

GOLDEN SPIKE NATIONAL HISTORIC SITE

Vol. 1

2003 Edition

No. 13

Last Spike Driven

PROMONTORY, UTAH TERRITORY Construction of the first railroad to connect the Atlantic and the Pacific was completed Monday, May 10, 1869.

An hour-long ceremony beginning shortly before noon marked the occasion of the meeting of the rails laid by the Union Pacific and Central Pacific railroad companies. Governor Leland Stanford, President of the C.P., and Gen.

Grenville M. Dodge, chief engineer of the U.P., each made brief remarks.

Preparations having been made by a crew of Chinese laborers, the two superintendents of construction, Mr. Reed of the U.P. and Mr. Strobridge of the C.P., inserted the last tie underneath the rails. It was of California laurel, highly polished, with a silver plate in the center bearing an inscription and the names of the officers and directors of the Central Pacific.

Prayer was offered by the venerable Rev. Dr. Todd. At the conclusion, the telegraph operator tapped out: "We have got done praying. The spike is about to be presented."

Everything being in readiness, four spikes: two of gold, one of silver, and one of gold, silver and iron, were delivered with appropriate remarks to Gov. Stanford and Dr. Durant, vice-president of the U.P. They received the spikes and put them in place in holes already drilled in the last tie. The final iron

spike was attached to the telegraph wires so that at each stroke of the hammer, the blow was heard in all the offices from San Francisco to New York, and throughout the land.

Amid cheers and general enthusiasm, the two engines, No. 119 and the Jupiter, moved up until they almost touched. Gen. Dodge shook hands with his counterpart, Samuel Montague, as they posed for a photograph.

Golden Spike National Historic Site Recognized for its Preservation Efforts

This past fall the park was honored for its preservation and stabilization efforts of historic resources when it was presented the 2002 Utah Heritage Foundation award for firms and governmental agencies. The Utah Heritage Foundation's mission is to preserve, protect, and promote Utah's historic built environment through public awareness, advocacy, and active preservation and to highlight ongoing preservation efforts in the state.

The cultural landscape of Golden Spike National Historic Site consists primarily of the structural components of the Union Pacific and Central Pacific railroad grades,

which include stone and wood culverts, wood trestles, stone trestle abutments and foundations, and the railroad grades themselves. Many elements date back to 1869 and provide tangible links to the workers and their efforts to complete the nation's first transcontinental railroad.

The preservation and restoration projects named in the award included stabilizing dry laid stone construction, re-establishing proper drainage at the culverts, reconstructing two wood culverts, stabilizing two other wood culverts, and replacing select wood members on the wood features. Archeological investigations occurred before

implementing any of the projects to ensure historic accuracy. The park developed and implemented a pest management program that addressed burrowing animals and termites. Structures that had been buried during flash flooding were excavated and stabilized and vegetation was removed for structural reasons and fire protection.

These projects could not have been accomplished without the help of the following partners: Utah State Historic Preservation Office, Golden Spike Association, Friends of Golden Spike, Utah Conservation Corps, and ATK Thiokol. Superintendent Mary Risser stated, "The success of this preservation effort reaffirms the

park's commitment to serve as an example of preminent historic preservation practices. We share this award with our partners on this project."

"The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education and inspiration of this and future generations."

-NPS Mission



Before and after: Park Service Archeologists identified the remains of an historic dual box culvert (left) on the Central Pacific railroad grade. The same culvert restored to its original appearance (right).





Welcome

Welcome to Golden Spike National Historic Site, considered by *Historic Traveler* magazine as one of the 25 historic sites in the country that every American should visit. The National Park Service preserves and protects our natural and cultural heritage. No matter where you live or travel in this vast land, you are close to a national park.

While many Americans associate the National Park Service with the preservation of pristine natural places, few realize that almost two-thirds of the national parks - Gettysburg, San Antonio Mission, Valley Forge, etc. - were designated specifically to preserve an important aspect or moment in our nation's history. Golden

Spike National Historic Site brings the country together at the spot where the nation's first transcontinental railroad was completed.

America's national parks offer unlimited opportunities to learn, have fun, and explore. They offer geological treasures, such as the Tetons and Delicate Arch. They bear testimony to the genius of native peoples in the ancient cliff dwellings of Mesa Verde. They safeguard sites that played a vital role in our nation's history.

As you visit Golden Spike National Historic Site, I encourage you to explore the Last Spike Site and the parallel Union Pacific and Central Pacific railroad grades. Use your imagination to envision hundreds of workers engaged in

the feverish race to complete the railroad. Look at the landscape and picture how you would have traveled from coast to coast before completion of the railroad.

The future of the National Park Service is as strong as the support and commitment of the people we serve. With your assistance, Golden Spike National Historic Site will remain intact for the enjoyment of generations to follow. Rest assured that the staff and volunteers of Golden Spike National Historic Site are committed to doing our part to defend and protect this special place.

Mary Risser
Superintendent

Golden Spike Association

The Golden Spike Association celebrates another year of success. Our objectives of preserving, protecting, and promoting the history of the site at Promontory Summit and the Driving of the Last Spike on May 10, 1869, remain unchanged. Our goals and mission have never faltered since our efforts began in the 1920's and resulted in the establishment of Golden Spike National Historic Site in 1965. The cooperative efforts of the Golden Spike Association and National Park Service staff have developed into a partnership, and many great events have taken place because of this union.

The Golden Spike Association received the donation of the Brigham City Union Pacific Depot in February 1994 and restoration has been ongoing. Located at 833 West Forest, it is destined to be the "Gateway to Golden Spike Country." The Historic Brigham City Depot houses a museum and gift shop that is staffed by volunteers and funded by donations. We enjoy support from the Box Elder Tourism Council, County Commissioners, and Brigham City.

The depot will be closed from January through April, but will open between 1 and 5 p.m. on Monday, Friday, and Saturday for the remainder of the year. Special tours and other events can be arranged by calling (435)723-2948. This is a special invitation to you to visit and share our happiness.

Norm Nelson, President
Golden Spike Association



Central Pacific and Union Pacific crews meet at Promontory Summit, Utah Territory, May 10, 1869.

Friends of Golden Spike

Friends of Golden Spike, an organizational branch of the Golden Spike Association, provides vital support to both the National Park Service and the Golden Spike Association as a catalyst for public involvement and appreciation for Golden Spike history. This group coordinates volunteers for special events, organizes special history programs, sponsors fundraising activities, and provides a full umbrella of citizen support functions for Golden Spike National Historic Site.

The Friends of Golden Spike support the mission of Golden Spike National Historic Site, which commemorates the completion of the nation's first transcontinental railroad. In November 2001, the Friends donated more than \$7,000 to Golden Spike National Historic Site for historic preservation of the Southern Pacific obelisk.

Membership is \$25 annually. Membership benefits include discounts at the Golden Spike Association's gift shop at the Brigham City Depot. Members also receive invitations to special events and are eligible for docent training. For more information, please call the Golden Spike Association at (435)723-2948 or ask a park ranger at Golden Spike National Historic Site.





Things to See and Do During Your Visit

Ranger Presentations:

During the summer, a variety of informative programs are given. Please check the activities board in the visitor center for times, location, and subject.

Locomotive Demonstrations:

The *Jupiter* and *No. 119* are demonstrated several times a day in the summer. Please call the visitor center for demonstration times. (435)471-2209 ext. 18.

Big Fill Walk:

A self-guided 1-1/2 mile loop trail along the original Central and Union Pacific Railroad grades. Trail guides are available at the trailhead. Allow at least one hour for entire loop.

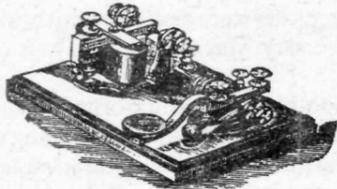
Promontory Auto Tour:

Consists of the West and East Auto Tours. The West Tour is a 14-mile, one-way loop and the East Tour is a 2-mile, one-way loop. A guidebook is available at the visitor center for a nominal fee.



Re-enactments of the Last Spike Ceremony:

During the summer, dedicated volunteers perform the Last Spike Ceremony on Saturdays and holidays. Please call the visitor center for ceremony times. (435)471-2209 ext. 18.



Film and Video Presentations:

Films and videos are shown daily in the visitor center. Check the activities board for times or make a request.

Junior Engineer Program:

We invite our younger visitors to become Golden Spike Junior Engineers. In one to two hours learn more about the nation's first transcontinental railroad and receive a prize for your work. Ask a ranger at the front desk.

Engine House Tours:

During the off-season when the locomotives are not operating, rangers lead guided tours of the engine house during the weekends.

Take only pictures...

A person found guilty of removing artifacts from government lands can be charged a \$100,000 fine and/or one year in prison. This is for a first time, misdemeanor case. The felony level can result in greater fines, penalties, and prison time.

