

Saratoga

Department of the Interior
U.S. National Park Service



Saratoga National Historical Park

The Battles of Saratoga: Student Research Packet

Elementary Level



Experience Your America

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A Note For Your Teacher

This Student Research Packet is based on educational programs and materials provided by Saratoga National Historical Park and on the years of requests we have received from students seeking information for reports or research papers.

As the New York State Education Department requires study of New York State and Revolutionary War history in Grades 4 and 5, this Packet is further designed to address NYS Social Studies Curriculum Requirements for these grades.

While this Packet is primarily intended to serve elementary school students, the information contained here will also be beneficial to middle school students who are studying the American Revolution. A targeted middle school Student Research Packet is being developed, and is scheduled to become available in 2011.

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Introduction

“So, what’s the big deal about the Battle of Saratoga? Why is it so important, anyway?” These are very good questions, and are worth asking.

If you’re studying the American Revolution in school, you’re probably asking questions like this. To get the answer, we need to first ask, “What was the American Revolution all about, anyway?”

The American Revolution is also called the War for American Independence. We, the United States, wanted to be a free and independent country, free from England and no longer British colonies. We declared our independence in July 1776 ...but now we had to prove it! We had to convince the rest of the world, and especially England, that we were a real country.

In the first years of the War (1775 and 1776), the Americans weren’t doing well in the struggle against the British. We needed help. We needed uniforms, money, muskets (guns), medicines, and other supplies. We also needed another country to recognize us as our own country —the United States of America.

The Battle of Saratoga, which actually took place on two separate dates (September 19 and October 7, 1777) ended in an American victory.

That American victory over the British was a major boost to American spirit. It also convinced another country, France, to formally recognize the United States as a real country. Several months after that, France declared war against England and fought on the side of the United States.

Once France joined the side of the U.S., two other countries did the same: Spain and the Netherlands. These alliances (partnerships) meant that not only did England have to fight in America, but it would also have to fight against three other countries in other places in the world. British troops would be involved in battles in Florida (controlled by the Spanish at that time), in the Caribbean Sea (on islands south of Florida), in the Mediterranean Sea (off the coast of Spain), in North Africa, in South Africa, and even in India.

Imagine throwing a small stone into a pond when the water is perfectly still and calm. What do you see on the surface of the water? You see ripples, and they move across the whole body of water. By “ripple effect” the Battles of Saratoga took what started as a colonial uprising and turned it into a world war.

That’s why the Battle of Saratoga is called the “Turning Point of America’s Revolutionary War” and why it has been called “the most important battle in the last 1000 years.” 🌿



Areas where conflict occurred during the American Revolution as a result of the American victory in the Battle of Saratoga. “Hot spots” are noted with red circles.

Vocabulary

Barrel (“**bahr**-rel”) —on a gun, the steel tube on top, through which bullets are fired.

Bayonet (“**bay**-oh-net”) —a long, pointy, metal spike that went on the end of a musket. It turned the musket into a spear, useful for very close-up fighting after the musket had been fired.

Bore (“**bohr**”) —the inside of a gun barrel.

Cartridge (“**car**-tridj”) —a small, rolled paper tube containing a musket ball and a measured amount of gunpowder. Soldiers used them to load their guns.

Company (“**com**-pa-nee”) —a smaller group of soldiers, made of 50-60 men. There would be about 10 companies per regiment.

Continental (“**kon**-tih-**nen**-tel”) —can refer to a regular soldier in the American army. Can also refer to a type of money created by the temporary American government, the Continental Congress.

Firearm (“**fire**-arm”) —another name for a musket, rifle, or pistol

Flintlock (“**flint**-lok”) —a firearm that uses a piece of flint striking against a piece of steel to create sparks that ignite gunpowder to fire a musket, rifle, or pistol.

Grenade (“**gre**-nayd”) —a small, baseball-sized weapon. It was a hollow, iron ball full of gunpowder and having a rope-like fuse. The fuse was lit, and when it burned down to the gunpowder, the grenade exploded.

Gunpowder (“**gun**-pow-dur”) —a dry, sand-like mixture of chemicals used to shoot guns and cannons. When ignited, its hot, expanding gases push a

Loyalists (“**loy**-al-ists”) —Americans who continue to support the British

Militia (“**mih**-lih-shuh”) —refers to a soldier, a company of soldiers, or a regiment of soldiers serving for a set period of time. Unlike regular soldiers, they might only serve for a few weeks or a few months each year.

Musket (“**muss**-kit”) —the most commonly used gun for soldiers in the Revolution. It was long, and held up to one’s shoulder to fire it. Muskets had a smooth bore, making them not very accurate.

Musket ball —the projectile (bullet) fired from a musket. Each was a small, round ball of lead (“led”), a soft and very heavy metal.

Pistol (“**pis**-tol”) —a small, hand-held gun that fired a smaller lead ball than a musket.

Regiment (“**red**-ji-ment”) —the basic unit of an army during the American Revolution. Each was made of about 500 men.

Rations (“**ray**-shuns” or “**rah**-shuns”) —the daily amount of food a soldier was supposed to be given.

Redoubt (“**ree**-dowt”) —temporary fortification built to one side or another of one’s main camp. It protects the camp on that side.

Rifle (“**ry**-ful”) —a type of gun, similar to a musket. The barrel of a rifle was different, as it was not smooth, but had many spiraled (twisting) grooves in the bore. These spiral grooves made the bullet spin when fired, like a football when thrown. This made the bullet fly farther and more accurately than a smooth bore musket.



Images of a model redoubt.



Note the use of both log walls and reinforcing dirt piled against the front of the wall.

The Big Picture

When 1777 came, the British had hoped to stop the “uprising” in their American colonies. They wanted to end to the fighting and to regain control.

The British believed that the uprising in America was centered in the New England colonies (Massachusetts, Rhode Island, New Hampshire, Connecticut). Therefore, cutting them off from the rest of the colonies should quiet things down everywhere else. British forces could then focus on the New England area, where the “troublemakers” were.

How to cut off New England from the rest of the colonies? Basically, the British planned to create a dividing line between Canada, which they controlled, and New York City, which they also controlled (having captured it from George Washington in 1776). The route would be the same one used for transportation, communication, and invasion since long before European settlement: along the Lake Champlain and Hudson River Valleys.

To do this, they created a complex plan that would involve invading New York from three directions.

Part 1: From the North
A large British army under the command

of General John Burgoyne would leave Canada and invade south into New York. They would follow Lake Champlain south as far as possible, then march south to the Hudson River. At the Hudson, they would march along the river road to Albany. Once in Albany, they would open communications with British forces in New York City.

Part 2: From the West
A smaller British army under Colonel Barry St. Leger (pronounced “saint led-ger”) would start from Oswego, on Lake Ontario, and invade east into New York. They were to make their way to the Mohawk River, which starts in the middle of New York, and follow the river valley to where the Mohawk River flows into the Hudson River (just north of Albany). In that area, they would meet up with General Burgoyne’s forces for an even larger British presence in Albany.

Part 3: New York City
British forces, under the command of General William Howe (pronounced “how”), would move north into the lower Hudson River Valley. By

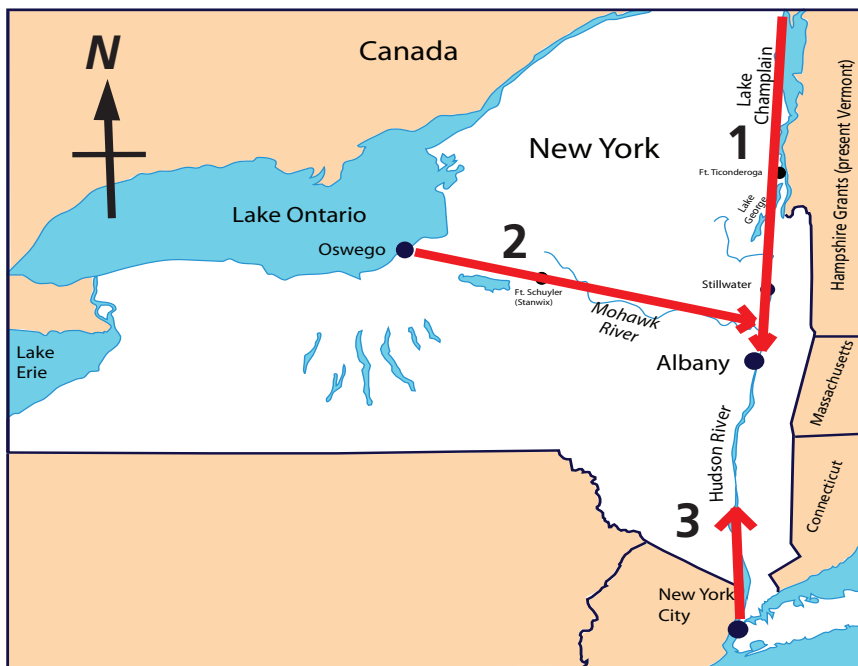
attacking forts in the valley, the British hoped American troops in the Albany area would move south to face Howe’s army –leaving fewer soldiers to defend Albany.

