roads.

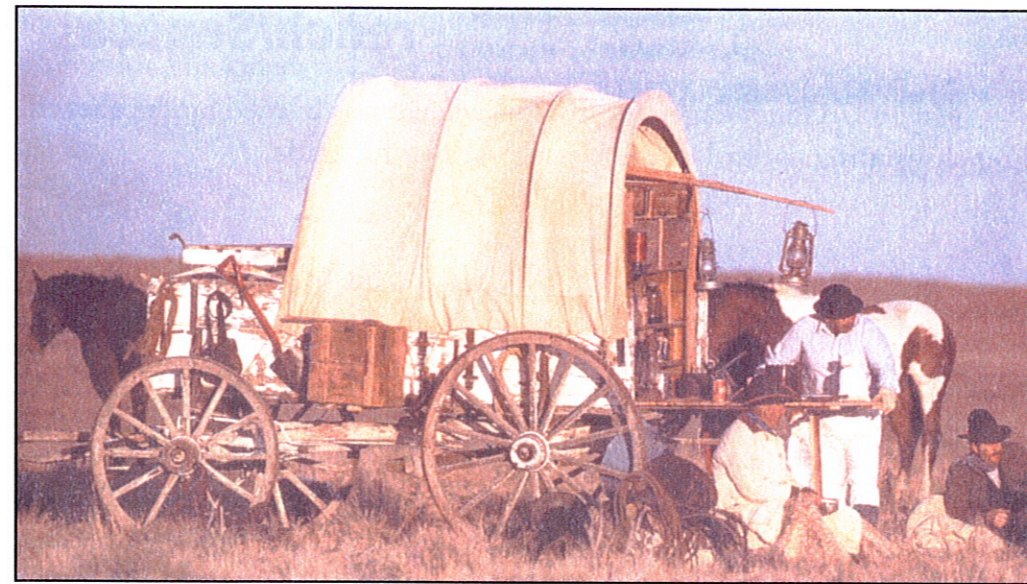
The main ways people got around was on foot or by horses and wagons. Usually the wagons held four men in the back and two in the front including the driver. The fancy wagons were carriages and carried two or three people. Wagon makers had to make the entire wagon by hand with no machines because they didn't have any electricity. Eventually, the wagon makers delivered up to one hundred wagons a week to Rochester. The wagons were made in East Albany.

The pioneers used wagons to go on trips some of the time. One of the big wagons they used was



My name is Hannah Hagen. I live with my parents, two sisters, and a dog and two cats. I was born in Rochester, NY in 1993. I'm in third grade at the Genesee Community Charter School. One of my interests is gymnastics. When I grow up I would like to be a doctor for babies.

a Chuck wagon. The Chuck wagon was like a kitchen on wheels. The cook had to stock the wagon with enough food for one or two months if they went on a big trip. He couldn't shop on the way because the towns with stores were too far from the trail. The cook would have a grocery list when he went on a big trip. The grocery list included: garlic cloves, yeast, beans, lard, potatoes, onions, dried fruit, chili powder, sugar and flour. The Chuck wagon held the food and also eating utensils like iron forks, spoons, knives, plates and cups. The largest pot on the Chuck wagon was the Dutch oven, which sometimes hung from a hook beneath the wagon. The cook drove the wagon from a bench built near the front of the wagon. On the side of the wagon there was a barrel. The barrel was refilled when the cook stopped by a river or stream.



This is a picture of what a chuck wagon would look like.

Today, wagons are rare to find. Because now we have electricity, gas and oil. Cars are better than wagons because cars go faster, farther and are warmer in the winter because we now have heaters too!

1687 French/Seneca

In 1687 Ganondagan an Iroquois village was burned by the French. This was the result of the French wanting control of the western beaver fur trade.



Rene De Brisay, the Marquis de Denonville, forbid the Seneca to stop any fur trade canoes in Irondequoit Bay. The Seneca refused to follow his orders and said they were free to go and trade anywhere they wanted.

So Denonville planned three surprise attacks to defeat the powerful Iroquois. He discovered he didn't have the forces to carry out all three attacks. He decided to just attack the Seneca.

The French had stronger weapons than the Iroquois. The French had weapons like broad axes, cannons, torches, short-range riffles and musket guns. The soldiers had 10 loaves bread for a 10-day attack. The French allies were the Illinois Indians. The Iroquois had weapons like stone axes, stone knives, war clubs, bows and arrows, and French trade guns.



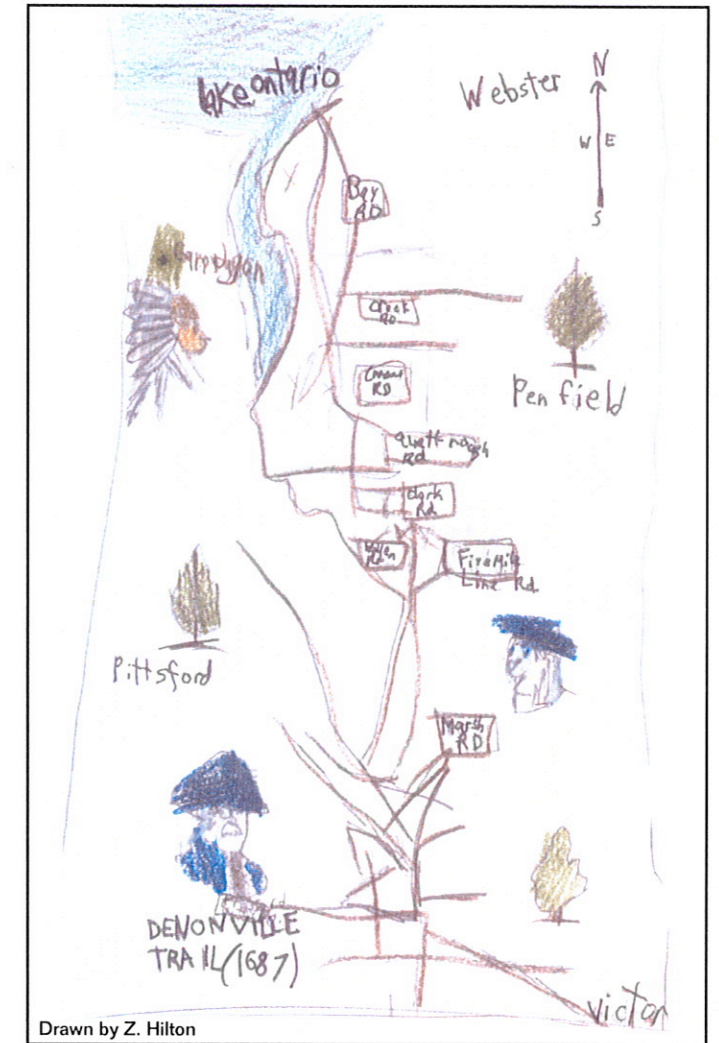
My name is Zachary Hilton. My family includes my brother Kris, my sister Tab, my other sister Jess, my Mom and my Dad. I like soccer and baseball. I also love reading. I am 9 years old. And I love dogs too. When I grow up I want to be a construction worker.

From July 12th-19th, 1687, Denonville and his army attacked the Seneca. He killed about 80 men and burned most of Ganondagan's corn and village.



On July 19th, the last day of the attack, Denonville claimed ownership of all Seneca land. After celebrating the French burned all things that could help the Seneca. Denonville wanted control of the fur trade, but in the end the friendship between the English and the Iroquois led to the defeat of France in America.

This is a map of Denonville's Trail in 1687. He went to most of the streets showing to your right. When he was on them they were trails.



Drawn by Z. Hilton

Revolutionary War

The Revolutionary war was one of many wars that made America what it is today. In fact before the Revolutionary war, America wasn't America. Today America is made up of many different groups of people. During the American Revolution there were a few groups of people. The Iroquois were one of the few. They lived along the Genesee River and in Rochester. The French also lived in Rochester and around Lake Ontario. The English lived on Long Island.

The Revolutionary War was from 1775-1781. In 1779 the British, Loyalists, and the Iroquois attacked



Flint lock guns used during the Revolutionary War as seen on display at the Rochester Museum and Science Center.