The law that protects Golden Spike NHS and other federal properties is called the Archaeological Resource Protection Act (ARPA). ARPA was enacted in 1979 to prevent the theft of artifacts from the nation's public lands. The seemingly harmless act of removing a small artifact, such as an iron spike, is similar to tearing a page out of a book. Each time it happens, what is left becomes obscured and difficult to piece together into a coherent story.

Golden Spike NHS has had some of its historical artifacts pilfered and put into personal collections, never to be seen again or enjoyed by the public. If you see a person engaged in artifact hunting or possessing a metal detector on federal land, please report it to a park ranger. Remember, by protecting our resources today, we ensure that future generations will enjoy the same experience for many years to come.

Become a National Park Service Volunteer

It would be very difficult to imagine what Golden Spike would be like without the aid of volunteers. In the last two years, individuals donated over 2000 hours of their time to locomotive operations. Polishing brass, cleaning boiler tubes, and recalibrating valves are among the dozens of tasks performed on the steam engines by V.I.P.'s. Boy Scout troops have split wood, collected trash, pulled weeds, and removed worn out railroad ties.

During special events such as the May 10th celebration and Railroaders' Festival, volunteers step in to augment Golden Spike's regular staff. On May 10th alone, over 100 volunteers participate in the day's events. One of the most special events is the reenactment of the "Driving of the Golden Spike" ceremony. Reenactments are performed during special events and on Saturdays and holidays throughout the summer. Participating as a member of the cast is a rewarding and exciting experience. Without the support of dedicated volunteers, it would be impossible to offer this activity for visitors.

Your Safety ... In the Middle of Nowhere

Visitors often ask, "How did they, the Union and Central Pacific, determine *out here in the middle of nowhere* to be the place where the two railroads met?"

When Congress told the companies to determine a place, Promontory Summit was the center spot between "end of track" for both companies. Thus, you're not "in the middle of nowhere," you're in Promontory, Utah. WELCOME!

You are right, though. Golden Spike is far from civilization, approximately 30 miles. So, before you leave civilization, pack extra food and water and fill up with gas. If you are planning on traveling the Back Country Byway, two or more spare tires can come in handy.

We have vending machines, a few picnic tables, a water fountain and flushing toilets at the visitor center. If you have

chosen the middle of nowhere for your dining experience, you will probably see the replica locomotives, *Jupiter* and *No. 119*.

During summer, the engineers fire up these two beauties and run them on our track. These are not HO or N scale locomotives, but the real thing, powered by steam. **THEY ARE HOT!! BEWARE!!**

Please do not climb into the locomotives. Viewing stands are provided to allow you to peer inside the cabs. While the engines are in motion, listen to the ranger for safety instructions. Placing coins or rocks on the track can turn these items into deadly projectiles. Please don't.

The "middle of nowhere" is home to many different plants and animals, all protected by federal law. Beware of rattlesnakes on the trails and roads. They are, by nature, a shy creature. Don't harass them and

they won't harass you.

One insect that will harass you is the mosquito. Due to West Nile Virus, keep your body covered if you have to be outside and wear mosquito repellent. Try to avoid the times of day when mosquitos are most present.

Dead birds can be indicators of West Nile Virus. If you come across a dead crow or raven and it looks like it did not die from routine natural causes or due to an accident, alert a park ranger.

Keep any pet on a short leash. This is a desert environment, and an animal left in a car for a short period of time can die.

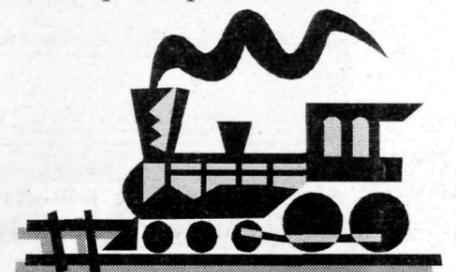
These laws are in place for your protection, that of the park and other visitors.

Yes, this is the "middle of nowhere." Are you safe?

There is something for everyone: visitor information services, locomotive operations, event assistance, electronics projects, computer work, historical research, photography, sewing and much more. No experience is necessary, just a willing attitude.

Anyone who has an interest in volunteering is encouraged to fill out a personal information sheet to list their skills and interests.

If you are the type of person who enjoys meeting people and learning something new every day, then you may be just the right person to become a V.I.P. at Golden Spike. Please contact a Park Ranger or Golden Spike's V.I.P. Coordinator if you would like to participate in all the fun.





Rebirth of the *Jupiter* and No. 119

When the Golden Spike Centennial celebration was held on May 10, 1969, the original steam locomotives present a hundred years earlier, *Jupiter* and No. 119, no longer existed. Two inoperable American 4-4-0 engines were borrowed from the State of Nevada and Paramount Pictures for the festivities. Many of the authentic sights, sounds and even smells from 1869 were missing.

The National Park Service decided to have replicas made of the *Jupiter* and No. 119, a challenge accepted by O'Connor Engineering Laboratories of Costa Mesa, California. Since no complete plans existed for either locomotive, over 700 technical drawings had to be painstakingly created from what research material could be found, especially historic photographs taken in 1869 by Andrew J. Russell, Alfred Hart, and Charles R. Savage. Many blueprints for internal parts were made from an 1870 design book; the Union Pacific archives had drawings of a boiler similar to No. 119's. The Southern Pacific Railroad had a document that mentioned *Jupiter's* driving wheel diameter. From such fragmentary sources, a complete picture finally emerged.

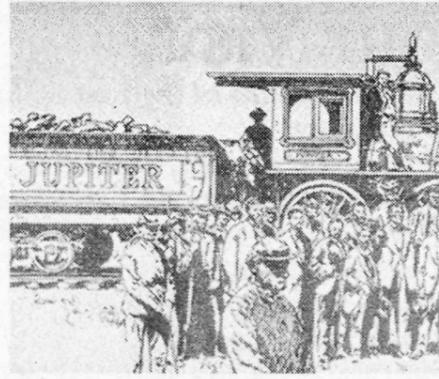
Turning the drawings into finished locomotives took another two years.

Specialized craftsmen had to be called in for some jobs. After the driving wheels were cast, they had to be sent to the Southern Railway steam shops in Birmingham, Alabama for machining and quartering. Wayne Helmick and Buck Marron, both master carpenters, came to the O'Connor shop to build the cabs and pilots.

Ward Kimball, one of the six original Walt Disney Studio animators, headed the team in charge of the intricate painting and gold-leafing of the locomotives and their tenders. At the time, there was little information to go on regarding the historically accurate colors to use (see article, page 5).

Firing steam locomotives with oil was a simpler and less demanding method than using coal or wood. For years, this was the method used. It proved economical as long as waste oil from Hill Air Force Base and the Ogden Defense Depot was available.

The finished *Jupiter* and No. 119 and their tenders were carried 800 miles on four trucks to Golden Spike National Historic Site, where 1.7 miles of track had been constructed on the 1869 roadbeds. Christened with water from the Atlantic and the Pacific, these



locomotives were dedicated on the 110th anniversary, May 10, 1979.

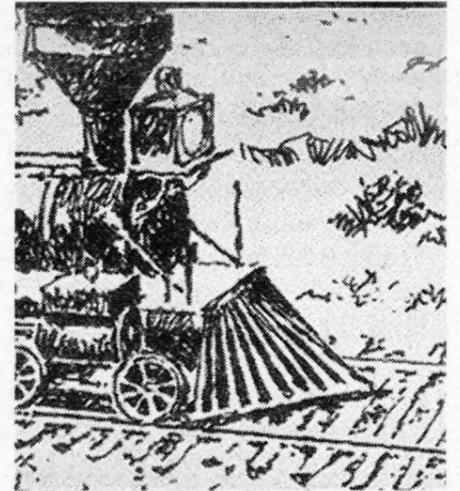
By 1990, obtaining and storing waste oil was becoming difficult. This, along with the desire for more historical accuracy, led to the decision to convert the locomotives to their original fuels.

The conversion process was complex. First, the oil firing systems and storage tanks had to be removed. Then fire grates were installed along with special baffles and spark arresting devices in the smoke boxes and stacks. Steam locomotives were notorious for starting fires along the right-of-way.

The original *Jupiter* was a wood-burning engine in 1869. There were no supplies of coal available in California

prior to the completion of the railroad, so out of necessity the Central Pacific engines ran on the abundant wood available in the Sierra Nevada Mountains. For a time, Trestlewood, a division of Cannon Structures, Inc., was salvaging the Lucin Cutoff trestle that bypassed Promontory in 1904. In an ironic twist, the scrap wood from this trestle at one time was supplied to Golden Spike for fueling the *Jupiter*.

The Union Pacific railroad often had difficulty just obtaining wood for ties, so their locomotives were coal-fueled. Coal is purchased from a local supplier to fuel the No. 119 today.