General Howe’s part in the plan would be small, and Burgoyne understood that Howe would

The Northern Campaign - 1777



Map 1: The red dotted line represents the British idea of isolating the New England Colonies. (larger view, pg. 20)



Map 2: British plan to invade New York in 1777 (larger view, pg. 21)

not be providing him much help.

On paper, it looked like a very good plan. In practice, it would prove much harder to do.

Why? American General George Washington and his army were only a few days march from New York City. The British had forced Washington's men out of the city in 1776. Howe was concerned that, if his men moved into the southern part of New York, Washington would move into New York City behind him and recapture it.

Howe's solution was to attack Philadelphia and draw Washington's army into the open so they could defeat the Americans in open battle. Howe would leave his second-in-command, General Henry Clinton, in New York City with several thousand men. Clinton would carry out Howe's part of the New York plan. 🌿

Saratoga: Key to the Puzzle

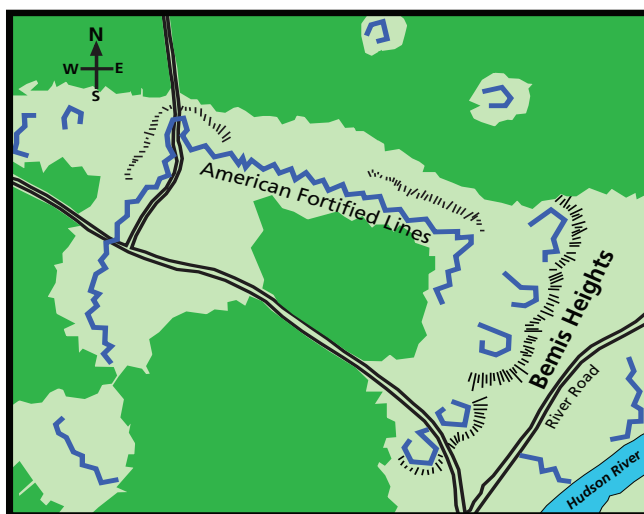
Part One of the plan, with the British army under General John Burgoyne, started out well for the British but ended in a clear and crucial American triumph.

Early British successes at Fort Ticonderoga and Mount Independence (see map on pg. 20) gave way to mixed results. Burgoyne's army delayed its southward push for nearly a month, spending August, 1777 in the small village of Fort Edward. From there, Burgoyne sent out a force of about 800 German soldiers under his command. Bound for Bennington, Vermont to capture supplies, they were met and defeated by American forces; they never even made it past the New York border.

Also while in Fort Edward, Burgoyne learned that

Colonel St. Leger (Part Two in the invasion plan) would be unable to continue toward Albany. No assistance would come from western New York.

In September, the British continued to invade south. As they did, American forces under General Horatio Gates moved north from the Albany, New York area. Arriving about 25 miles north of Albany on September 12, 1777, the Americans quickly began building strong and imposing defenses on Bemis Heights, a very important ridge overlooking a narrow point in the Hudson River Valley.



Map showing American fortifications. Note how Bemis Heights overlooks the Hudson River, and how the Americans used this area as an "anchor" from which to build the rest of their defenses. Blue zig-zag lines show the strong defensive walls. Areas where you see lots of short, dark lines close together are elevated (hills). (larger view, page 22)

Cannons on Bemis Heights and fortified walls on the valley floor below completely controlled the river and the valley. Additional fortified walls running 3/4 mile inland (west) from Bemis Heights and then turning south about 3/4 mile gave even better protection for American forces. By controlling this narrow point in the river valley, the Americans would force the British to pay dearly in time and lives lost if they tried forcing their way through American defenses.

Knowing only a little of the American defenses, General

Burgoyne tried avoiding them. He split up his army into three groups in hopes of circling around behind the American positions. On September 19, 1777, about 1 1/2 miles north of American defenses, British forces met and began to fight with American soldiers in the fields of a farmer named John Freeman. Fighting that day was very fierce, with many soldiers on both sides injured or killed. By evening, the British had forced the Americans off the field; they won the day's battle.

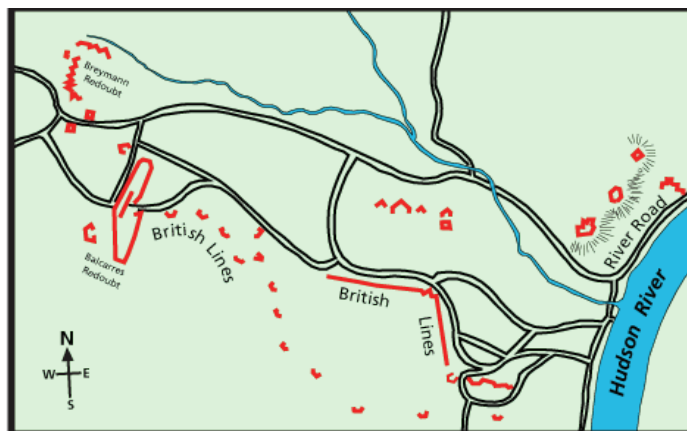
Over the next two weeks, the British built their own fortified lines, about 1 1/2 miles north of American defenses. They had not chosen the area, so they did the best they could to build

strong defenses. Trying to defend a large area, without building one giant wall, they built several sections of walls they hoped could help each other if the Americans tried to attack.

Two weeks later, on October 7, Burgoyne sent out a large group of soldiers to find supplies and to learn more about American positions.

When American forces spotted them, Gates ordered an attack. By late afternoon, the Americans had pushed back the British and captured a key British position, the Breymann Redoubt. This forced the British to begin leaving the field and retreating North. The Americans had won.

Slowly retreating north through cold rain and thick mud, and with little food or supplies, the British progressed only about eight miles to the village of Saratoga (present-day Schuylerville,



Map showing British defenses. Red zig-zag lines show their fortified walls. Note how the British lines are more spread out than the American positions. The Breymann Redoubt is to the far left. And again, areas where you see lots of short, dark lines close together are elevated (hills). A larger view of this map is given on page 23.

New York). There, American soldiers in the area prevent the British from moving any farther. Within two days, General Gates' army had surrounded the British. About five days later, on October 17, 1777, General Burgoyne surrendered to General Gates.

This crucial American victory made the Americans more

confident. It also convinced the country of France, a long-time enemy of England, to join the war on the side of the United States. Not long after, Spain and the Netherlands did the same.

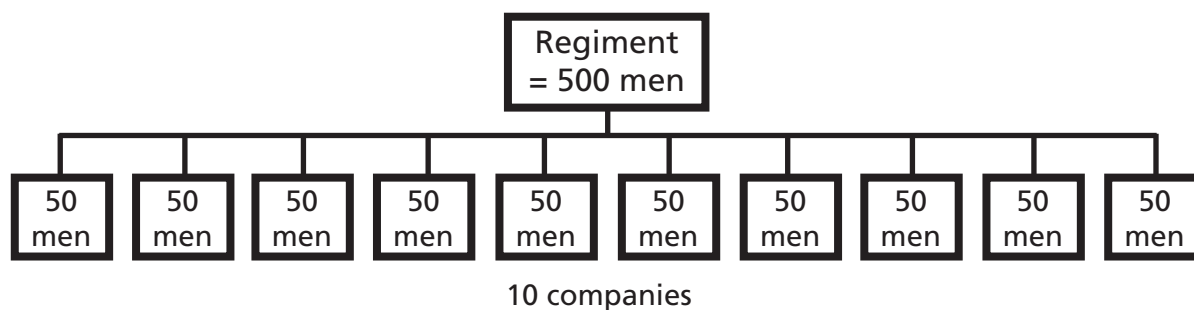
While the war was far from over (it officially ended in 1783), America's victory at the Battle of Saratoga had world-changing effects: this victory gained international recognition of the United States and won foreign support that helped guarantee American independence. 🌿

Make-up of an Army

The basic "building block" of an army at the time of the American Revolution was called a regiment ("red-ji-ment"). Each had about 500 men. To better organize them, they were broken down into

basic units called companies. In the American army, each company had about 50 men. In the British army, each had about 60 men.

Here's what it would look like in picture form:



On average, eight of the ten companies in a regiment were just regular soldiers. They were often known as "battalion men" (pronounced "bah-tal-yun"). Lined up in very close lines and

rows, the soldiers would fire their muskets all together or in groups. This sent a large number of musket balls flying through the air, which would be very dangerous for their enemy.