My name is Elliot Williams. My family is my mom, my dad and my older brother Allen and me. My favorite things to do are play video games, take pictures, and read. I also play lacrosse, hockey, and the trumpet. I am interested in photography. When I grow up I want to be a photographer.

American frontier communities. This drove George Washington to the point where he sent the Sullivan-Clinton Expedition to attack all Iroquois settlements in western New York. Seneca villages were destroyed, many Iroquois died from disease and starvation. The 1779 Sullivan campaign was one of the largest Continental army offensives but remains relatively unknown. The Iroquois were completely defeated.

The French and Americans had many different items during the American Revolution. The weapons the French and Americans had were knives, muskets, flintlock guns and bayonets. For shelter they used tents because they weren't in one place long enough to build a permanent shelter. They communicated with runners. A runner was a person who was armed with a pistol and a knife who delivered letters. The medicine they had was made of herbs and leaves. Bad wounds meant amputation. For infection they would use leeches to suck infected blood. Their transportation was horses and wagons.

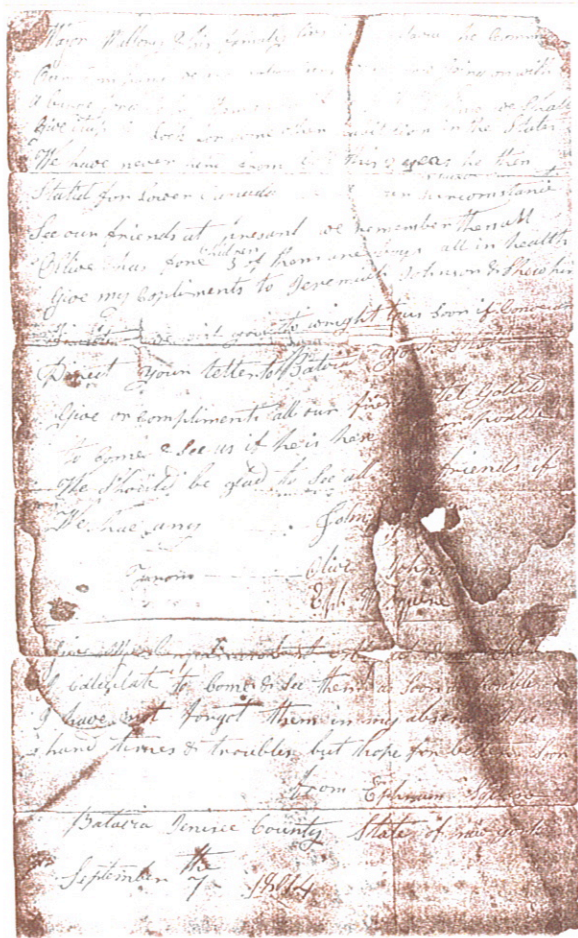
The Revolutionary War had many battles. Some were important, some were unknown but they made America what it is today.



Photo by E. Williams

A drum used for communication during the Revolutionary War as seen on display at the Rochester Museum and Science Center.

The War of 1812

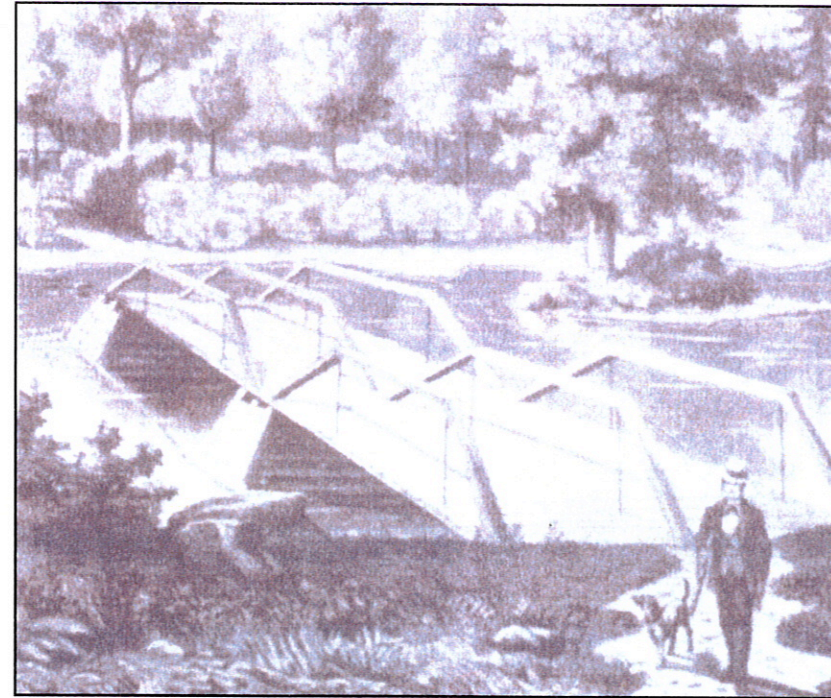


The War of 1812 is one of the most forgotten wars in American history. It's forgotten because it wasn't fought for a great cause.

The United States was organizing an invasion on Canada to become a stronger country. Britain realized this and decided to stop the United States. Meanwhile, Britain was trying to conquer New Orleans and Baltimore to control all of the outgoing trade. First, Britain took control over Lake Ontario with their small fleet of war ships. Their fleet of war ships was too small so they started capturing American war vessels and other war units which triggered the United States government to declare the second war of American independence against Britain.

William Hinchey, Adel Rowe, and Donald McKenzie gave the first alarm of British attack by delivering a warning letter to Captain Rowe. They were standing where the Charlotte lighthouse stands today. The letter told Captain Rowe to send the militia to

Letter from Ephrian Squire to Olive Johnson from the Rochester Museum and Science Center research library.



Main Street Bridge, Rochester, NY during the War of 1812.



My name is Ian Slothower. I like reading and writing. I also like studying castles. I have a little brother, a mom and a dad. My dream is to become a famous author and photographer. E.B. White inspired me to become an author. Gary DeFranco inspired me to become a photographer.

protect the Main Street Bridge.

The War of 1812 was fought from 1812 to 1815. A peace treaty was signed on December 24th, 1814 in Guent, Belgium. The war polluted Lake Ontario and killed many people. It also put many shipwrecks on the bottom of Lake Ontario. In fact, Lake Ontario is infested with shipwrecks.

The War of 1812 was not fought for a constructive purpose because the United States didn't capture Canada and Britain did not conquer New Orleans or Baltimore. But, I guess this just goes to show that wars are not useful.

What was Life Like for the People Who Lived Here?



Pioneer and Native American Shelter

The Native Americans and the pioneers both needed shelter. Many families of an Indian clan lived together in a longhouse, but usually one family lived in a pioneer house. Both of them used trees to build their houses. Both used fires to cook and to heat their shelter.

The Iroquois built their longhouses using beams or rafters. They tied the beams under the roof inside to brace the structure. They covered the walls and the roof with bark sheets. For extra protection, more poles were set on the outside of



This is a picture done in perspective by a girl named Alexandria Mewborn. It's a picture of long houses. The longhouses were different sizes.



Hi, my name is Nicoya Jones. I have a sister that's 9. I have a brother that's 2 years old. I have a mom and a dad. I don't have step parents. My hobby is jump-roping. I like to go to Seabreeze [Amusement Park] and I like to spend time with my family. I'm interested in learning about Black history. I want to be a nurse when I grow up because I like to make people feel good.

the bark to hold it firmly in place. The Iroquois men tied horizontal poles around the frame using bark strips. These lighter poles were stretched to support the roof. The poles were bent toward one another. They were tied together and their ends crossed. The longhouse was 30 to 200 feet long and 15 to 25 feet high. The longhouse could hold up to 100 people at a time. In the longhouse fires were placed in the center and heated the whole building.

Houses were the pioneers' shelter. The pioneers built their houses with squared logs, straw, animal furs, clay and later with planks or brick. The fireplace was built against the wall and most of the heat went up the chimney. The houses were so cold in winter that if you were writing a letter the ink would freeze on your pen!