The Story of the *Jupiter*

Jupiter, *Storm*, *Whirlwind* and *Leviathan*, locomotives numbered 60-63, were completed by the Schenectady Locomotive Works in New York State in September of 1868. They were the first of 28 engines ordered from Schenectady by the Central Pacific Railroad.

The *Jupiter* voyaged around Cape Horn on a separate ship, taking 140 days to reach San Francisco. After reassembly in Sacramento, it was put in service on March 20, 1869 and sent to Wadsworth, Nevada.

Leland Stanford, President of the Central Pacific Railroad, had picked a locomotive named *Antelope* to pull his

special train to the ceremony at Promontory. Coming through the Sierra Nevada mountains, this engine was badly damaged when it hit a large tree, which railroad workers were attempting to roll across the tracks.

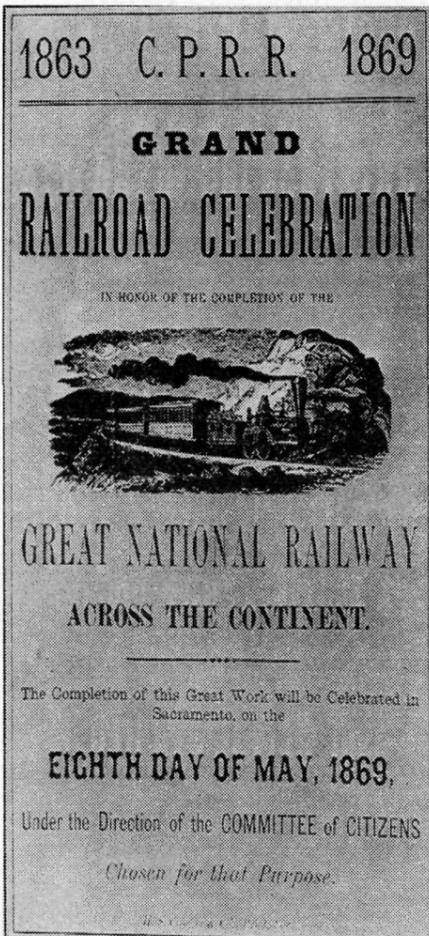
Jupiter was pressed into service as a substitute engine. Stanford's party arrived early and had time for sightseeing on the shores of the Great Salt Lake; a photograph of this excursion shows *Jupiter* pulling a water car behind the tender.

Bedecked with American flags, *Jupiter* is seen again proudly standing at the last end of track as the crowd celebrates

the completion of the nation's first transcontinental railroad on May 10.

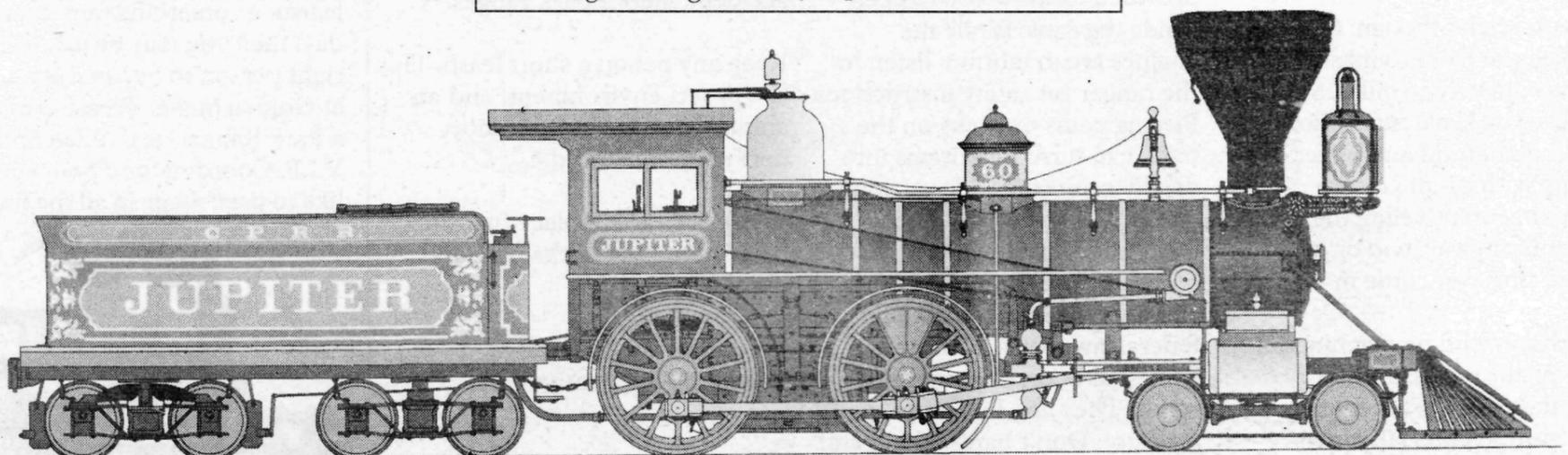
After the Central Pacific reorganized as the Southern Pacific Railroad, its locomotives had their names replaced by numbers. In 1891, *Jupiter* became No. 1195. Two years later, it was converted to burn coal; the distinctive stack was replaced with a different design, and other parts were changed.

Sold to the Gila Valley, Globe and Northern Railroad, the aging engine became No. 1, "the One Spot." Despite the efforts of her last engineer to save her, the former *Jupiter* was finally scrapped in 1909 for \$1,000.



Central Pacific *Jupiter*

Builder	Schenectady Locomotive Works
Type	4-4-0 American
Fuel	Wood
Water Tank Capacity	2,000 gallons approx.
Driving Wheels	62 inches diameter
Engine Wheelbase	21 feet 6 inches
Total Engine Weight	65,400 pounds





Iron Horses of a Different Color

The color of a steam locomotive? Most people would say they have no color, dazzle or sparkle; they're just a flat, dirty black. That image typically comes to mind because the steam locomotives we see in movies and on television are of 1900's vintage and were without color. But the locomotives of the 1860's? Now that is a horse of a different color!

The 1860's were the height of the Victorian Era, which was characterized by elaborate and often ostentatious workmanship. Locomotives were no exception; they were seen as the company workhorse, showpiece, and public relations department all rolled into one. The train coming to town was a major event of that era, and as it rolled out again the townsfolk were left awestruck in its wake.

The *Jupiter* and *No. 119* are arguably our country's two most renowned, readily recognized locomotives. Each, by a mere stroke of fate, represented their respective companies in the "Golden Spike," or "Wedding of the Rails" ceremony. Both were immortalized in Andrew J. Russell's "East Meets West" photograph, plus a number of other photos taken on that day by Russell, Charles Savage, and Alfred Hart.

The image of the *Jupiter* and *No. 119* facing each other across the last spike site has become an image recognized around the world. Would the true colors of the *Jupiter* and *No. 119* be forever enshrouded in the black and white images of historic photos? With the completion of the replica locomotives in 1979, the *Jupiter* and *No. 119* burst upon the scene in living color. Ward Kimball, one of the six original Disney animators, was commissioned to head the painting operation. Absent any documentation on the actual colors of the original *Jupiter* and *No. 119*, Kimball chose bright reds and vermillions for eye-catching, popular appeal.

Between 1979 and 1993, thousands of visitors viewed the replicas of the *Jupiter* and *No. 119*. They watched and often participated in re-creations of the last spike ceremony. The locomotives were captured on film and postcards and featured in newspapers and magazines. Railroad buffs world-wide marveled at the *Jupiter* and *No. 119*. Thus, the striking colors chosen by Kimball became the accepted identity for the locomotives. This comfortable, popular, and familiar scene was shattered by a very simple 3-1/2 line entry: *Locomotive.-The new engine Jupiter, fresh from the paint shop, gleaming in blue and crimson with*

gold appeared on the track this morning.

This item appeared in the March 20, 1869 issue of the Sacramento Daily Bee, and then went unnoticed for over a hundred years until brought to light recently by researchers. This revealing, yet vague, bombshell set historian Jim Wilke on a personal quest to research the exact color schemes for the *Jupiter* and *No. 119*. It was a curiosity for Wilke; what shade of blue? Which parts were blue? How did they really appear to the photographers as they composed their black and white photos?

Wilke's quest took him to the Smithsonian and the California and Nevada State Railroad Museums. While Wilke was unable to find definitive information on the color schemes for the *Jupiter* and *No. 119*, some information and color paintings were available on similar locomotives built during the same time period. From Wilke's research the new color schemes were developed for the *Jupiter* and *No. 119* and proposed to the National Park Service.

The idea of changing the long accepted colors of the replica *Jupiter* and *No. 119* came as quite a shock to many people.

Coincidentally, this proposal came just as the locomotives were scheduled for their first repainting. Still, no one had considered a drastic change in color scheme. Although the original colors on the *Jupiter* and *No. 119* in 1869 cannot be verified exactly or completely, it was ultimately decided that the new color schemes proposed by Wilke would be more historically accurate than the colors the replicas had been painted.