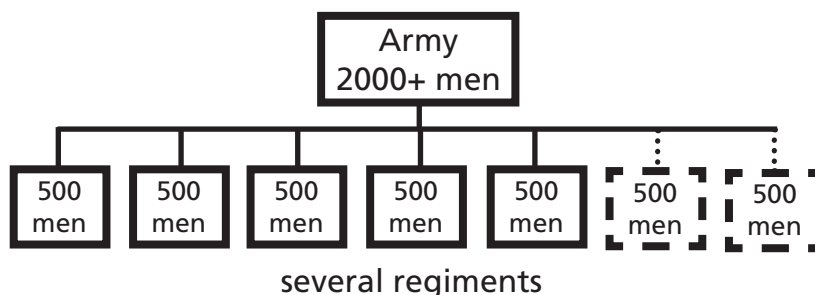
More specialized soldiers made up the remaining two companies.

One company was made of grenadiers (“**gren-a-deers**”). More experienced soldiers, they often were larger men –six feet tall, or taller. They got their name from the weapon they used to specialize in, a grenade.

The last company in a regiment was made of

light infantry (“**in-fan-tree**”). Also specialized soldiers, light infantrymen didn’t line up like regular soldiers, but spread out over a wider area. Since they were used to being more spread out, they could be used for scouting parties to get information on an enemy’s location, or to try getting around behind an enemy.

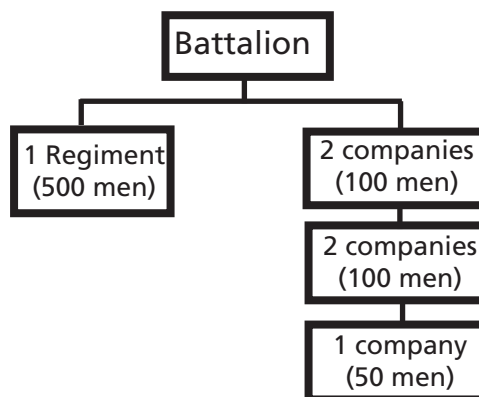
An army could contain several full regiments. So, in picture form:



Armies could also have parts of regiments (several companies) put together with a full regiment. Or, they could simply put together some companies from a few regiments. This grouping was called a battalion.

As a picture, it could look like this (RIGHT):

Being able to form and re-form units made it possible for commanding officers to adapt to changing situations. That ability could mean the difference between an army being able to do its job and having to withdraw from a battle. 🌿



Make Ready, Take Aim, Fire!

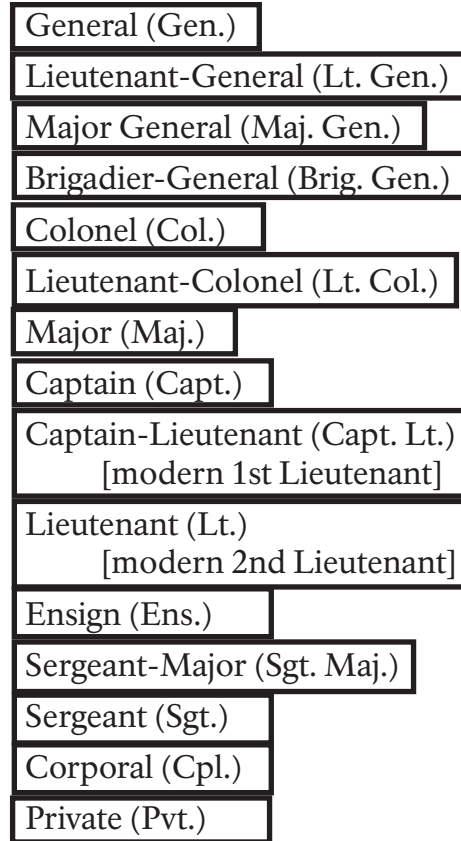
A line of soldiers firing in a group. The amount of smoke in the air shows the amount of shooting taking place.

Imagine how much smoke would be made by 1000 or more soldiers!

Officers — Who’s in Charge?

By “officers” in an army, we don’t mean police officers. We’re actually talking about the men who were giving the orders and commanding the soldiers. There were a number of ranks, or levels, of officers, and each generally had command over a certain group of soldiers of lower rank.

Here is a chart showing the different ranks in an army during the time of the American Revolution. The common abbreviations for each rank are included in parentheses. Ranks run from private soldier, the lowest, to general, the highest. 🌿



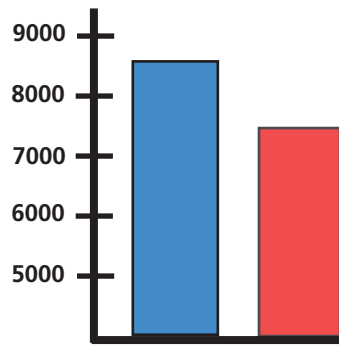
The Armies at Saratoga

September 19, 1777

“The Battle of Freeman’s Farm”

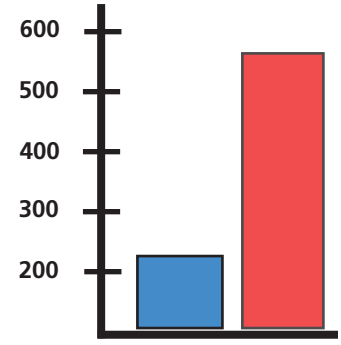
	American Army	British
Army total number of troops:	8,300	7,500
soldiers killed or injured:	225	567

Numbers of soldiers



Strength of armies
September 19, 1777

Numbers of soldiers



Casualties of armies
September 19, 1777



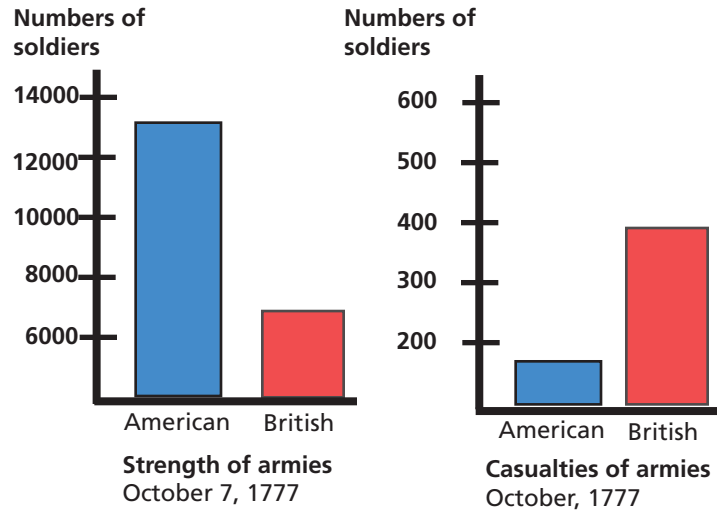
Is this real?

Unfortunately, none of the wooden fortified walls from the Battle of Saratoga still exist. Even so, this computer-generated illustration gives you an idea of what the very strong American defenses at Bemis Heights might have looked like.

October 7, 1777

“The Battle of Bemis Heights”

	American Army	British
Army total number of troops:	13,000	6,800
soldiers killed or injured:	175	395



Some Brief Notes on the Armies

The American Army

Many Americans at the beginning of their War for Independence were actually afraid of, or even hated, the idea of a standing (pre-existing) army. Most people, including men in government, preferred militia soldiers. It soon became obvious, though, that the militias provided by the 13 states would not be enough.

Militia troops would still be vital to the American cause, but they still posed problems for commanding officers. One of the biggest was their tendency to leave when they felt their time of service was over —doing so at their own convenience. Further, as the 13 states often did not cooperate well with each other, even during such a crisis as a war, one state or another might not supply all the militia soldiers it should.

Congress authorized the creation of the Continental Army (a national army) in 1775 as an attempt to solve these problems. Even though it was a national army, it faced many problems. Efforts to recruit new soldiers never raised the numbers of soldiers the Congress wanted.

Supplies and pay for the troops were usually delayed or non-existent, as the Continental Congress was not allowed to create taxes. The states reserved that right to themselves, and would donate only what they felt was appropriate. Further, there would be political and personal

conflicts, inexperience and dishonesty in the Congress and the army.

Even with these problems, the Continental Army served through the eight years of the War for Independence. Perhaps they were not the most powerful fighting force ever seen, but their endurance in the face of unbelievable hardships and difficulties made the dream of independence a reality.



Different regiments, even if from the same state, could have very different uniforms. ABOVE, left to right: 2nd New Hampshire Regiment, 2nd New Hampshire Regiment Drummer, 3rd New Hampshire Regiment

The British Army

British soldiers faced certain negative prejudices or stereotypes. Sometimes, there were soldiers who were not good examples of citizens. For some men, the army offered a better choice than going to jail for being unable to pay off debts (money they owed others) or as punishment for other crimes.