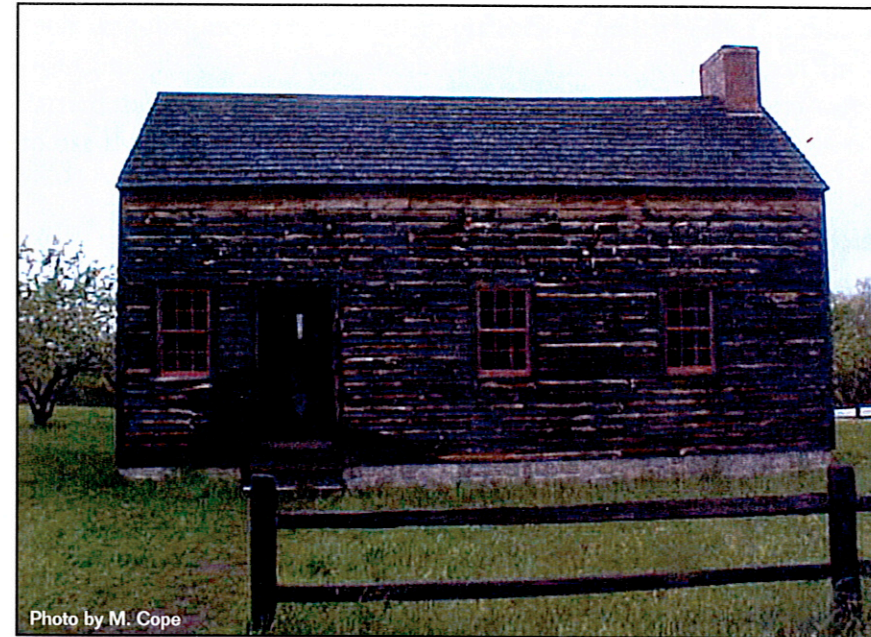


Photo by M. Cope

The pioneers had plain furniture that they made themselves. In the colonial houses, there was often only one room and a dirt floor. The one room was called the Keeping Room. The Keeping Room was used for eating, sleeping and cooking. The older children slept in the attic (or loft). When more children were born they built more space. Sometimes the door was the only opening. A window or two might be cut in later.

This is a picture of Nathaniel Rochester's first house. It is a pioneer house.

How Did the Settlers Use the River?



Upper Falls in Rochester, NY in 1768.

Water was important to the settlers. Settlers liked living near rivers because it made life easier for them. A river in New York State that the settlers used was the Genesee River.

Rivers gave the settlers water for their crops and their animals. They used the river for drinking water and for washing clothes and for bathing. They used the river water for cooking and fished for fish to cook.

The river was not just for work. People used it for fun activities like swimming and jumping. Artists painted the river to show the beautiful landscape. Paintings showed other people what the river looked like before there were photographs.

Rivers were used for transportation. To get across the river before there were bridges, the settlers turned their wagons into boats by taking off the top and wheels and floating them across. Rivers can be used to get from one place to another more quickly but the waterfalls on the Genesee River made it difficult. Indians carried their small boats around the waterfalls on land but the settlers had bigger boats so it was harder for them to use the Genesee River for travel.

The Seneca Indians named the river Genesee which means “pleasant banks”.

The settlers used the river in many ways- for food, water and travel. The waterfalls were beautiful but even today they make it hard to travel from the source to the mouth of the Genesee River.



My name is Brianna Rivera. I have a Mom, a Dad and two sisters named Anija and Celisse (C-eel-isse.) My hobbies are Art, Music and Soccer. I'm 9 years old. And I'm a girl.

Pioneer Life

Pioneers had a very hard life. Men did the heaviest work. They cleared the land, built houses, and tended to the fields. Men also cut, hauled and stacked wood. Sometimes men went to lumber camps or mills to earn money. Women tended to the vegetable gardens, did the washing, cooked and cared for the children and the family. Single women worked in the home or in the fields. Sometimes they would work as servants, weavers, or teachers. Settlers had children too. Early settlers named their children after people in the bible or with names like Faith and Hope.

To make their life better, children needed to go to school. To make a school, families had to donate land and supplies. The community helped to build the schoolhouse. Teachers were hard to get because they got very little pay. Sometimes a family would pay a teacher with wheat or other goods. Back then most teachers were men. Books were scarce. The teacher would have one book for the whole class to use. Some teachers used a stick to discipline the children that were being bad. Pioneer children learned letters and numbers. They learned arithmetic for daily life.



Photo Courtesy of GCCS 1st Grade

A kitchen in the 1800's as displayed at the Stone-Tolan House, Rochester, NY

On Sunday people had to go to church. People wouldn't play games or work. Sunday was a day of rest. On Sunday, if you lived far away from church you wouldn't go home for lunch, you would go to the Sabbath house. Then after lunch people would go to the afternoon mass.

Pioneer's home life was very different from today. People slept on very different types of beds than we do today. The mothers and fathers slept on a Jack-bed. A Jack-bed was high enough so another bed could fit under. The mother and father would not be able to stretch out because the bed was not long enough. A trundle bed was pulled out from under the Jack-bed. The babies slept in cradles near the fire. Older children slept on bags filled with straw or mattresses filled with softer feathers or wool. Colonial houses had no running water. There was no way to make sure water was clean so they didn't often take a bath or drink water. When people did take a bath they did it in front of the fireplace in a big, wooden tub.

Pioneers cooked their meals on an open fire. Sometimes they had tripods to hang a pewter cauldron over the fire. There was a lot that could be done with a cauldron. It was a place to boil water to wash dishes, clothes and people. It could be used for making soap or candles, and catching rain. People ate corn, corn and more corn. They ate corn fresh, corn boiled, corn baked, corn roasted, creamed, cooked or popped in the way the Native Americans taught them. The Pioneers planted pumpkin and squash. They would bean plants around the corn stalks so the bean plants would grow up the corn stalks. They cooked the beans into mush or porridge.

Compared to today's, water was very hard to get clean, but now you wouldn't even think when you get a glass of water to drink. Pioneers had to cook over the fire with smoke in their face. Now compare it to how we cook with a stove and we don't have any smoke in our face. Compared to Pioneer life, our lives today may seem easy, but every person's life holds a set of challenges.



My name is Molly Snell-Larch. I enjoyed the challenge of being an author. The best part was learning about my topic and sharing what I learned. The hardest part was taking notes. I am interested in learning all about the air. I want to be a veterinarian. My hobbies include reading and playing sports. I have a twin sister Hannah, a Mom and a Dad.

Food of the Pioneers

Pioneers needed food to survive. The pioneer women and girls cooked food by the fireside. The younger people in families ate smaller portions than the older ones. Food also was limited, so they would not make meals too large. Lunch, which they called dinner, was the biggest meal of the day.

They had meat, vegetables and fruit. They had big gardens, orchards and fields. Gardens usually produced herbs, carrots, beans, pumpkins, squash, lettuce, tomatoes, turnips, onions and melons. Apples were grown in orchards and gathered in the fall. Rotten apples and ones with worms were made into apple cider. Worms and everything the bad apples contained went into the apple cider.

Corn and other grains were grown in fields. Corn could be ground into meal by hand or at a mill. Corn meal, with other ingredients, could be made into corn bread and Johnny Cake. Corn or oats were cooked into mush for the younger children. Oats were made into oatmeal. Wheat was ground into flour to make breads, tarts, scones, pies, cookies and cakes. Potatoes were also grown in fields. Hearty soups were made from potatoes, dried meat, and garden vegetables.

They had animals for different reasons. Two reasons were for making work like plowing easier and for food. Hens produced eggs and chicken meat. Pigs gave meat too! They had pork, bacon, and sausages which were made



Sara Dill has a brother named Josh who is 13, and is 4 years older than her. She has a cat. Her name is Pepper and she is really cute and snugly. Some of Sara's hobbies are being with her friends, violin and swimming. She wants to be an artist. She likes writing this book. Her favorite part of writing this book she says was being able to know she could write well and have experiences. The hard part was writing the draft over and over. Sara likes sewing with her Grandma. She would like to tell you that she does not have an 'H' on the end of her name.

in the fall after pigs had fattened during the summer. As a treat, children were sometimes given crisply fried pig tails. Cows gave milk and beef.

A good Christmas dinner was roast turkey, maple-glazed ham, turnips, cheese, walnuts, cranberry sauce, potatoes, stewed celery with cream, coffee and baked apples. A good treat was maple sugar.



A Shaker seed catalog that people could buy from. First packaged seeds.