The timing of the change of colors for the *Jupiter* and *No. 119* was extraordinary. May 10, 1994, was the 125th anniversary of the last spike ceremony. This would prove to be the largest event in the history of having the locomotives at the Site. On that anniversary morning, the brilliantly painted locomotives rolled out on the tracks transporting 14,000 visitors back in time. Back to what it must have been like on that day, 125 years before; and once again, they left everyone awestruck in their wake.

The Story of No. 119

In November 1868, Rogers Locomotive Works of Paterson, New Jersey built Union Pacific Locomotives *No. 116*, *No. 117*, *No. 118*, *No. 119* and *No. 120*. Six months later, *No. 119* was stationed at Ogden, Utah.

Thomas Durant, Vice-President of the Union Pacific Railroad, like Leland Stanford, also had difficulty getting to Promontory. Stopping for water at Piedmont, Wyoming, he found his train surrounded by 400 tie cutters who had been waiting three months for their pay. They chained Durant's coach to the

siding for two days until the money arrived.

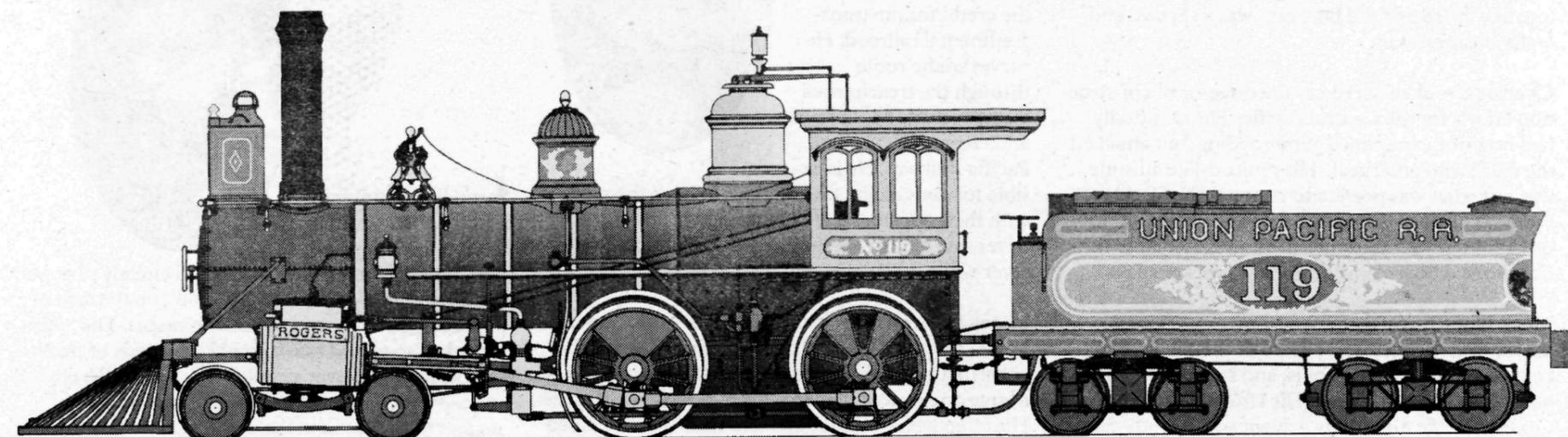
While Durant's party was detained, the rain-swollen Weber River washed away some supports at the Devil's Gate Bridge. The engineer of the now unknown locomotive at the head of Durant's special train saw that his heavy engine could not cross the shaky trestle, although he was able to shove the lighter passenger coaches over one at a time. The passengers themselves walked across so as to take no chances.

Meanwhile, in Ogden, the telegraph notified the round house that Durant needed a locomotive. *No. 119* happened to be ready to go and thus received the honor of participating in the Golden Spike ceremony.

After May 10, 1869, *No. 119* continued in service as a freight locomotive. In 1882, she was renumbered as *No. 343*. *No. 119* went to the scrap heap in 1903; like *Jupiter*, her demise brought the railroad a fee of \$1,000.

Union Pacific No. 119

Builder	Rogers Locomotive Works
Type	4-4-0 American
Fuel	Coal
Water Tank Capacity	1,942 gallons approx.
Driving Wheels	57 inches diameter
Engine Wheelbase	21 feet 9 inches
Total Engine Weight	68,400 pounds



1869, May 10th. 1869.

GREATEST EVENT
Rail Road from the Atlantic to the Pacific
GRAND OPENING
— OF 1869 —

Union Pacific
RAIL ROAD
PLATTE VALLEY ROUTE
PASSENGER TRAINS LEAVE
OMAHA
ON THE ARRIVAL OF TRAINS FROM THE EAST
THROUGH TO SAN FRANCISCO
In less than Four Days, avoiding the Dangers of the Sea!

Travelers for Pleasure, Health or Business
WILL FIND A TRIP ON THE GREAT PACIFIC RAILROAD THE MOST
LUXURIOUS CARS & EATING HOUSES
ON THE UNION PACIFIC RAILROAD
PULLMAN'S PALACE SLEEPING CARS
RUN WITH ALL THE COMFORTS OF HOME
GOLD, SILVER AND OTHER MINERS!
How to the Gold in such great quantities in California, Nevada, Wyoming, Colorado, Utah, Oregon, Nevada, New Mexico, Idaho, Arizona or California.

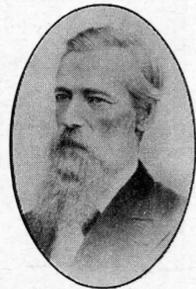
CONNECTIONS MADE AT
CHEYENNE for DENVER, CENTRAL CITY & SANTA FE
BY RAIL AND THROUGH THE TERRITORY, SALT LAKE CITY, DENVER, CENTRAL CITY AND ANOTHER
Be Sure they Read via Platte Valley or Omaha
Company's Office 78 La Salle St., opposite City Hall and Court House Square, Chicago.
CHARLES H. RICHMOND, Ticket Agent.
G. P. GILBERT, JOHN P. HANEY, J. BURD, W. SNYDER.

CENTRAL PACIFIC RAILWAY

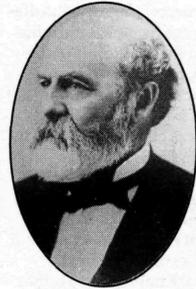
UNION PACIFIC RAILWAY



Charles Crocker



Mark Hopkins



Collis P. Huntington



Leland Stanford



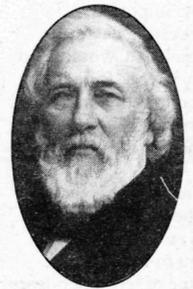
Dr. Thomas C. Durant



Oliver Ames



Sidney Dillon



John Duff



Leland Stanford was the first President of the Central Pacific Railroad. From 1864-66 he served as California's governor and became a United States Senator in 1885. He was a dynamic, charismatic, leader whose political acumen made him very effective in obtaining favorable railroad legislation. In 1891 he founded Stanford University which still stands out as one of the country's leading schools.



Theodore Judah

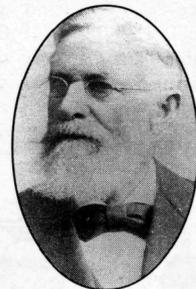
Collis P. Huntington ran the affairs of the Central Pacific in Washington D.C. His political savvy made him very adept at obtaining railroad and financial legislation favorable to the Central Pacific. Huntington, like the rest of the Big Four, was a shrewd and crafty businessman.

Charles Crocker served as the director of construction efforts for the Central Pacific. He admittedly had no prior experience in railroading, but attacked the work with great zeal. His ramrod-like attitude was just what was needed to conquer the Sierra Nevada. Charles Crocker is responsible for the hiring of tens of thousands of Chinese workers in California who became known as "Crocker's Pets."

Mark Hopkins, also known by many as "Uncle Mark," was the financial wizard of the Big Four. He kept the books, paid the bills, and squeezed every penny out of every dollar. His efforts kept the Central Pacific financially solvent and operational when funds were scarce and the company operated heavily on borrowed money.

Theodore Judah was the construction engineer whose energy and vision deserves much of the credit for the transcontinental railroad. He surveyed the route through the treacherous Sierra Nevada Mountains and created the Central Pacific Railway. He is also responsible for convincing the Big Four to back the railroad with their considerable talents and wealth. Judah never saw his dream fulfilled. He contracted yellow fever while in Panama and died in 1863.

James H. Strobbridge was the Construction Superintendent for the Central Pacific Railway. During the construction of the railroad he was considered to be a large and powerful man who ruled with an iron fist. His effectiveness and aggressive work habits helped the Central Pacific to lay hundreds more miles of track than anyone thought possible.