Most of the men who enlisted in armies in the 1700's did so to escape being poor, hungry, or without proper clothing. Still others wanted



Examples of two British Regimental jackets: 21st Regiment (LEFT), 24th Regiment (RIGHT). Note the different trim colors, blue for the 21st, green for the 24th.

excitement and adventure.

The officers, by contrast, were of the “better sorts”. They were the “gentlemen” of society, and were considered to be better than the common person on the street.

Very few regular soldiers ever advanced to becoming officers, and those who did never rose very far in rank. Still, the culture of the day expected them to show deference (a certain kind of respect) to those socially beneath them.

The British army in the Battles of Saratoga was made up not only of regular soldiers, but also of loyalists, Native Americans, and German soldiers. Different reasons brought each group to that fateful event.

Loyalists

Americans who remained loyal to the King of England were known as loyalists. Many felt they had too much to lose to try supporting American independence. While they stayed loyal to England, their service in the British army wasn't always dependable or effective.

German Troops

Germans were involved not so much by choice as by chance. Germany wasn't one country in the 1700s. It was more like a geographic region, made up of over 300 different independent provinces (kind of like counties or small states). Each had its own prince or duke ruling it, and each had its own army. Those princes or dukes might rent out parts of their armies to another ruler, and the soldiers would fight wherever they were needed.

Often, we may hear those German soldiers referred to as “mercenaries”, that is, as soldiers for hire. The German troops weren't actually mercenaries, though, as they in fact continued to work for their own prince or duke back home; he

was still paying them their usual salary.

During the American War for Independence, most of the German soldiers used by the British were from one main German province, called Hesse-Cassel (“**hess-uh kahs-el**). We Americans thus called them “Hessians”. None of the Germans at the Battles of Saratoga were from Hesse-Cassel. A few dozen were from another province, Hesse-Hanau (“**hess-uh han-ow**”), and they could be called Hessians. The majority of the Germans under General Burgoyne, however, were from the province of Brunswick (“**brunz-wik**”); they were “Brunswickers” who would have not liked being called Hessians. Usually, the Americans called them that anyway.

Native Americans

At the time of the War for Independence, Native forces were on both sides of the conflict. American and British forces wanted to gain the allegiance of different groups, or at least their neutrality.

Both sides knew the abilities of the Native Peoples to survive in the wilderness. They wanted the Natives' skills in scouting for their armies. Most of all, they knew that generations of settlers along the frontiers knew and feared war parties of “savages,” as they were then called. Both the Americans and the British wanted them to be employed as a terror weapon.

It is unpopular today to regard the Native Peoples as anything more than helpless victims of white aggression and superior technology. Yet viewing them as merely passive overlooks an important part of Revolutionary War history.

When the Native Peoples did enter into the war, they did so for a variety of reasons: feelings of friendship or a history of loyalty to one side or another, opportunities to prove themselves in battle, seeking to improve conditions for their own people, or even opportunities to obtain needed or desired items (like muskets, steel axes, clothes, blankets, and other durable goods). Whatever the reasons for their participation, when present they were helpful. When they left, it sometimes left their allies wondering why.

Camp Followers

Wives and even whole families of soldiers often followed the army in which their husbands/fathers served. There might also be single women who had no commitments at home and who wanted to find other opportunities (travel, work, perhaps finding a spouse) for themselves.

Camp followers could be found in both the British and American armies. Their roles were considered important enough that in the British army, it was required that there be 3 camp followers for every company of soldiers.

These individuals performed many duties around camp, including laundry, sewing, and cleaning shoes, belts, or belt buckles. They also helped take care of the sick and injured, and even foraged (searched) for supplies. They sometimes scavenged on the battlefield after a battle, taking needed or desired items from the dead or

dying. This activity sometimes gave them poor reputations, and could even put them at risk of injury or death if a battle wasn't fully over.

There are accounts from the Battles of Saratoga of camp followers found dead on the battlefield. One was accidentally killed as she tried bringing musket cartridges onto the field. Another was



Photo: Saratoga National Historical Park

“dashed to pieces” by a cannon ball while she scavenged on the battlefield before the fighting had fully ended. 🌿

The lives of camp followers with the army were anything but easy. Extreme weather, hunger, lots of walking, intense physical work, insects, and no shelter but a tent were just part of the everyday experience of these women and children.

Soldiers' Food

Regular soldiers were supposed to receive regular rations each day. Those rations were not guaranteed, though. If an army was on the move and unable to get more supplies, or if it was cut off from its supply, the soldiers might be reduced to little or no food for days or even weeks.

A soldier's daily rations usually consisted of the following:

- 1 pound beef
- 1 pound bread
- 1 pint peas
- a little salt
- a little butter
- an ounce of vinegar
- 1 gill (pronounced “jill”) of rum –a kind of alcohol, which could help kill germs or illness-causing microbes in water

In case of shortages, the armies tried to make due. Salt pork —imagine a pork chop soaked in very salty water for several weeks or even months— or dried, salted fish might replace the beef. “Ship's

bread”, which was like a very flat and very hard biscuit, often replaced bread. The soldiers might instead be given a pound of flour, which they mixed with water and salt and baked on a hot rock —“fire cake” as it was called. Peas could be substituted with corn meal or oatmeal. Salt, butter, or vinegar might not be available at all.

Vegetables like potatoes, turnips, pumpkins, beans, squash, or corn might be available for purchase from a farm or town near where an army was encamped.

Armies sometimes bought such supplies. They might also take them with a promise of later payment, or just take them in the name or king or country. 🌿



Weapons of an Army

Muskets

Soldiers relied heavily on their muskets, and the vast majority of soldiers carried them. A trained soldier could load and fire his musket 3-4 times every minute, which allowed a group of soldiers to put a lot of bullets in the air very quickly.



A copy of a musket. Each one weighed a little over 9 pounds.

Muskets were smooth bore firearms, meaning the inside of the musket barrel was as smooth as the outside. As such, it wasn't very accurate. A trained soldier could usually hit a man-sized target up to about 50 yards, or about half of a football field. But that smooth bore meant that soldiers could load their muskets quickly. Since the muskets weren't very accurate, a soldier didn't so much aim his musket as just pointing it at an intended target and shoot.

Muskets could also be used with bayonets—long, pointed metal spikes that could be “fixed” (placed) on a musket, turning the musket into an effective stabbing spear. This was especially useful if an enemy got too close after the soldier had fired his musket and couldn't reload in time. The musket had an “L” shape to it near its base, allowing the musket to be reloaded and fired even if the bayonet was attached.



The musket with its bayonet attached.

Rifles

Rifles were somewhat different from muskets.

They looked very similar on the outside, but the key difference was inside. Rifles had spiral



Comparing the bore of a musket (LEFT) and a rifle (RIGHT).

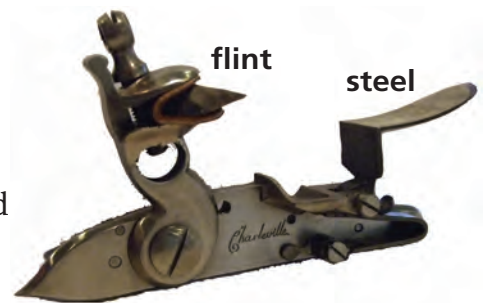
grooves, or “rifling,” in their bores. This would make their bullet spin, which made the bullet go farther and much more accurately than a regular musket bullet. Soldiers using rifles had to wrap a piece of greased cloth around the bullet before loading it into the rifle, creating a very tight fit and giving the rifling a better grip on the bullet. A tight fit was necessary to get the proper spin on the bullet.

Unlike muskets, rifles took much longer to load and fire—about two minutes per shot. Getting the bullet in the barrel took much longer, and rifles had to be well aimed and carefully fired. A trained rifle soldier could, however, hit a man-sized target up to 200 yards (two football fields) or even farther. Aiming the rifle required a set of “sights,” small metal pieces on top of the barrel that were lined up by eye before the soldier fired.

While a rifle was very effective at longer distances, it wasn't very useful when an enemy was close. It took too long to load and fire, and if an enemy got too close, the rifle couldn't be used with a bayonet, as it would interfere with the front sight.

Similarities: Muskets and Rifles

Both types of firearms were called “flintlocks” because of the way they ignited the gunpowder to fire a bullet. The “lock,” on the side of the musket, used a piece of flint, a very hard mineral, to strike a piece of steel and create sparks that would ignite gunpowder and fire the weapon. Both were also called “muzzle loaders” because the bullet had to be loaded into the muzzle, or the open end, of the barrel.



Close-up of the lock of a Revolutionary War firearm. The flint was held in a metal jaw, and the steel piece was hinged. Pulling the trigger made the flint jump forward and hit the steel, igniting the gunpowder and firing the musket.