The process of making maple sugar was taught to the Pioneers by the Native Americans. The step that started the whole process was tapping maple trees. The pioneers had to be patient and let the sap drip into buckets or wood troughs. Then they had to boil the sap and boil it until it got thick. They poured it in containers with a pig's bladder stretched as a cover and let it harden. If they wanted to sweeten something or have a treat, they could take out a chunk of maple sugar.

The men hunted for food. They had guns for shooting animals. The animals they shot were mostly foxes, bears, deer, rabbits and birds. Bear meat was the most popular. Sometimes they would smoke meat in a hollow tree to preserve it then keep it in the attic and eat it slowly.

The pioneers had to work hard for their food. They had to grow it, harvest it, hunt for it, and prepare it all by themselves.

Pioneer Animals

Animals were very important to the pioneers. They were pets and also gave them food and clothing. Some wild animals were hunted for food and others preyed on the pioneer's animals. Animals also helped the pioneers travel.



The pioneers' lives were not easy because of wild animals. There were foxes, coyotes, bears and wolves. All of them killed farm animals. The pioneers hated wolves the most because they believed wolves killed people. The settlers made up stories about wolves killing people, but they weren't really true. The people set traps to kill these animals and keep their farm animals safe.

Pioneers had many domestic animals. These were cattle, pigs, chickens, geese, sheep, horses, oxen, cats, dogs and bees. Oxen and horses pulled plows and wagons. The dogs rounded up sheep and cattle. They also were pets and protected people from wild animals. Some animals provided food for the settlers. Chickens laid eggs and cows gave milk. Cattle, pigs and chickens provided meat. Bees made honey. Beeswax was used for candles.



My name is Hannah Snell-Larch. I have a twin sister and a Mom and a Dad. My sister's name is Molly. I am going to be getting a dog. My hobbies are Irish Dancing, swimming, playing with animals, and visiting my family in Florida. I am interested in learning about animals. When I grow up I want to be a veterinarian. My favorite part of this expedition was researching. The best part of writing this book was signing books in the author's chair. The hardest part about writing this book was writing it.

Settlers also used animals for clothing. Sheep's wool was used to make blankets and clothes. Cowhide gave leather for hats, shoes, saddles, and harnesses. The cats were pets and caught mice.



Animals were very important to the circle of life for the settlers. The animals did work for the people and provided them with food and clothing. The settlers would not have been able to travel west without their animals.



Pioneers traveling with animals. The animals are dogs, oxen, sheep and horses.

Pioneer Farming

The pioneer farmers didn't have steel until 1816. However, they were surrounded by trees so they used wood to make their tools.



The most important tool was the ax. One pioneer farmer could clear the land, build a house, make fencing and cut down trees with one ax. There were three different kinds of axes. The felling ax was used to chop down trees. The broad ax was used to square logs. The plain ax was a general, all-purpose ax.

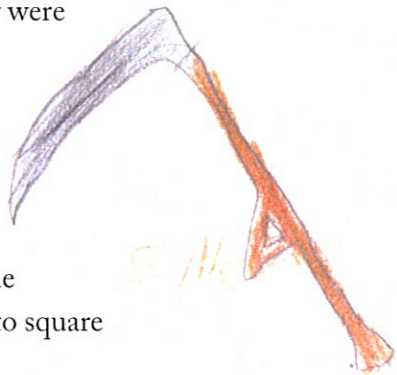


broan squarer

The pioneers used animals to help in farming. They used cows or horses to pull a harrow which is a heavy, wooden plow used to break up the soil. Horses also pulled the covered wagons.



Hand knife



scythe



My name is Nate Klein. I sit at the "High Falls" crew table. I play football and rollerblade [at Spinners]. I LOVE to frustrate my teachers!

The pioneers used their hands by digging the soil and planting the crops in the field. They planted:

- corn
- beans and squash
- carrots
- wheat
- cabbage
- lettuce



flatter

They ate the corn and fed it to the chickens and other animals. They made flour and bread out of the wheat. They ate the other vegetables.



The pioneers didn't have a general store to buy their tools and food at so they had to make their own tools and food.



mill pick



scorp



hit hiring post

Early Settlers' Games



My name is Glendale Terry. I am 9 years old. I like to play football and play with my little brother. I have dogs (2.) They are big. Their names are Vedo and Alexis.

What games do you think early settler children played? There are games we play today. Like marbles. We play marbles the same way.



We play with dolls. They made their dolls out of wood. They played with toy animals. The toy animal was made out of wood. We play checkers in a different way. They played with corn cobs.

They would go ice-skating on a pond. They would tie a pound of ice to their feet and go skating. They would play snowball fights. They played jump rope outside.

They would go fishing in a pond. They used a string on a stick. They would go swimming in a pond. Some people still swim in clean ponds and in the river.



A settler boy trying to be a cowboy rider.

There were pets like dogs, bunnies and birds. They would fly their kites. They had a game where you spin the top like we do today.



They played flatball. We do not play that game. The kids would all lie on the ground. A kid would bounce a ball off the wall to try and hit those of the ground. If they were hit, they were out. The last person on the ground won and would be the ball thrower next game. Like dodge ball where you got to hit the person who's on something and they got to be the dodger. Both boys and girls played that game.



Photos by Mrs. Morales



I saw these at the Genesee Country Museum. It's a checkers board with corncob pieces.

What is the Science of the Genesee River?



Spring Water

A spring is water that comes out of the ground. Springs can be either hot or cold. Hot springs expand causing holes in the ground where they bubble out of the ground. Many rivers start as springs.

When it rains over hills and mountains, some

This is a stream. It looks crystal clear. There is a little fall there. The photo was taken at the source of the Genesee River.



My name is Jennifer Son. I have a Mom and a Dad. I have a gold fish too. I used to have a dog named Bungle. My hobbies are making stuff, drawing and computers. I would like to be a doctor when I grow up. My favorite part of this expedition was going to Pennsylvania. I was born in Rochester, NY. My birthday was August 10, 1993.

of the water is absorbed by the ground. An aquifer is an underground layer of rock that holds this underground water. Eventually gravity and water pressure build up and force a spring to bubble out of the ground. The spring goes into the brook and the brook goes into the river. The river then empties into the ocean or a lake.

One spring that begins the Genesee River is found in Gold, PA. It looks like you could get drinking water right from it. The water from the spring looks crystal clear. You can see the ground right through it.

This is a photo of the source. It looks like a stream. You can stand with your feet over it.



Flora of the River

Plants help us live. Plants live all over the world. Plants even live in the river. In the river there is water and the sun's rays can go through the water to get to the plants. Duckweed is one plant that lives in the Genesee River.

The sun's rays help plants carry out

This is a photo of the plants at the source of the Genesee River.



My name is Vontrase Osborne. My family includes my mom, my brothers and my sisters. I have these pets: 1 dog, 2 hermit crabs, 2 fish, 2 turtles and a tortoise. My hobbies are games, skateboarding and pranks.

photosynthesis. Algae can be found covering the rocks along the river. Moss may be seen which makes a green, slippery carpet. Ecologists judge the health of a river by the number of plants (and animals) that live there. More than just duckweed is found in the Genesee River. Horsetail, water arum, yellow flag, cotton grass, reed mace and cone bearers also live in rivers.

“Flora and fauna” is a phrase people hear a lot. Flora is another way of saying plants. If you want to learn more about the fauna you can read the essay on page 52.

This is a close up picture of plants near the Genesee River. It was green near the water but there were fewer plants away from the banks.



Animals That Live by the Rivers

Many different animals live along the river and in the river. The river gives them food and water. Animals that live in the river have certain body shapes that makes them live better in the river. There are mammals, fish, birds and amphibians.



Beavers are mammals. Beavers are special. They are special because they have body parts such as webbed toes. Beavers have adapted parts to help them swim, like their flat tails. What do you think they use their flat tails for? Well, they use them to swim.

Beavers build dams along the narrow parts of streams and rivers. They cut down trees with their strong teeth to build their dams. Their dams help build a pond where beavers build their lodges. There are many ways for beavers to get in their lodges: they can swim underwater, or go above the water to enter.