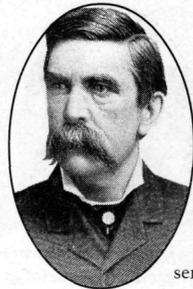
James H. Strobbridge

Samuel S. Montague



Samuel S. Montague replaced Theodore Judah as the Chief Engineer of the Central Pacific. Since Judah had already surveyed the route, it was Montague who took on the task of tunneling through the granite mountains. The Sierra Nevada also forced him to build hundreds of trestles and bridges, and over 37 miles of snow sheds. Historians consider Montague to have been a very fine engineer. He is seen in the picture above shaking hands with his counterpart, Grenville M. Dodge.

General Grenville M. Dodge



Grenville M. Dodge earned his rank for meritorious service during the Civil War and was even wounded on at least two occasions. Dodge's role for the Union Pacific was that of Chief Engineer. His skill and ability were unmatched. Because of the speed at which he could lay track during the war it was said of him "we don't know where General Dodge is, but we know where he's been." Dodge often disagreed with Durant and once, presidential candidate Ulysses Grant was needed to settle a disagreement between the two men.

General John S. "Jack" Casement



John S. Casement was known among his men as "General Jack." He and his brother, Dan, were small men (just over 5 feet tall), but were a bundle of energy and were so tough that many men feared them. Jack was a general in the Civil War and ran his track laying crews like a military unit. Trouble makers could easily find themselves on the wrong end of a bullwhip that the general carried.

Dan T. Casement came from Michigan with his brother Jack. The Casements were a team. Dan was the book keeper and financier. He made sure the bills were paid, and somehow found the money to keep a steady flow of wages to the workers, even at his own expense when necessary. He also made sure that all supplies were ordered and delivered on time to keep the crews busy.



Dan T. Casement

Sidney Dillon held the position of President of the Credit Mobilier Company while also serving as a member of the UP board of directors. He commonly overstepped his bounds to look out for Durant's interests while he was away. Dillon was known for his questionable business practices.

Oliver Ames along with his brother, Oakes Ames, owned a shovel manufacturing company in Massachusetts when they first became involved with the UP. Oliver replaced John Dix as president of the UP, and also served as a United States Congressman. He was heavily involved in the political and financial aspects of the railroad.

Dr. Thomas C. Durant held the position of Vice President of the Union Pacific Railroad. He was a doctor of medicine before he began his career as a railroad man. He eventually came to be thought of as one of the worst robber barons. Durant had a course personality that won him few friends. His shrewd and often underhanded methods helped the Union Pacific to succeed in its early years and made him very wealthy in the process.



The Effect of the Transcontinental Railroad on the Military West

The completion of the first transcontinental railroad in 1869 influenced military strategy and tactics in the West for the remainder of the 19th century in ways that had lasting consequences to the nation. Its primary importance to the government, particularly the War Department, was facilitation of troop movement to provide for military security of the West. The railroads that grew out of the first transcontinental railroad helped neutralize the internal and external threats to the nation.

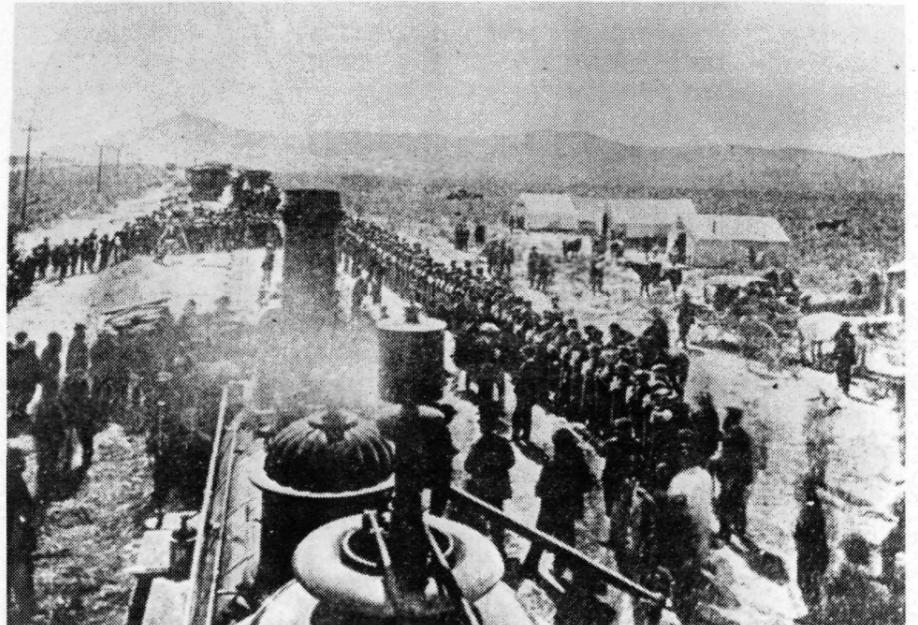
Before the first track of rail was laid, there was a military-railroad connection. Military men, such as Grenville Dodge, conducted some of the surveys before the 1860s. Abraham Lincoln understood the value of railroads to the economic development of the nation. At the outset of the Civil War, President Lincoln knew how important railroads, and especially a transcontinental railroad, would be to the future security of the United States. The transcontinental railroad was the key to securing the rich and strategic West Coast to the Union.

After the Civil War, when construction of the railroad began in earnest, veterans, enlisted men and officers alike, went to work for the Union Pacific. Nine of ten supervisors of the line were experienced military men. Grenville Dodge, a retired Army Officer, learned about building and repairing railroads during the war while he was in charge of construction projects and military railroad operations. General Sherman liked to boast that Dodge could build and repair railroads about as fast as troops marched.

The discipline, experience, and leadership of army veterans like Dodge and the Casement brothers, Dan and "General Jack," was crucial to the construction of the Union Pacific Railroad. Civilian contractors had been able to inspire laying only one mile of track a week; the Casement brothers' veterans reached a rate of one mile a day, two miles a day and eventually up to eight miles a day.

Organized along military lines in squads, platoons, companies, regiments, battalions, and divisions, the Union Pacific crews built the railroad with military efficiency. Using his military connections, Grenville Dodge arranged for 1000 muskets to be issued to the work crews of the Union Pacific for their protection. The armed workers were often able to form firing lines to defend themselves against hostile Indian attacks. It was said of the workers of the Union Pacific that they could form a work gang as quickly as they could form a skirmish line.

The military connection to the transcontinental railroad extended to the highest levels of the Federal Government. The military hierarchy in the War Department saw the importance of the project to the security and prosperity of the nation. The General of the Army, William T. Sherman, devised a plan to keep all hostile Indians north of the Platte River and south of the Arkansas River to provide a safe corridor of operations for the Union Pacific railroad workers. Because of the shrinking size of the Army, however, he was only able to detail



From the Union Pacific's No. 119, two or three companies of the 21st Infantry Regiment at the Last Spike Site on May 10, 1869.

a little over 5,000 troops to protect the workers. Those 1000 muskets and the wartime training and experience of the men were invaluable to the Union Pacific as they toiled across the territory of some of the most war-like natives in North America.

The federal government cut the strength of the regular Army from 55,000 in 1865 to 25,000 or less after 1869. The railroads made the field operations of an army declining in strength much easier. At the same time, the number of forts and isolated sub-posts declined through a process of abandonment and consolidation. None were more isolated than the garrisons stationed in forts and presidios along the West Coast. The railroads facilitated the movement of the smaller army and lessened the impact of the loss of forts and garrisons. They linked these very isolated and vulnerable posts to the rest of the United States and strengthened the American hold on the entire Pacific Coast.

May 10, 1869 can be seen as the true beginning of the settlement of the West and the beginning of the end of the frontier. In the two decades that followed, the West filled with railroads that bound the nation together in a web of iron that stretched from coast to coast and from California to the Puget Sound. The nation could now truly be considered united.

The railroads gave the regular Army a speedy, secure route across the barrier of the "Great American Desert." Because of the railroad, a journey that previously took more than six months overland with large costly wagon trains or six months by ship around Cape Horn now took less than ten days. The railroad achieved the West's military security by transporting men and material

quickly to the Pacific - thus neutralizing the external threat of hostile foreign powers.

Subsequent railroads also played a role in ending the internal threat to the West's military security. They were instrumental in the final defeat of hostile Indian tribes by decreasing the cost and length of Indian Wars campaigns. Directly or indirectly, the military played a significant part in almost every aspect of the planning, construction, protection, and use of the nation's first transcontinental railroad.

It is fitting and symbolic of the military's role in the great project that the telegraph on Promontory Summit sent the signal that electronically fired a salute by one of the large caliber barbette guns at Fort Point in San Francisco Bay and that a battalion of the 21st Infantry Regiment were present at Promontory Summit on May 10, 1869. The military security of the west was no longer a dream but a reality.

Casement's work crews laying track for the Union Pacific in 1866.



The discipline and experience of army veterans was crucial to the construction of the Union Pacific railroad.



From the Central Pacific's Jupiter - 21st Infantry Regiment at the Golden Spike ceremony May 10, 1869, Promontory Summit, Utah Territory.