Soldiers would use pre-made cartridges (“kart-rid-jez”) to load their firearms. Each cartridge was a small paper tube containing a musket ball

and a measured amount of gunpowder. The cartridge was folded and twisted at each end, one end longer than the other, to contain the gunpowder and musket ball.

Soldiers used one hand and their teeth to tear off the longer end of the cartridge and expose the gunpowder. They would pour a small amount of gunpowder in the shallow metal pan beneath the movable piece of steel and close the pan. Next, they poured the rest of the gunpowder down the barrel and put the musket ball, with the paper wrapped around it, into the barrel. Using a thin metal rod called a rammer, they would push the musket ball down the barrel so it was touching the gunpowder, and then would remove the rammer.



Above: a paper cartridge. Below, a cutaway view of the inside of a cartridge.

When the moving metal jaw holding the flint was pulled back, it would lock in place until the trigger was pulled. When the soldier pulled the trigger, the jaw, now under pressure from a spring inside the lock, would jump forward very fast, causing the flint to strike the steel. This created a shower of sparks that ignited the gunpowder in the pan. That in turn ignited the gunpowder inside the barrel as the burst of flame traveled through a tiny hole in the side of the barrel. When the main gunpowder charge caught fire, it created a small explosion that pushed the musket ball out the barrel. The whole process from pulling the trigger to the musket actually firing took perhaps a tenth of a second, and —BANG!



Here, a soldier fires a musket. Note the smaller burst of flame in the pan and the larger one out the barrel.

Artillery

Most people just call these “cannons” but there were a few different kinds of artillery, each having very specific purposes.

Cannons were very heavy, thick, long tubes of iron or bronze. They were referred to based on the weight of the cannon ball they fired. A cannon designed to fire a 3-pound cannonball was a “three pounder,” a 6-pound cannonball a “six pounder,” and so forth. The smallest cannons fired 1 to 2 pound cannon balls, the largest could fire up to 24 or 36 pounds.

Cannonballs were solid iron, not hollow, and they did not explode. What they did was to punch big holes in heavily fortified wooden walls. Smashing through a fortified wall, they sent chunks of wood blasting out the other side and seriously injuring or killing soldiers.

When fired, a cannonball would be traveling at speeds of about 480 miles per hour. That’s like a modern passenger jet flying at top speed. The distance a cannonball could go depended on the size of the cannon and how much gunpowder was used. Cannons used about 1/3 the weight of the cannonball in gunpowder. A six-pounder could fire a ball about half a mile or so. A 12-pounder could fire a ball over a mile.

A cannonball could be used against soldiers as well. Using only a few ounces of gunpowder the cannon would send a ball skipping along the ground at about head or chest height. As the ball went along, it would kill or injure many soldiers, bouncing a little to one side or another so its path of travel was no longer perfectly straight.

Cannons could also fire grapeshot, a group of mini-cannonballs sewn in a cloth bag, or canister



A British 12-pounder from the Battle of Saratoga. The gun weighs over 2400 pounds.

shot, a large tin can full of musket balls. Both were intended for use against lines of soldiers, and both could hit a large number of soldiers at the same time.

Mortars were very different pieces of artillery. They were much shorter and generally lighter, at least in comparison to cannons. Mortars were designed to fire a hollow, exploding shell over the heads of soldiers, into the middle of groups of soldiers, and over fortified walls. Mortar shells did not explode on impact, but had fuses that burned down and ignited the gunpowder inside

BELOW: a small mortar.
RIGHT: a small to medium-sized howitzer.



the shell, causing it to explode.

Howitzers were sort of a blend of cannon and mortar. At shorter distances than cannons, they could be used to fire cannonballs, grapeshot, or canister shot. For longer ranges, they could be angled upward to fire hollow, exploding shells at or behind an enemy. 🌿



Photo: Saratoga National Historical Park

A cannon blast, even when only gunpowder is used, creates a tremendous amount of noise and smoke—a very impressive demonstration!

Chronology of the Battles of Saratoga

A chronology is a list of events listed in the order in which they happened. This one outlines the events that led up to the Battles of Saratoga, the Battles themselves, and the British retreat and eventual surrender to the Americans.

You can learn even more about this chronology by using the “Northern Campaign” map on page 17 to find where each of these events took place.

June 17 1777 Burgoyne and his force leave St. John, Canada. His total force is nearly 9,000 men and 2,000 women.

July 1-5 Fort Ticonderoga is attacked for four days by the British Forces

July 5-6 Ticonderoga is abandoned by the Americans during the night. The men escape across a bridge to the Vermont side of the lake; some head toward Vermont, others go south. Burgoyne’s men split up to follow both groups, while some stay at

Ticonderoga.

July 6 *Battle of Hubbardton*: in modern Vermont. The Americans are forced back, but they have put up a good fight.

Late July Burgoyne’s men follow a route southward from Skeenesboro. Retreating Americans make the difficult wilderness roads even worse. Burgoyne takes 20 days to cover 22 miles. His army reaches Fort Edward on 29 July. Burgoyne must pause to take care of supply problems.

July 26 Lt. Colonel Barry St. Leger departs with his small army from Oswego, on Lake Ontario.

Aug. 2 St Leger’s forces arrive at Fort Schuyler (Stanwix). Americans defending the fort alert Albany that they are under attack.

Aug. 6 *Battle of Oriskany*: Loyalists and Native Americans from St. Leger’s Army ambush American militia soldiers at Oriskany.

Aug. 16 *Battle of Bennington*: 800 German soldiers from Burgoyne’s army is overrun near Hoosic, New York while trying to gather supplies.

Aug. 17 The majority of Indians in Burgoyne’s army leave, returning to Canada.

- Aug. 7-22** St Leger's troops attack Fort Schuyler. The siege is lifted when they hear that a large force of American troops is headed to the fort. (This report is a false story created by Benedict Arnold, who has only a small force with him.) St. Leger's army retreats to Oswego. [Burgoyne learns of this on 28 August.]
- Aug. 19** Horatio Gates, having been named Commander of the Northern Department arrives in Albany to replace Philip Schuyler.
- Sept. 8** Gates' army advances north from the Albany area.
- Sept. 12** Gates' Army begins fortifying Bemis Heights to block the advance of Burgoyne's Army.
- Sept. 13** Having gathered some needed supplies, Burgoyne's Army begins crossing the Hudson on a bridge of boats at Saratoga (modern Schuylerville, about 12 miles north of Bemis Heights).
- Sept. 19** *First Battle of Saratoga:*
- Burgoyne divided his army into three columns (groups) and advanced toward the American fortified lines.
 - Realizing that his western defenses were not completed, General Gates sends General Arnold's division to advance toward the British and to try pushing them back, away from Bemis Heights.
 - Fighting began around noon at the farm of John Freeman. The British managed to hold the battlefield.
 - Since the British held the field, Burgoyne regarded it as a victory. However, he had not opened a way to Albany.
- Sept. 20 -Oct. 6** Burgoyne's Army set up camp and fortified (built strong walls around) its position. Burgoyne received a letter from General Clinton on Sept. 21, saying he could "begin to make a move north" from New York City. Burgoyne misunderstood the letter, thinking Clinton might push up toward Albany.
- Sept. 26** Argument between Gates and Arnold over Gates not mentioning Arnold in his report about September 19th. Gates relieved Arnold of command. Although Arnold planned to visit Congress to state his involvement, some officers, hostile to Gates, convinced Arnold to remain.
- Oct. 3** General Clinton invaded north up the Hudson River from New York City with 3000+ troops.
- Oct. 6** Part of Clinton's forces attacked and captured two forts near Bear Mountain: Forts Clinton and Montgomery.
- Oct. 7** *Second Battle of Saratoga:*
- Burgoyne sent a "reconnaissance in force" (large scouting party) to probe the American lines. Some 1700 troops with eight cannon and two howitzers advanced around mid-day.
 - The Americans saw them and attacked near Simeon Barber's Wheatfield. In a fierce fight, the British were driven from the field in considerable disorder.
 - American troops followed them and captured a German-held redoubt (Breymann Redoubt). That capture threatened Burgoyne's entire army. Nightfall ended the fighting, and the British withdrew to the protection of their river fortifications.
- Oct. 8** Burgoyne's Army begins to retreat toward Ticonderoga—60 miles north. This retreat began only after nightfall and was slowed by bad weather, very muddy roads and exhausted draft animals.
- Oct. 9-10** Gates' Army began a slow pursuit of Burgoyne's. Burgoyne only managed to move his army about nine miles, just to the village of Saratoga (present-day Schuylerville).
- Oct. 11-15** The Americans besieged British positions in Saratoga. Gradually, the Americans were able completely to surround the British.
- Oct. 13-15** Gates and Burgoyne negotiate the British capitulation (surrender).
- Gates gave very generous terms when he learned General Sir Henry Clinton's force was moving north. [Only a small part of this column actually came near Albany. Some 1700 troops burned Esopus ("eh-so-pis")(modern Kingston) and got within 30 miles of Albany by ship. They were ordered to withdraw when General Clinton received orders to break off the action to support General Howe's forces operating near Philadelphia.]
- Oct. 17** The articles of capitulation ("ka-pit-u-lay-shin") are signed and known thereafter as the Convention of Saratoga. 🌿

Important “Players”

American Army

Major General Horatio Gates (1728-1810)

Commander of the Northern Department of the American Army during the Battles of Saratoga. Negotiated the surrender of the British Army under General John Burgoyne in the document, the “Articles of Convention”. He was later reprimanded by Congress for negotiating the surrender without them



Major General Benedict Arnold (1741-1801)

Second in command of the American Army during the Battles of Saratoga, he was largely responsible for keeping up pressure on the British during the first day of fighting, September 19, 1777. Relieved of command before the second day of fighting, October 7, 1777, he disobeyed orders, rode onto the battlefield, illegally took command of two different officers’ troops, and was seriously wounded in the left leg.