Otters live by the river, too. They have webbed feet and waterproof coats. Otters live in empty burrows of other



My name is Alliyah Rutland. My family includes 3 sisters, 1 brother and a Mom. My hobbies include dancing, playing, and going places. I am interested in learning about animals. When I grow up I want to be a teacher or dentist. My favorite part of this expedition was when we were in Pennsylvania I saw a bear at night. The best part of this book was the printing and making pictures. The hardest part was looking in books. I am in third grade. It was hard making this book.

animals. They are great swimmers. They catch fish with their paws. They can swim and eat fish at the same time.

Muskrats live in burrows along banks of rivers. They have scaly tails that help them go through the river by steering like rudders.

Blue Herons live along the river and in ponds. They wade in the shallow water and wait for fish and frogs. Blue Herons are special because they have long beaks and they have long legs so they don't have to swim to catch fish.



Many animals live near rivers. Some animals that live in the river are special like beavers because a beaver can swim better than most animals and a Blue Heron has special body parts also. Name some other animals you think live in the river.



This is a picture of an otter.

Meandering

If you take a bunch of people and ask them what is the best known of river shapes they will mostly say meandering. Meanders need steep valleys to form. Meanders form on valleys that are steep. When a river meanders, it makes an “s” shape.



Meanders go on a flat slope. Meandering rivers do not cut into the land. Meandering takes sand, silt, and pebbles and takes them to another place.



This is meandering in a river from the ground. It looks very big!



My name is Kendall Brewer. In my family there is one brother, Zane, a mom and a dad. I have one cat. My cat's name is Little. My mom and dad named her that because she is little. My hobbies are swimming, animals and running. I am interested in dolphins, cats and dogs. When I grow up I want to be a veterinarian. My favorite parts of this expedition were when we went on the field studies and writing.

Meandering happens when the water goes fast.

The water on the outside is faster than the inside. The water goes slower on the inside. The dirt on the outside doesn't get left behind. But on the inside the dirt gets left behind.

Over time the meanders grow more and soon the little meanders will be a curve. The fast water will erode to the outside and make a larger meander. No plants grow on the inside of the meander because there is not soil there. Sometimes rivers flood when it rains a lot.

When the river floods then goes back down, it doesn't always go back in the same place. When a curve gets cut off it is called an oxbow lake.



This is a meandering river from the air. It has more meandering.

Erosion

Erosion is a process that swipes away rock and soil from the land. You can find erosion at river beds, river banks, lake shores and mountains.



Rivers cause erosion. As rivers flow the water brings up rock and soil and carries it to the end of the river or stream. When the river meanders it has force. Most erosion takes place on the outside of a meander. When the river is faster it washes away more soil and rock. When the river flows slower the particles of rock and soil settle to the bottom of the river.

Rivers can even wash away a huge rock. The water eats away tiny particles of the rock one bit at a time. It takes thousands of years or even millions of years to swipe away a huge rock.

Trees secure soil on the river bank. The roots hold the soil together like a ball. When pioneers came to



My name is Olivia Schneider. I have 2 sisters- Tara who is 7, and Chloe who is 4. I also have a Mom and a Dad. My 2 best cousins are Abby King, and Emily Donnell. My hobbies include soccer, tennis, sleepovers, playdates and gardening. I am interested in learning about Mary Jemison. When I grow up I want to be a teacher and an artist. My favorite part of this expedition was going on the Pennsylvania trip. The best part of writing this book was the final copy because I was excited when I got to the end. The hardest part was final copies because you had to type in all that information. I've played the piano since I was 6 and I've played soccer since I was 5.



This is a picture of the Mount Morris Dam. Notice that the river caused some erosion.

the Genesee River they chopped down all the trees. The roots died so the soil loosened up and crumbled into the river. This caused a lot more erosion.

People can stop erosion in many ways. People plant willow trees on the river banks. The willow trees have good roots to hold together the soil or dirt. People put heavy rocks against the river banks and that is called rip rap. People build gabions in the river. Gabions are like cement walls covered with chicken wire. Gabions stick out on the outside of a meander. The gabions slow down the water. Gabions also build up a new river bank by trapping all the sediment.

Natural Resources



View from the bus of the Genesee River at Letchworth State Park.

Western New York is the water itself. Some people think you can only use water for drinking, but it can be used for a lot of things. Early settlers in Rochester used the Genesee River to catch fish, for transportation, and to water their crops. They even used it to provide power for mills [see pg 60.] The water turns the great millstone to grind wheat into flour.

Trees are another important natural resource. People used trees for building houses, for fuel to cook

Without the many things that the Earth provides, people wouldn't be here today. The resources that come from nature are called "natural resources." Some are never used up, like water. Those are called "renewable resources." Others, like oil, cannot be replaced easily. Those are called "nonrenewable resources." We must guard our natural resources or else we will lose them.

One of the most important natural resource of



My name is Alexandria Mewborn. I have one sister, her name is Meshco. I don't have a pet. My hobby is playing the guitar. I would like to study more about the Genesee River. I would like to be in the WNBA playing basketball. My favorite part of this expedition was when we got to go to Pennsylvania. The best part was taking notes. The hard part was putting it in a draft.

food and for heat during the winter. The Pioneers tapped Maple trees to sweeten their food.

The water was cleaner when the settlers came to the area than it is today. Why was the water cleaner? Because there wasn't any pollution. Today there are factories that dump waste into rivers. People don't care about how clean the water is. It's our responsibility to take care of and guard our natural resources. The Genesee River has been here for 10,000 years even before people were on Earth. Its source begins at Gold, Pennsylvania. It's mouth is at Lake Ontario.



This is a picture that shows natural resources: like the water, trees, plants. The water is clearer at the beginning than down by Rochester at its mouth.

Mills

Mills were so important to the early settlers of Rochester. Without the mills Rochester could not have been called the "Flour City".



DIFFERENT MILLS

There were all different kinds of mills. There were grist mills, flour mills and saw mills. The mill stones used in the mills were made of granite.

WATER WHEELS

The water wheels gave the mills power. There were wheels made out of wood. The wheels were very large. Four thousand pounds



Photo taken at RMSC

A view of the tail race as it might have been in 1816.



My name is Sharde Garcia. I have two brothers and I'm the only girl. I have a dog, fish, and rabbits. My hobbies are football and basketball. I am interested in learning about math and computers. When I grow up I want to be a doctor or a teacher. The hardest part about writing this book was when I had to write. The best part was looking for information and doing my final copy.

of water could fill each bucket of the wheel.

EBENEZER "INDIAN" ALLEN

Ebenezer Allen was also called Indian Allen because he was good friends with the Seneca Indians. Allen built the first saw mill and grist mill in 1789. Mr. Phelps and Mr. Gorham asked Allen to build the mills along the Genesee River. Allen had hoped that the Indians would bring their wheat to the mills to be ground into flour.

TRIPHAMMER MILL

The triphammer mill was one of the earliest factories in Rochester. It was built in 1816 by William Cobb. The triphammer mill was used to make tools.



The Genesee River was so important to the mills. Water from the river gave the mills power. Without the water power of the Genesee River, there might have been no Rochester!

This model from the Rochester Museum and Science Center shows what Brown's Race may have looked like.



Photo taken at RMSC

Water Quality in the Genesee River

My third grade class went from Rochester, NY to the beginning of the Genesee River in Gold, PA and followed it all the way to the end back in Rochester. The beginning of the river is called the source and the end is called the mouth which is Lake Ontario. We took water quality samples from different parts of the Genesee River.

Oramel, NY had the darkest water of all the samples. We thought the water at the source was the



clearest but we found out it was not. The sample we took at the source had some duckweed in it. We also took a ride on a boat called the Sam Patch down part of the Genesee River. The sample we took there was darker than the sample we took at Portageville, NY.

Here is a picture of the source. At the beginning of the source is an old well.

Water may look crystal clear but may contain bacteria. Bacteria is a tiny cell. It can also be known as an organism. Most bacteria is harmless, but some may cause very serious diseases such as cholera, dysentery and E. Coli.

High bacteria count is the reason the beach is closed some days in the summer. Some of the bacteria comes into the river from the sewers overflowing. There are other naturally occurring bacteria that are found in the Genesee River. Coliform is a type of bacteria that is always found in the water. It comes from the waste of warm blooded animals. Algae can be another big problem in the Genesee River and Lake Ontario. Algae is a small plant without a root system that grows in wet places. Algae is an important food for fish and other animals.