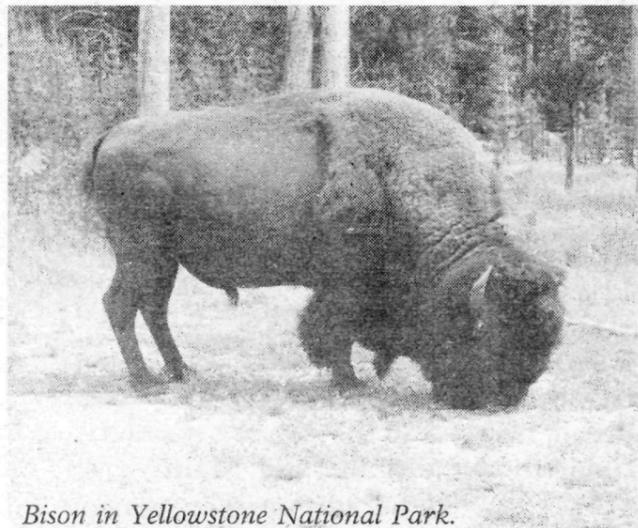
Demise of the American Buffalo

Imagine a land filled not with men, but with beasts—not with highways or houses, but vast grasslands and prairies. This is how the American frontier would have been viewed in the early part of the 19th century. It truly was a place “Where the buffalo roam.” The frontier appeared to its conquerors as vast, untamed, and unalterable. In 1869, the Central Pacific and the Union Pacific Railroad companies bridged the continent with bands of iron. The transcontinental railroad shot like an arrow straight through the heart of the American frontier and ultimately, the American buffalo.

As early explorers began traversing this continent, they found it covered with large bull-like animals. Bearing a close resemblance to the African buffalo, they were incorrectly labeled as buffalo. Since that time, these great animals have borne that name when they are actually a species of bison. The incredible size of these herds amazed early explorers. Their stories were often thought to be exaggerations. It wasn't until these vast herds were viewed with their own eyes that people finally believed the reports.

The Ice Age left North America with wide-open plains filled with lush, green grass. This environment suited the bison perfectly. With few natural predators and ample room for grazing, they found little barring their pervasion of the American continent. Found in areas stretching from Alaska down into Mexico and reaching from the Carolinas to California, there were few places that did not feel the presence of the bison. Early estimates placed their numbers somewhere between 40 and 80 million. With numbers this large the question might be asked, “Where did they all go?”

As the railroads continued to fuel emigration and early settlers began to establish themselves, the bison proved invaluable as a source of food and raw material. They were



Bison in Yellowstone National Park.

“The sooner we get rid of the Buffalo entirely the better it will be for the white man and the Indian too, civilizing the Indian and making him self sufficient.” - Rep. John Hancock



harvested much like any other game animal, and it wasn't long before they were no longer found around the areas of human habitation. The railroads depended almost entirely on bison meat as food for their workers. The world famous Buffalo Bill Cody began his career by supplying these workers with bison meat. As trains began using the rails, the large herds became a nuisance by damaging the railroad grade which, in turn, caused delays. Clever devices such as the pilot, or cowcatcher, weren't enough to move the bison and damage was commonplace.

It was the completion of the railroads and the increase of trade across the continent that would mean the ultimate demise of the bison population. Due to the railroads, it was now relatively inexpensive and extremely fast to ship raw materials to eager eastern manufacturers. Positioned through a seemingly inextinguishable natural resource, the plains were flooded with individuals ready to take advantage of the situation. It was at this point that the true slaughter of the bison commenced.

There were vast sums of money to be made by the “buffalo hunter.” If a hunter could kill and process 100 bison a day, he might make up to \$6000 per month. This was a substantial amount considering that the individuals who worked so hard to complete the transcontinental railroad made about \$30 a month. The lure of a quick dollar and wild adventure drew many hunters out onto the plains. At one point there were as many as 2000 buffalo hunters in business.

Overhunting began to take its toll on the great bison herds. The hunters could not comprehend, or

did not care, that the herds were starting to thin out. Quite simply, the hunters believed that the animals were moving around and migrating. It was unimaginable that the numberless herds could be diminished at all by any amount of hunting. The hunters continued to move from herd to herd until it became increasingly difficult to find them.

Just as the presence of bison was part of the scenery of the American West, their killing was also becoming a part of the American lifestyle. They were shot as trains rolled past the great herds. Hunting excursions were also commonplace. Just about anyone who desired to shoot a bison could.

Piles of bison bones ready to be shipped by rail for processing.



There were those, however, who did regard the diminishment of the bison herds with apprehension. With the elimination of the bison, the Plains Indian tribes saw their lifestyle disappearing. This was alarming considering that this would mean a loss of a good part of the material on which they subsisted. Sacred to many Plains people, the bison provided food, clothing, shelter, tools and utensils. Nothing was wasted.

Their culture and lifestyle threatened, the Plains Indian tribes fought to protect their way of life, and the bison that sustained it. Warriors harassed settlers, waylaid the traveler, and impeded the

progression of the railroad. But, in the end, they could not resist the forces of westward expansion. Driven by sentiments such as those expressed by Representative John Hancock of Texas, the destruction of the bison continued unabated and the traditional nomadic life of the Plains tribes disappeared with the buffalo.

Being assaulted on all sides, it's not surprising that the bison disappeared. By 1883, there were only a few isolated herds left. These weren't the large herds of the early 1800's, but small herds running for their lives. By the early 1890's only 400-1000 of these animals could be found anywhere. These once large and thought to be inextinguishable herds had indeed been extinguished. Only a mere shadow of the original herds could be found anywhere. Because of the mismanagement of one of our nation's tremendous resources we were close to losing it.

At a time when the fate of the bison seemed sealed, a new way of thinking about the environment began to take shape. Individuals became interested in the preservation of our natural treasures and resources. In regards to the American bison, the government passed legislation prohibiting their killing in 1894. This was a time of great change concerning the ideology of the

American people.

Today we recognize that as a people we had nearly lost a valuable resource and many aspects of American culture and lifestyle had changed. As a growing nation, we sacrificed some of the things that made it unique in the name of progress. Now it is more important than ever to evaluate and mitigate the effects of our actions on our natural and historical resources. We must also be vigilant in protecting those areas that have been set aside for our enrichment. We cannot afford to lose any more of these treasures to neglect or indifference.



Golden Spike Named "Park of the Year" by Western National Parks Association

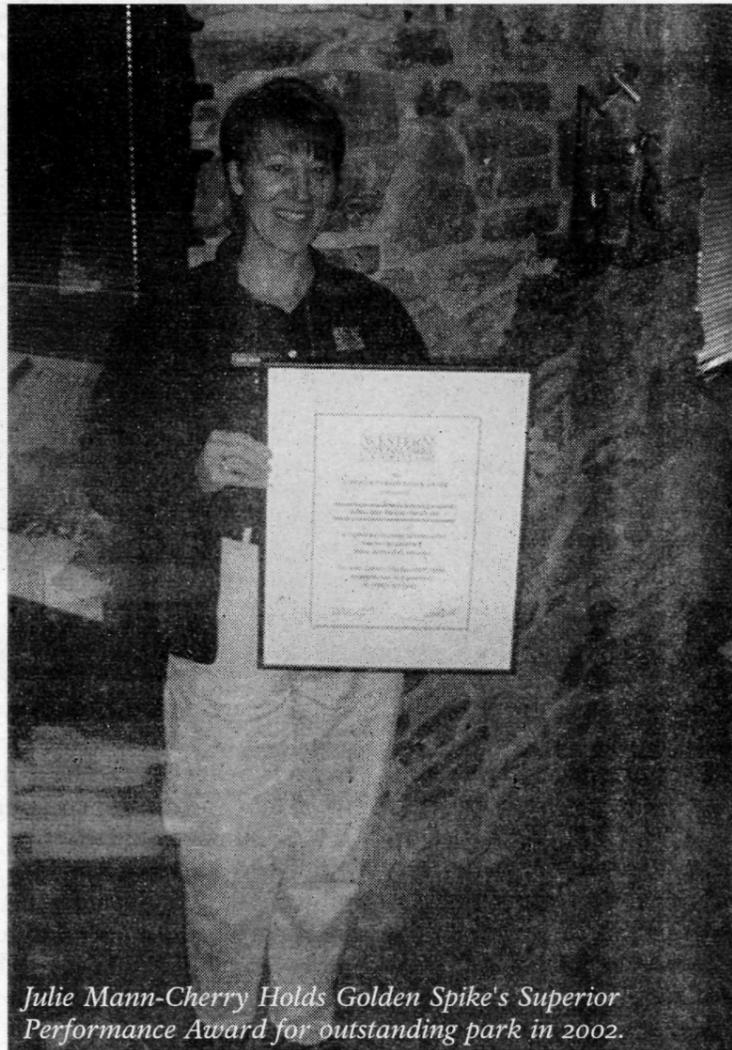
The Board of Directors of Western National Parks Association (WNPA) selected Golden Spike National Historic Site to receive a superior performance award as WNPA's outstanding park in 2002. WNPA, a nonprofit organization, operates in 63 National Park Service areas in the western part of the country.