Colonel Daniel Morgan (1735-1802)

Commanded a corps of about 500 riflemen sent by General Washington to assist the Northern Department of the



British Army

Lieutenant General John Burgoyne (1722-1792)

Nicknamed “Gentleman Johnny” for his relatively mild treatment of his soldiers, he commanded the British Army invading south from Canada into New York in 1777. With about 7500 men in his command at the start of the Battles of



American Army. Sent to counter the ‘Indian influence’ in General Burgoyne’s British Army, his men saw little of the Native Americans but a great deal of action against British regulars.

Colonel Thaddeus Kosciuszko (1746-1817)

[pronounced Ko-shoo-sko]

A Polish volunteer with the American Army, he received an officer’s commission as a Colonel of the Engineering Corps in 1776. The next year, he was assigned to the Northern Department of the American Army and was responsible for designing and overseeing the construction of American fortifications at Bemis Heights, just north of Stillwater, NY.



Major General Philip Schuyler (1733-1804)

[pronounced Sky-ler]

Though commander of the Northern Department of the American Army for the first part of the Revolution, he was replaced by Congress with General Horatio Gates in early August of 1777. Schuyler remained in contact with the American Army during the time of the Battles of Saratoga, and eventually went into state and national politics.



Saratoga, he ended up having to surrender to the Americans on October 17, 1777.

Major General Friedrich Baron von Riedesel (1738-1800)



Commander of the German forces under British General Burgoyne. A competent soldier in his own right, he is perhaps as well known today as the husband of Baroness Fredericka von Riedesel.

Brigadier General Simon Frasier (1729-1777)

Commanded the British right column as they attempted to sweep around the American positions on September 19, 1777. Frasier showed strong leadership on the second day of fighting, October 7, 1777, riding along British lines to rally the retreating British forces and keep their withdrawal from becoming a panicked mess. During this action, he was mortally wounded by American riflemen, and



died the following morning. He was buried, per his request, in the British River Fortifications.

Baroness Fredericka von Riedesel (1746-1808)

The wife of General Friedrich von Riedesel. With three daughters under the age of 5, she accompanied the General during his six years in North America. Her journal, available in print, provides extensive information on life in America at that time. 🌿

**Park Pictures**

Photo: Saratoga National Historical Park

John Neilson Farmhouse

The only standing structure on the battlefield from the time of the Battle of Saratoga.



Photo: Saratoga National Historical Park

Philip Schuyler House

Located 8 miles north of the battlefield, this was the country house of American General Philip Schuyler.

Saratoga Monument

Also located 8 miles north of the battlefield, this 155-foot obelisk was built starting October 17, 1877 to commemorate the American victory in the Battle of Saratoga.

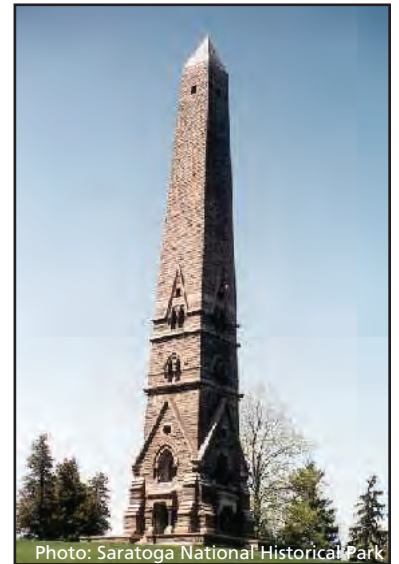


Photo: Saratoga National Historical Park



Photo: Saratoga National Historical Park

British River Fortifications

A very scenic view over the Hudson River, this area also shows how control over the river and river valley were so important.

Victory Woods

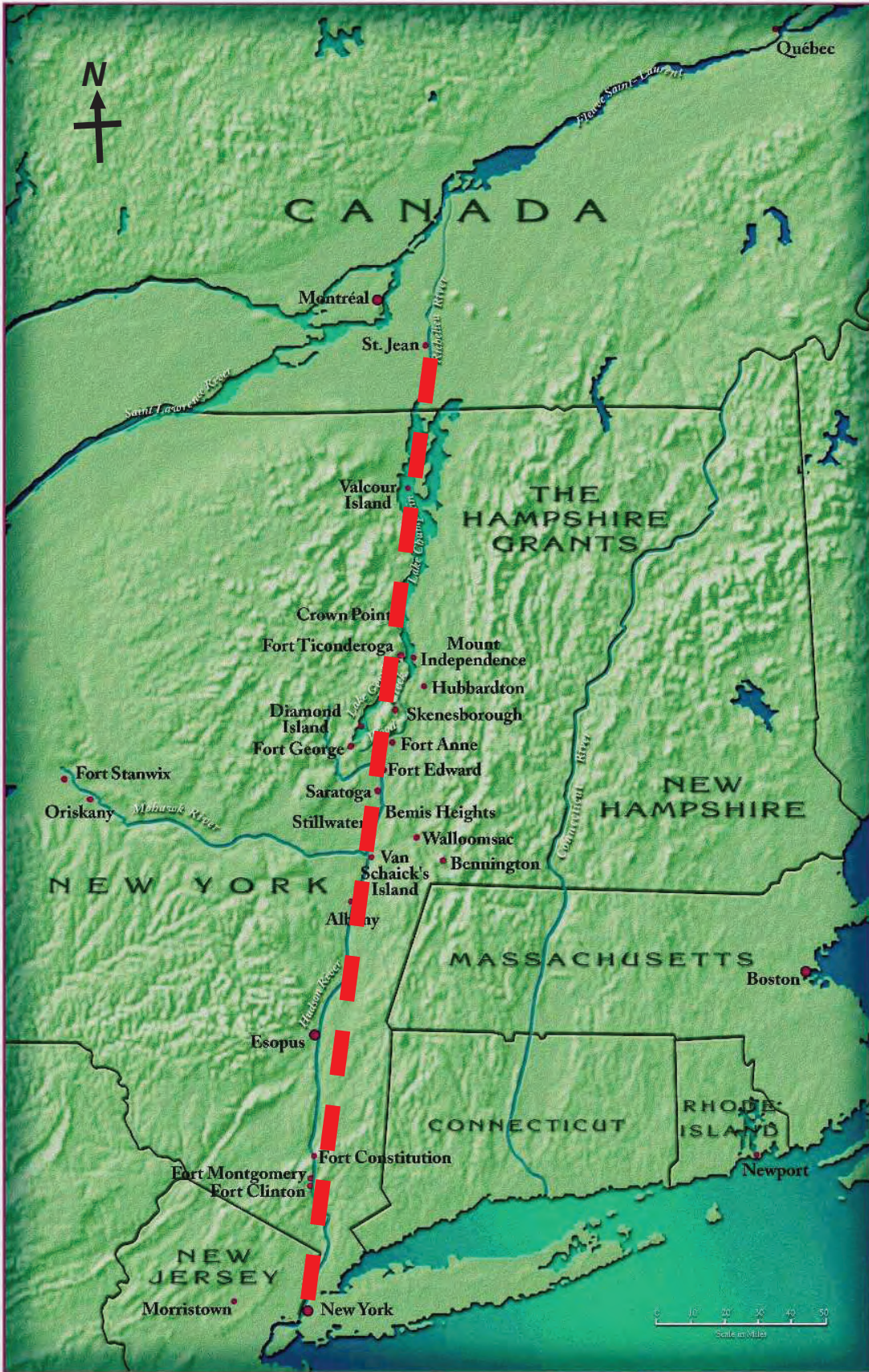
Here, General Burgoyne's British forces made their last camp and defense before surrendering to General Gates and the American army.