This is a picture of the samples of water we took at the Genesee River and the string we took across the river to measure it.

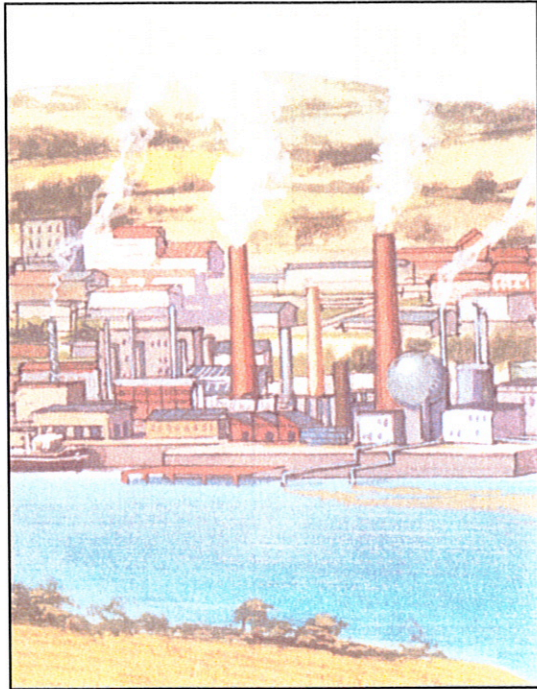


Klara Owens is eight years old. She has a big family with four brothers, three sisters. Her hobbies include cheerleading, playing with her friends, dancing, singing and playing basketball. Her favorite part of the expedition was going to Gold, PA. Science is Klara's favorite subject at GCCS.

Water Testing

Keeping water clean is important to our lives and the whole ecosystem. Pollution is anything that is not naturally there like: plastic bags, clothing, cans and bottles. People are careless and throw things in the river.

Some factories let their waste flow directly into the river.



Some factories let their waste flow directly into rivers near the factories. Much of the waste that is dumped into rivers contains poisonous chemicals. Water that has poisonous chemicals in it finds its way to drinking water. That is why water is tested before it leaves the treatment plant to make sure the water is clean.

Oysters that live in the oceans help pick up pollution in the water. The more oysters in the water the healthier the water. The fewer the oysters in the water the less healthy the water. Streams, lakes rivers and ponds are fresh water. But oceans are saltwater. There are no oysters in the Genesee River so when you want to know if the water there is healthy or not try to notice how many animals live in and around the river.

Pollution does many bad things. It can make animals very sick and can even cause the deaths of animals by destroying their habitat. Dirty water can make people sick too.

Scientists at many different government agencies and the health department help keep our water safe. That is why water is tested to see if it contains dangerous amounts of pollution. Water is tested for chemicals and bacteria.

If you help keep the water clean than you can also help keep the whole food chain healthy.



Our class studying the Genesee River in Wellsville, NY.



My name is Franny Wetmore-Rivera. My family includes my Mom, my two dads, my brother and me. I have two dogs, Athena and Layla. I want to be a teacher and a singer part time when I grow up. I am 8 and 3 quarters, I live in Rochester, NY and I love my family.

Mount Morris Dam

My name is Anija Rivera. My family includes two sisters and my mom and dad. I have a dog named Jaz. I have two twin fish named Angel and Snip. I like to draw, paint play soccer, tennis and basketball. When I grow up I want to be a pre-school teacher. I'm nine years old. My birthday is April 10th. I was born in 1993. I am one third African-American.



People who live close to any river and far from any river use dams. On the Genesee River there were a lot of floods. People decided they needed a dam. So the Mount Morris Dam was built.



Dams have different purposes. Some Dams called "Hydroelectric Dams" create electric energy. Hydroelectric Dams reduce air pollution by creating electricity without burning fuel. Some Dams control water and stop floods from occurring. The Mount Morris Dam does not have hydroelectric power. It protects Rochester, NY from floods.

Heavy flows of water in 1865 caused terrible destruction to the Genesee River Valley and Rochester, NY. The Genesee River Valley had major floods about every seven years. The Dam at Mt. Morris was built to stop the risk of flood disaster. The Congress approved the Construction of the Mt. Morris Dam in 1944.

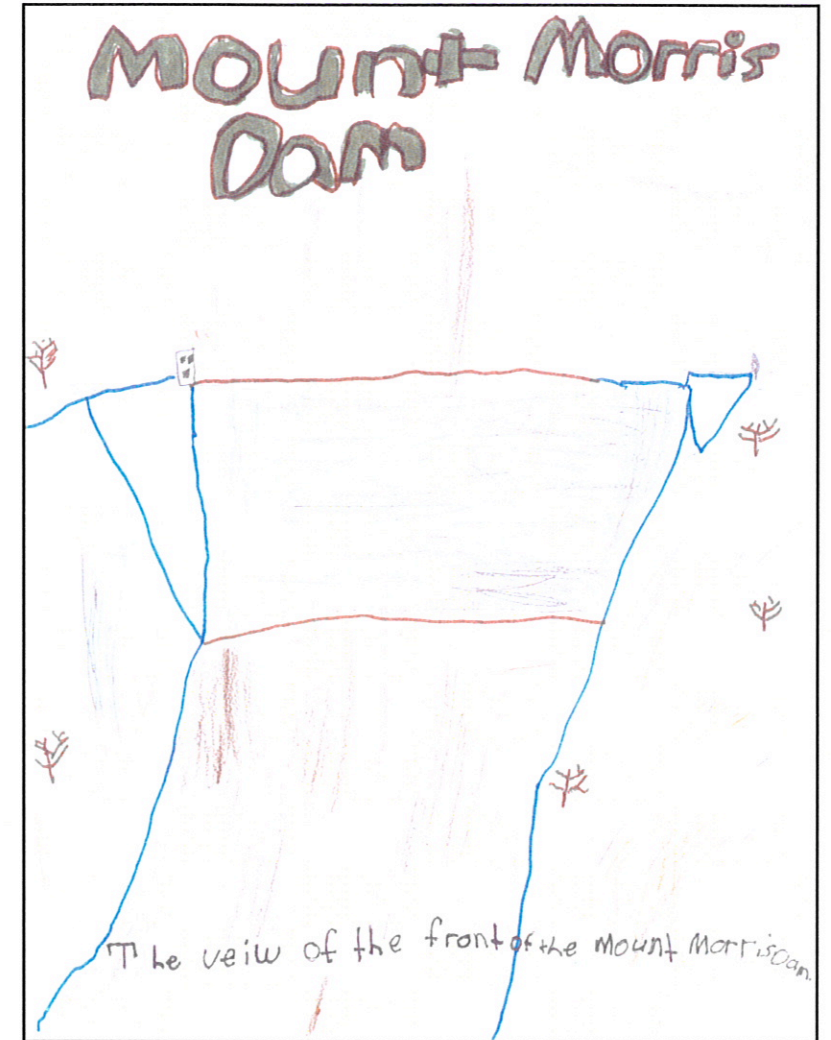
The Mt. Morris Dam was built 67 miles from the mouth of the river in Rochester on Lake Ontario. It's made of concrete and sits 245 feet above bedrock. The Dam is 1,028 feet long and it is 790 feet tall. The total length of the spillway is 550 feet. The crest elevation is 760

feet. If the water got higher than 760 feet it would spill over the spillway. A spillway is the front of a dam and if there was a big flood the water could spill over the top of the dam down the "spillway".