The award recognized the park's efforts to keep the public informed about park issues. Within a week of the 2001 Fort Ranch Fire, the park had written and published a four-page insert to the park newspaper about wildland fire. The park consistently issues local and regional press releases about park issues and events. In addition, during a time when park visitation to National Park Service areas dropped around the west, sales at Golden Spike increased by 5%.

"This is the second award that Golden Spike National Historic Site has received from WNPA this year," stated superintendent Mary Risser. "Bookstore manager Julie Mann-Cherry was selected as July's employee of the month. She expanded the selection of sales items and created attractive displays. There was a 310% increase in sales during the Olympics over the previous February, and May 10th sales were up more than \$1,000 from the previous year even though attendance was slightly down. These increases can be attributed to Julie and the displays she designed for the special occasions."

WNPA, formerly Southwest Parks and Monuments Association, was founded in 1938. As a nonprofit organization authorized by Congress, WNPA publishes interpretive material that is available through sales or free distribution. All net proceeds support the interpretive and research programs of the National Park Service.

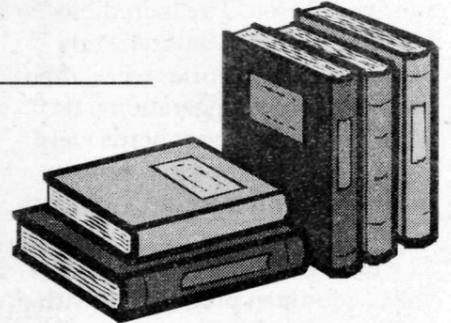
**WESTERN
NATIONAL PARKS
ASSOCIATION**



Julie Mann-Cherry Holds Golden Spike's Superior Performance Award for outstanding park in 2002.

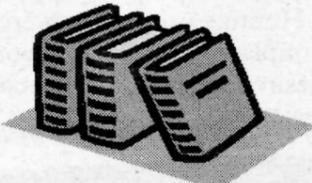
New Additions and Editions to the Bookstore

Bookstore manager Julie Mann-Cherry is diligent in searching for new and unique items to add to the park's bookstore. Hours are spent perusing catalogs, calling vendors, and asking for review copies and items. Then begins the process of determining if it should be a sales item. Although a slow process, in the end, just like visiting a National Park Service site, you can't go wrong in visiting the bookstore. You'll find books and educational materials that you may not find elsewhere. Some of our "old standbys" include *Golden Spike* and *Hear that Lonesome Whistle Blow*. Recent releases are *Promontory* and *Victorian Internet*. We hope you are impressed with our current selection as Julie and the park staff continually try to improve it.



Manager's Picks

Prices subject to change



Nothing Like it in the World
The story of the men who built the trans-continental railroad. By Stephen Ambrose \$16.00 paperback, \$28.00 Hardback, \$26.00 Audio, \$32.00 CD

Empire Express
Captures three dramatic decades in which the United States doubled its size and began to discover a new national identity. Culminates in driving the Golden Spike. \$18.00 paper, \$34.95 Hardback

A Great and Shining Road
The Epic Story of the Transcontinental Railroad. \$17.50

Westward to Promontory
A pictorial displaying Andrew J. Russell's work, the official photographer of the Union Pacific. \$5.95

Strangers from a Different Shore
A history of Asian Americans through narratives, personal recollections, and oral testimonies. \$16.95

For Children & Young Adult

Dear America: The Great Railroad Race
Story of the railroad told through the fictitious diary of a young girl. \$10.95

Death of the Iron Horse
Based on a true story about the Cheyenne Indians and their experience with the steam engine forging to the west. \$5.99

Across America on an Emigrant Train
Robert Louis Stevenson's account of his journey across America. \$18.00

My Name Is America: The Journal of Sean Sullivan
A Transcontinental Railroad Worker; Nebraska and Points West, 1867. \$10.95

The Transcontinental Railroad
A concise history of building the Transcontinental railroad for children. \$19.50

Framed & Matted B/W Prints of Jupiter and No. 119
Three pins, the Union Pacific logo, a lantern and small gold spike, accent the set. \$34.95 to \$119.95

Cobblestone: The First Transcontinental Railroad, 1869
History magazine for children. \$4.95

Examples of WNPA-funded projects are the historical flags and period clothing used at Golden Spike, production of the book *Rebirth of the Jupiter and the 119* and the video *Tales of the Rails*.

Become a member of WNPA and receive a 15% discount on merchandise at most cooperating associations. Membership information is available at the front desk or write to:

Western National Parks
Association
12880 N. Vistoso Village Dr.
Tucson, Arizona 85737

Everything sold at WNPA's Golden Spike outlet is available through mail order. To make mail order purchases or to request a listing of sale items please contact:

Bookstore Manager
Golden Spike NHS
P.O. Box 897
Brigham City, UT 84302
Ph: (435)471-2209 ext. 11
e-mail: Julie_Mann-Cherry@partner.nps.gov

JUST FOR FUN

National Park Pop Quiz

1. Old Faithful, one of the most famous natural wonders of the world, is a feature of this park that became the first National Park in 1872.

2. On April 12, 1861, a mortar shell exploded over this fort signaling the beginning of the Civil War. Today, it is one of many National Park Service areas that commemorate a Civil War battle site.

3. This site preserves the home of the 33rd President of the United States, famous for his honesty and plain speaking.

4. Carved into the face of a 60-million-year-old granite mountain are the portraits of four American presidents at this inspirational National Park Service site.

5. This park preserves some of the best archeological sites of the ancestral Pueblo people called the Anasazi. The remains of their stone cities are sheltered in the recesses of canyon walls in various parts of the park.

6. Twenty-five miles of barrier island preserve the natural beach, dune, marsh, and lagoon habitats for many species of birds. The Kennedy Space Center occupies the southern end of the island.

Can you name the state where each of these National Park Service sites is located?

1. _____, _____, and _____
 2. _____
 3. _____ 4. _____
 5. _____ 6. _____

Find out more about your National Parks on the World Wide Web

www.nps.gov

Did you know? Today there are almost 400 National Park Service sites. "National Park" is the general term for these sites, but each one has a certain designation. There are many different park designations including, National Park, National Battlefield, National Historic Site, National Memorial, National Monument, National Seashore and National Scenic Trail.

Use the following clues and word list to complete the RR crossword puzzle

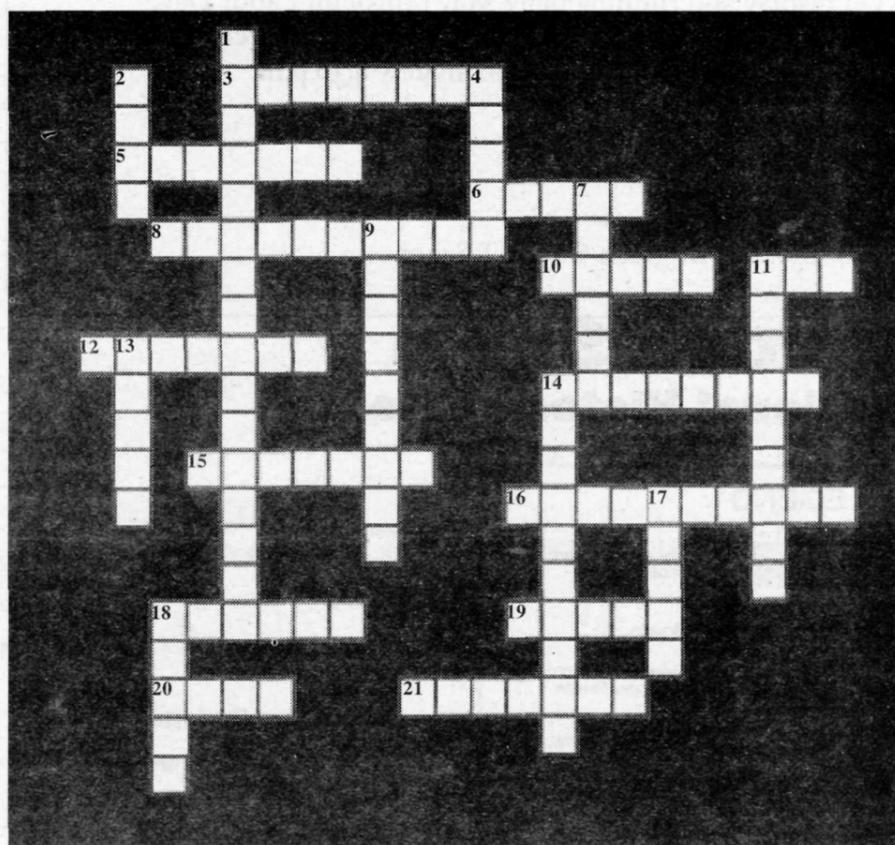
Across

- 3. Iron Way
- 5. CPRR Workers
- 6. Roadbed for Tracks
- 8. Iron Horse
- 10. UPRR Workers
- 11. Most Miles of Track in 1 Day
- 12. CPRR Engine
- 14. CPRR President
- 15. Eastbound, ___ Pacific
- 16. ___ Summit
- 18. Ceremonial "Last Spike"
- 19. May ___ Eighteen Sixty-Nine
- 20. Named for Ute Indians
- 21. Hear the Lonesome ___ Blow