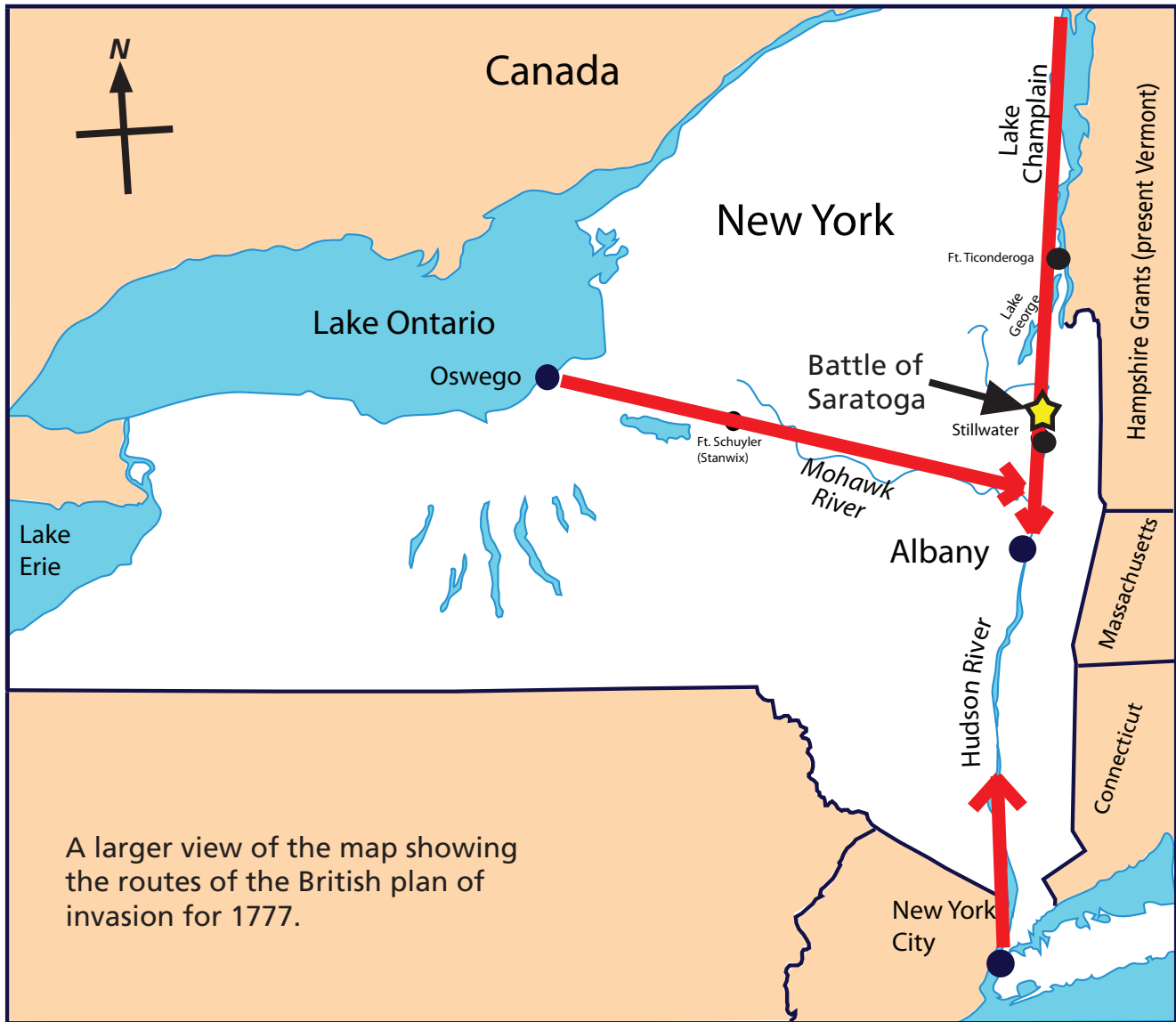
Photo: Saratoga National Historical Park

Want to see more? Check out the Saratoga National Historical Park website at "www.nps.gov/sara" and check out our "Virtual Tours"

The Northern Campaign - 1777

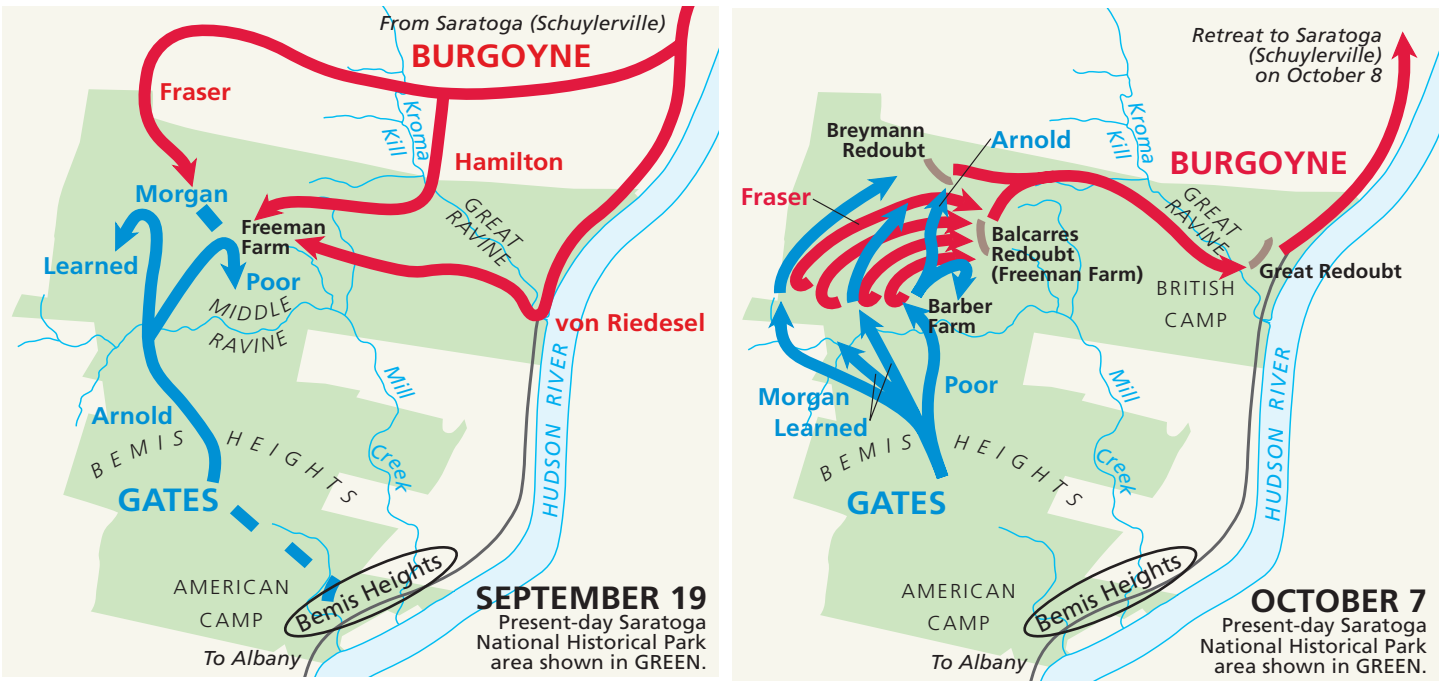


Area map showing how invading New York through the Lake Champlain - Hudson River Valley would, the British hoped, would isolate the New England Colonies (New Hampshire, Massachusetts, Connecticut, Rhode Island).