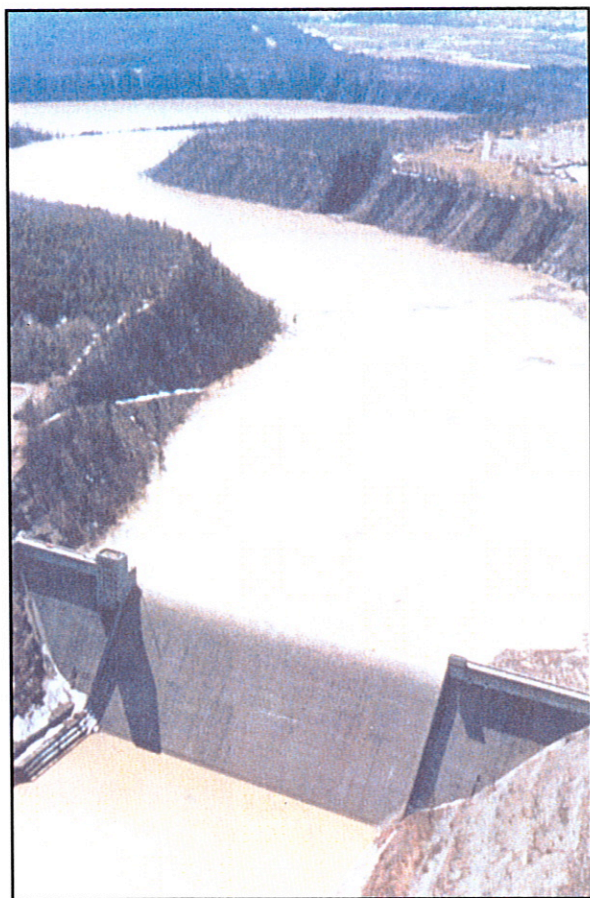
Since the Mt. Morris Dam was built, it has prevented over 1 billion dollars in damages. The Dam also helps control erosion along the river by slowing the amount of water that goes down the Genesee River Valley. The Mt. Morris Dam lowers the risk of flood disaster for many of people living in the Genesee Valley region.

This is the drawing I made of the Mount Morris Dam. In front of the dam is the spillway!



Genesee River Flooding of 1972

High flooding south of the Mount Morris Dam in 1972.



Did you know we had a flood that made history in 1972? Cities and towns on the Genesee River that are south of the Mt. Morris Dam experienced flooding in 1972. Cities north of the dam did not experience as much damage because of the dam.

Hurricane Agnes started in the Gulf of Mexico on June 16th, 1972 and slowly moved up toward Pennsylvania. It was still a hurricane when it reached the Genesee River in Pennsylvania. The hurricane was a storm and it was the first tropical storm of the hurricane season. It was going especially slow which made it so bad. It caused a great damage because it stayed in one place longer than a fast storm.

Hurricane Agnes caused the most destructive flooding to occur in the Eastern United States in June of 1972. Agnes was not a particularly strong hurricane in the northeast. Most of its devastation occurred well after it had been downgraded to a tropical storm. At this point, the remnant of Agnes joined another large low-pressure system and continued to produce heavy rainfall.

Soils, especially rocks, can store a large amount of water, and this constant seepage keeps rivers flowing between rainstorms. Plants also use soil. They often take a large amount of rainfall. As a result, about a third less of the rain that falls reaches the rivers.

Rochester was spared the worst of the flooding primarily due to the operation of the Mt. Morris Dam. The rain was held by the Mt. Morris Dam and it still flooded Rochester, just not as bad as north of Mt. Morris. The Mt. Morris Dam had to let such major amounts of water come through which would cause major downstream flooding. The water was within 5 feet of the top of the dam. The dam saved the city of Rochester from paying a lot of money from all the damage they would have paid more money to clean up after the flood than to build the dam.

During the week prior to Agnes a large amount of shower activity took place and resulted in widespread areas having over an inch of rain. Heavy rainfall from Agnes started on the night of June 20th and continued until June 25th. Over the Genesee Basin the maximum official rainfall recorded in Wellsville, NY was 13.7 inches. Unofficial reports of over 16 inches were also received.

On the upper Genesee, above the Mt. Morris Dam, flooding was devastating, breaking all historical records. Both of the official State gauges- at Scio and Wellsville- were destroyed by the flood. Hundreds of roads and bridges were washed out by the floodwaters. One significant factor in the damage was the large amount of debris that moved down stream, which caused significant damming along various parts of the stream channel.

In early May my class and I went to the source of the Genesee River. We traveled all the way up the river until we got the Mt. Morris Dam. I saw a piece of wire that collects debris before the debris can cause problems. I saw for myself how dams are important to our world. [See also pg. 66] Dams are important to our world: They are important because they control the water from flooding cities and towns.



My name is Katelyn Chatterton. My family includes 2 sisters, Kim and Kayla, 1 brother, Nick, my Grandma, my Mom and my Dad. I have these pets: 7 cats and 1 dog. The cats are- Meko, Minerva (nickname Minnie), Tigger, Tigre, Mumbletop, Tootsie, and Mitters. My dog's name is Shautsey. Shautsey means "dear one" in German. My hobbies are basketball, animals, singing, hockey and baseball. I am interested in dolphins. I want to be a veterinarian when I grow up. The best part of writing the book was we can really focus and really learn how to catch up on our work. The hardest part was note taking.

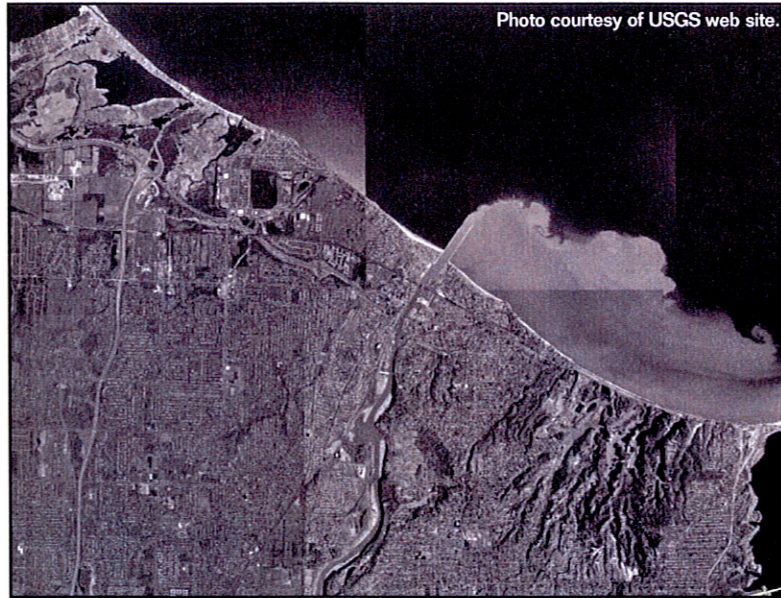
The Mouth of the River

The mouth of a river is where it dumps out into a body of water. Like a lake or ocean. That is where the river ends.

The Genesee River flows north and gets wider and deeper as it goes. It starts pretty clear but it does not stay clear. When it gets fast it pulls dirt off the riverbanks. That is called erosion. When the river ends it dumps out into Lake Ontario. When the river ends it slows down and when it gets to Lake Ontario it drops all the dirt.

Irondequoit Bay was the mouth of the Genesee 12,000 years ago. Glaciers blocked up that area so the river decided to go toward Charlotte beach. As the glaciers moved they dropped dirt and blocked up the path of the river. Charlotte beach is where it is today.

Some rivers have deltas. A delta is a land formation surrounded by water on 3 sides. Clay



A satellite view of the mouth of the river. It shows the silt. You can see Irondequoit Bay in the bottom right corner.



My name is Nahoma M. Presberg. My Mom's name is Marcy. My Dad's name is Martin. My brothers' names are Matan and Avi. My cats' names are Izzy and Connie. My interests are math, family history and playing with friends. When I grow up I want to be an author or an illustrator. I really liked learning about rivers and getting the experience of writing a book. It was a challenge to get it done on time.

or mud will not form a delta. Silt or sand will form a delta. It is light enough for the river to carry, but it is heavy enough to settle where the body of water is shallow enough. If the ocean has a strong current a delta will not form.