Down

- 1. 1st ___ Railroad
- 2. Chinaman's ___, Formation
- 4. UPRR "General" Engineer
- 7. UPRR Vice-President
- 9. To Send a Wire
- 11. Utah in 1869
- 13. Westbound, ___ Pacific
- 14. CPRR Headquarters
- 17. UPRR Headquarters
- 18. Standard ___ Tracks

Durant, Tenth, Golden, Chinese, Sacramento, Union, Arch, Territory, Dodge, Jupiter, Irish, Locomotive, Grade, Transcontinental, Central, Stanford, Ten, Railroad, Gauge, Promontory, Utah, Whistle, Omaha, Telegraph



To become a Junior Engineer at Golden Spike National Historic Site you must show that you have learned about the transcontinental railroad and its importance in American history. Pick up a worksheet at the front desk, fill it out correctly, and attend at least one ranger program or film. Return the worksheet to the front desk to be checked and receive your prize.

Transcontinental Trivia

- 1. Where was the golden spike driven?
 A. Promontory Point B. Ogden
 C. Promontory Summit D. Corinne
- 2. Where did the Central Pacific start from?
 A. San Francisco B. Sacramento
 C. Portland D. Omaha
- 3. Where did the Union Pacific start from?
 A. Omaha B. New York
 C. Oakland D. San Francisco
- 4. When was the railroad completed?
 A. 1896 B. 1869
 C. 1863 D. 1836
- 5. What two locomotives met at Promontory on May 10, 1869?
 A. Juniper and 119 B. Jupiter and 116
 C. General and Antelope D. Jupiter and 119
- 6. T or F: There were 4 precious metal spikes presented at the ceremony.
- 7. T or F: Leland Stratford was the President of the Central Pacific Railroad.
- 8. T or F: The most track laid in a single day was 10 miles and 56 feet.
- 9. T or F: The Union Pacific laid the most track.

1. Yellowstone National Park - Wyoming, Idaho, Montana 2. Fort Sumter National Monument - South Carolina 3. Harry S Truman National Historic Site - Missouri 4. Mount Rushmore - South Dakota 5. Mesa Verde National Park - Colorado 6. Canaveral National Seashore - Florida

ANSWERS: 1. C - see p. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

ACTIVITIES

Golden Spike National Historic Site



Visitor Center

Hours: 9:00 a.m. -5:30 p.m.

Closed: Thanksgiving, Christmas, and New Year's Day, and Mondays and Tuesdays October 1 through April 30.

Steam Locomotives

On display and running daily May 1 through Labor Day.

Locomotives arrive at Last Spike Site approximately 10:30 a.m. and depart for the night approximately 4:30 p.m.

Contact Us

435-471-2209 ext. 18

www.nps.gov/gosp

P.O. Box 897 Brigham City, UT 84302

Special Events

Anniversary Celebration May 10

Railroader's Festival Second Saturday in August

National Park Service's Birthday

August 25

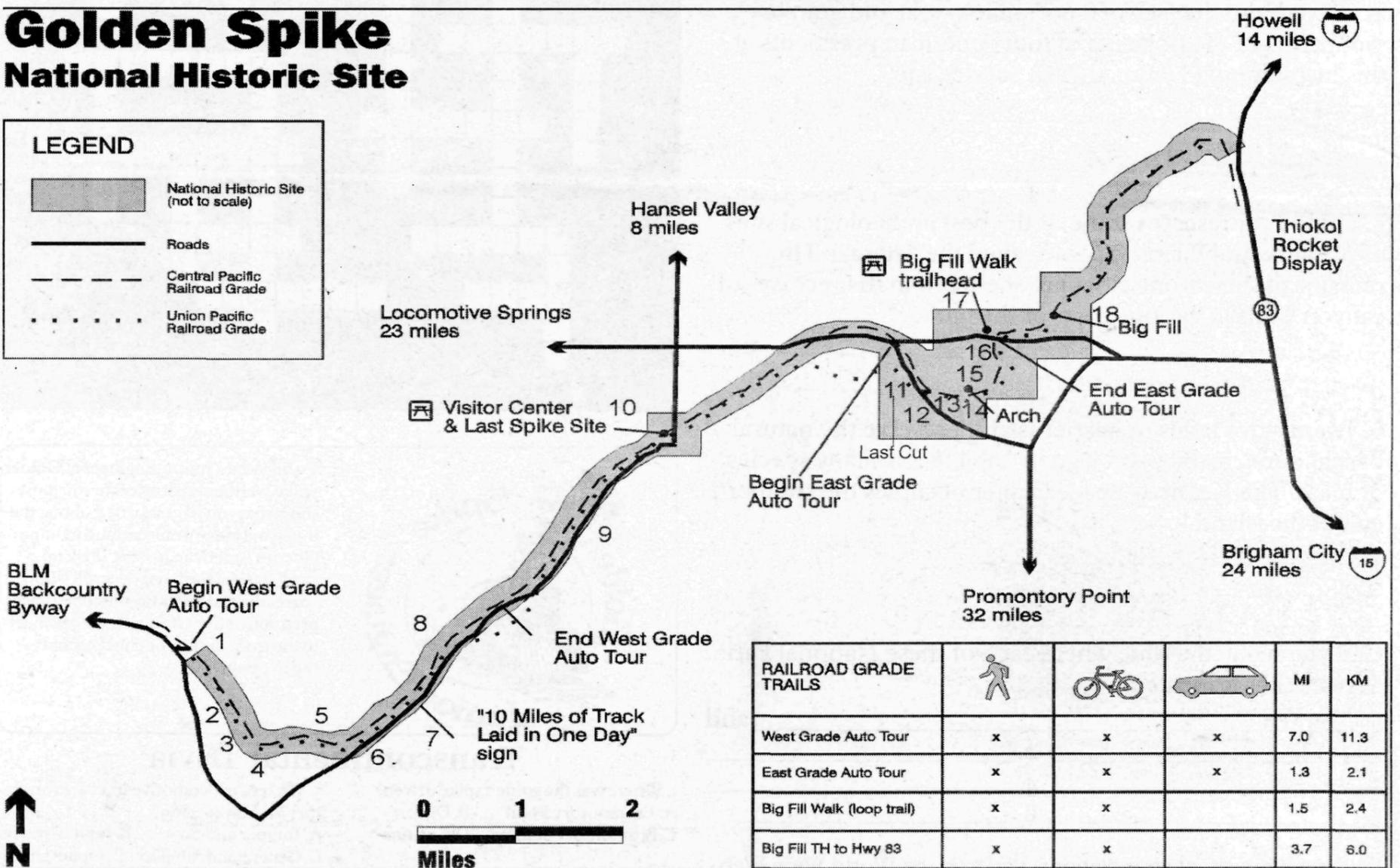
Winter Film Festival Friday, Saturday, & Sunday between Christmas and New Year's



Golden Spike National Historic Site

LEGEND

	National Historic Site (not to scale)
	Roads
	Central Pacific Railroad Grade
	Union Pacific Railroad Grade



West Tour

- The Last Climb:** The west slope of the Promontory Mountains.
- Parallel Grading:** These are a reminder of the great race to Promontory.
- Cut and Fill:** Rock blasted from cuts was used to fill in low areas.
- Stair-Step Cut:** A method used to excavate several levels at the same time.
- A Hand-Built Railroad:** All

The Promontory Trail Auto Tour

- work was done by hand.
- Sidings:** The wider grade indicates a siding once existed here.
- Ten Miles In One Day:** A record that has never been beaten.
- Gravel For Ballast:** A borrow source is seen on the left.
- Approaching the Golden Spike:** The completion point for the railroad.

- An Unlikely Meeting Place:** Promontory Summit, Utah Territory.
- Union Pacific's Last Cut:** A short walk will take you to this cut.
- Trestles and Fills:** A stone culvert can still be seen here.
- Blasting:** Deep rock cuts were drilled and blasted with hand tools.
- Choosing a Route:** The railroad was routed north of the Great Salt Lake.

East Tour

- Natural Memorial:** This formation is known as Chinamen's Arch.
- The Steepest Grade:** The rise here is 1.7% or 90 feet per mile.
- More to Discover:** Turn left here if you wish to take the Big Fill Walk or return to the visitor center.
- Big Fill and Big Trestle Site:** Take the Big Fill Walk to this location (1.5 miles round trip).