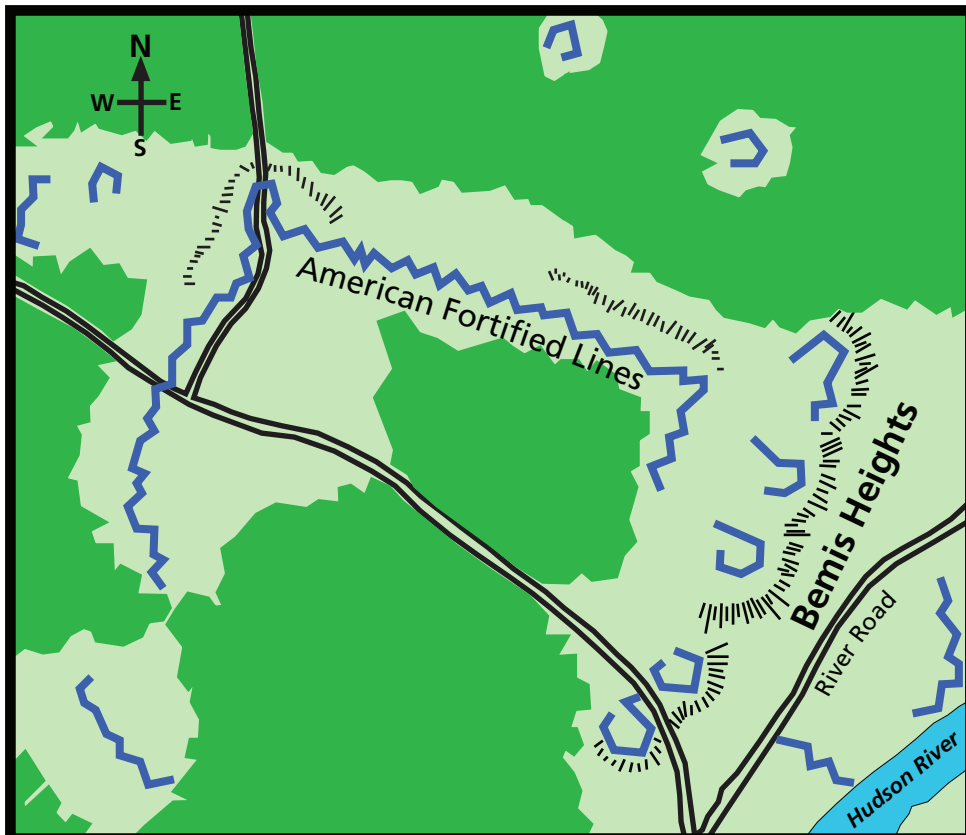


“I have always thought Hudson’s River the most proper part of the whole continent for opening vigorous operations. Because the course of the river, so beneficial for conveying all the bulky necessaries of an army, is precisely the route that an army ought to take for the great purposes of cutting communications between the Southern and Northern Provinces...”

British General John Burgoyne, 1775



Arrows showing the movement of American troops (in blue) and British troops (in red) during the Battles of Saratoga. Note how the American position on Bemis Heights, near the bottom of the maps, gave them such a good view of, and control over, the Hudson River. Cannons on the hills there could hit the river and the road beside it.



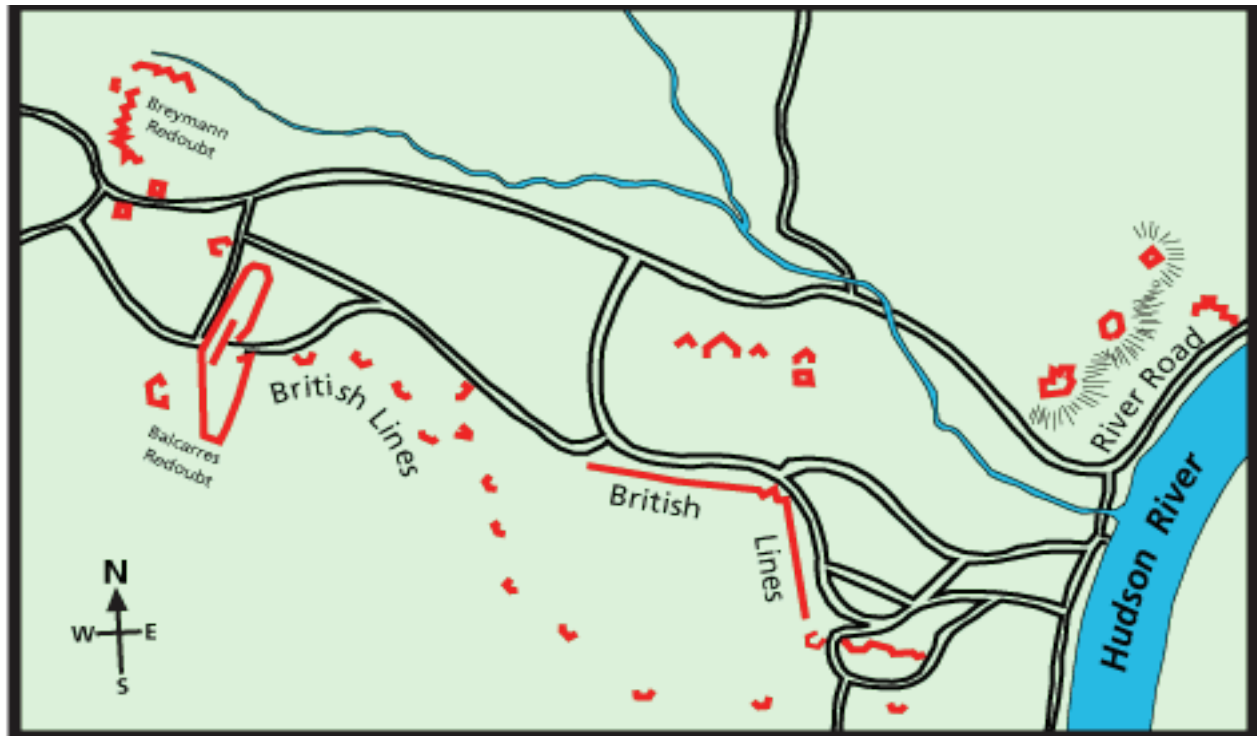
American forces under Horatio Gates made excellent use of the landscape. By building defenses where they did, on Bemis Heights, they not only kept the British from using the river and main road, but also from going around to the east side of the river.

The land east of the Hudson River, with all its ridges and ravines, was too difficult to travel through.



Photo: Jacquie Tinker

RIGHT: copies of cannons now sit on Bemis Heights overlooking the Hudson River Valley. This view over the river valley gives a very good understanding of why the Americans put cannons and fortifications on Bemis Heights and in the valley below.



Only about two miles north of American defenses, the British built their own fortifications on the grounds they won during fighting on September 19, 1777. They had a lot of area to cover, so they built defensive lines in sections that could watch the open areas between them.

The Breymann Redoubt, at the far left of this map, proved to be the vulnerable point, as the American capture of this position on October 7 threatened the entire British position from behind.

Additional Project Ideas

Write a Pension Claim

A pension (pronounced “pen-shun”) was a written account of a retired soldier documenting his service in the army. The pension proved he was eligible to receive payment from the government in return for his past military duty. You’ll need to include important details from events you were involved in —those details help support your claim! Where was your army on a given date? Were you involved in fighting in a specific area? Were you injured in a battle? Who was your commanding officer, someone who can confirm your story?

Create a Camp

Get or make a picture of your neighborhood, school campus, local park, or other open area. Use this as a basis for designing a fortified military camp you either draw as a picture or build as a model. Where might you make strong, thick defensive walls? Where would you put cannons? Where would soldiers be able to sleep, eat, and practice?

History Cards

Make your own set of “trading cards” (like baseball or football cards) with pictures and information for commanding officers and for soldiers on the armies of the American Revolution.

Letters Home

Imagine you are a soldier on either the American or the British side. You’ve just fought in one of the two Battles of Saratoga. Write a letter home, and describe what you have experienced. You can include things like:

- How warm or cool was the weather?
- Was your army successful in driving the enemy from the battlefield?
- Are you afraid of what the enemy will do next?
- Are you confident of eventual victory for your side?
- How well or poorly have you been eating?
- Is your uniform going to keep you warm in the upcoming winter, or is it too worn out?
- If your family moved to America from England when you were very young (or, if you lived

in England, if your friends had moved to America), how might you feel knowing some of the soldiers on the other side could have been your childhood friends?

Past and Present

People like to tell the stories of their own lives. Talk with a veteran about his or her experiences in the military and tell your class what you learned.

Become a “Virtual Visitor”

There are many historical sites from the American Revolution. Most have museums, visitor centers, and tours. Nearly all have some kind of webpage as well. Visit the website of a historical site mentioned in the Chronology (page 13) and write a report about why that place is important. Or, you might use the information on that webpage to draw a picture or write a poem about what happened at the historical site.

“Travel in Time”

OK, so time travel isn’t actually possible. But some historical sites sometimes offer “living history programs” where people dress up like soldiers, camp followers, or civilians and demonstrate what life was like during the time of the American Revolution. Other sites even offer “battle re-enactments” where the people dressing like soldiers replay the events of a given battle. Visit one of these events and tell your class, draw a picture, or write a report about what you experienced there.

Make Your Own “Ship’s Bread”

Adult supervision required: hot oven involved!

Ingredients to mix in a large bowl:

2 cups whole wheat flour

1/3 cup water

2 tsp. salt

Roll dough out 1/4 inch thick, cut out circles about 4 inches across and pierce tops several times with a fork. Place circles on lightly floured cookie sheet and bake at 425° F for 15 minutes. Remove from oven, cool for 10 minutes. Pieces will be fairly hard due to very low moisture, but that lack of moisture helped preserve them for many weeks. 🌿