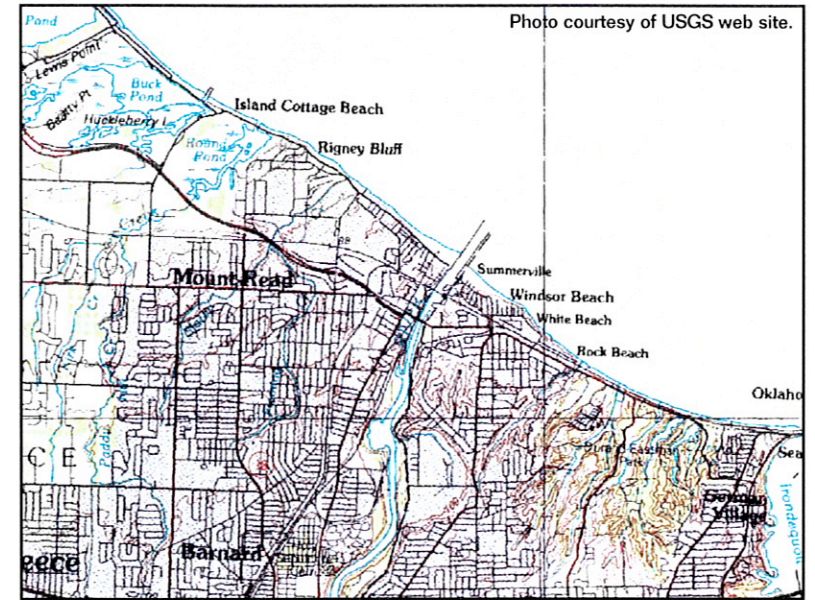
The Genesee River does not have a delta because the piers prevent it. When the Genesee River flows into Lake Ontario it is too deep and it cannot form a delta. If there were no piers when it dumped into Lake Ontario it would be shallow enough and it would form a delta. People don't like deltas because it makes it so boats can't go through.

The Genesee River flows into one of the Great Lakes. There are 5 Great Lakes. They include Lake Erie, Lake Huron, Lake Michigan, Lake Superior, and Lake Ontario. When you put all the water from the Great Lakes together, you have the largest body of fresh water in the world.

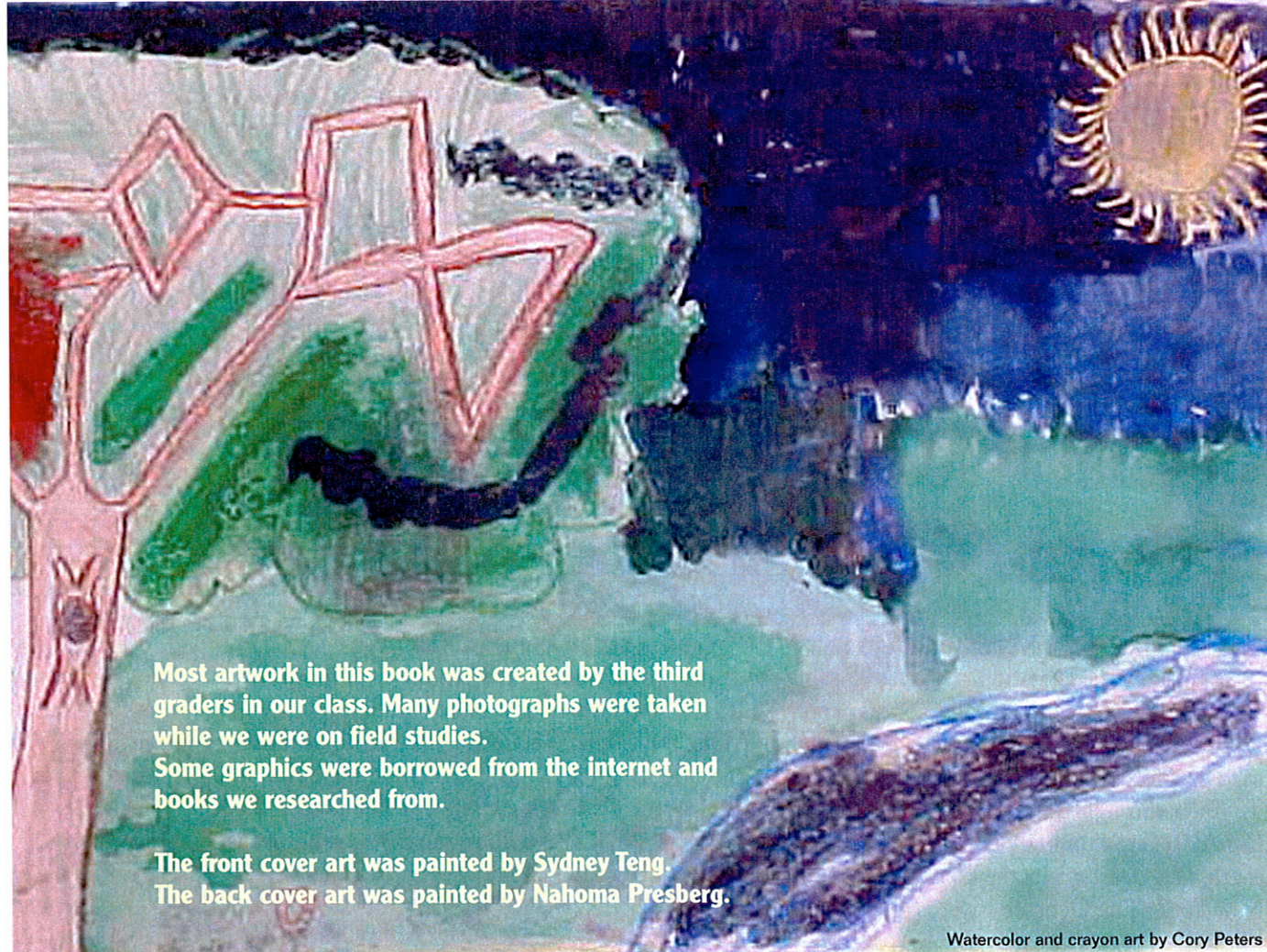
Lake Ontario is the smallest Great Lake. It is 193 miles long and 57 miles wide.

The Lake Ontario lighthouse is not used anymore because the silt from the river made the shorelines farther out. The lighthouse light does not go out far enough into the lake for the light to be useful.

The Genesee River is unique in many ways. One way is that it ends in a lake rather than the ocean or the sea. That then gets to the Atlantic Ocean by going through the St. Lawrence River. Lake Ontario empties into the Atlantic Ocean by going through the St. Lawrence River. The St. Lawrence River starts right on the border between Canada and the U.S.A. It flows through Canada and goes into the Atlantic Ocean. Another way that it is unique is that most rivers flow south. The reason why the Genesee River flows north is because it comes from Pennsylvania which is higher ground than New York. The Genesee River is also a very shallow river.



A map of the mouth of the river as it is today.



Most artwork in this book was created by the third graders in our class. Many photographs were taken while we were on field studies. Some graphics were borrowed from the internet and books we researched from.

The front cover art was painted by Sydney Teng. The back cover art was painted by Nahoma Presberg.

Watercolor and crayon art by Cory Peters

Authors' Notes

We are the 2001-2002 Third grade class of the Genesee Community Charter School at the Rochester Museum and Science Center. Our school is an Expeditionary Learning/Outward Bound School. We don't go on field trips we go on field studies. Everywhere we go has a purpose for our learning. Each time period we study has an expedition. This expedition was the Genesee River Valley for the years 1550 - 1825.

In the Spring of 2002 the Rochester, NY city historian came to our third grade class to talk about primary resources and early Rochester. During her visit we learned that there were not very many resources written about early Rochester and even fewer that were written at our level. So with Mrs. Naparsteck's help and guidance we began to write this book to fill that void.

We talked to many experts and went on many field studies to learn about the Genesee River, its valley and the early settlement of Rochester. We met with geologists, water experts, librarians and a photographer to name a few. We went to a living history museum, and finally spent three days traveling down the Genesee River starting at the source in Gold, Pennsylvania!

When we got back from our big trip, we decided on four questions to guide us in our research. (These questions eventually became our four chapters.) Each of us then chose a topic to specialize in and we researched and researched. And then we wrote, revised, reflected, wrote, edited and wrote some more. Being an author is hard work!

After the writing was done we chose artwork and graphics to go on our pages. Then we each got to draw the layout we wanted for our pages. Finally we wrote a short biography of ourselves.

We hope you enjoy our book. We hope you learn a lot from it!

Thank you to...

Ms. Ruth Rosenberg-Naparsteck, Rochester City Historian

Dr. Lisa Wing, Genesee Community Charter School Leader

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Mrs. Valle

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Our families and friends and everyone who helped us along the way!

E 138
Discovering the Genesee Volume 1
R. Berger Archive
Genesee CCS

