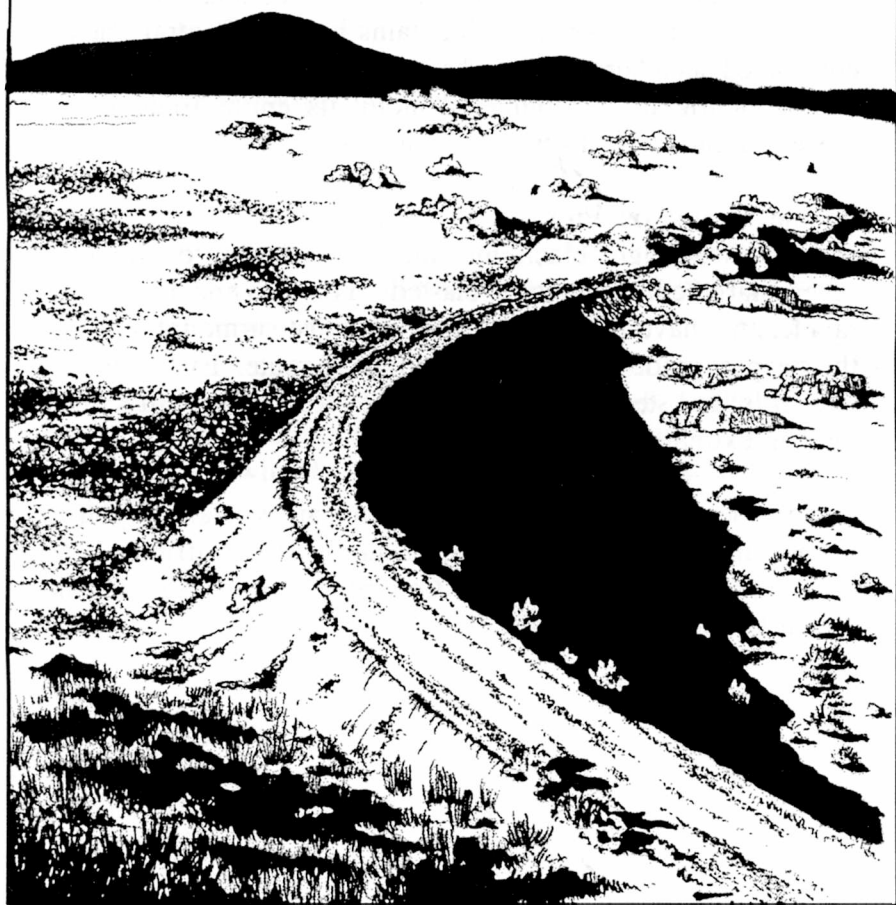


Golden Spike National Historic Site

A guide to

The Big Fill Trail



During the first months of 1869, the valley to the East was filled as far as can be seen with construction camps of the Union Pacific and Central Pacific Railroads. Many of these camps became short lived "Hell-on-Wheels" towns such as Deadfall, Murder Gulch, Last Chance, Painted Post, and Junction City, the largest town in Utah Territory west of Ogden. Today, virtually nothing remains of these construction camp "towns"; however, the workers' legacy of a hand built railroad has been preserved.

Imagine being one of the already weary workers preparing to challenge the Promontory Mountains. Not since tunneling through the Sierra Nevada Mountains has the Central Pacific confronted such hard work. The most difficult construction the Union Pacific has encountered along its entire route is the Eastern approach to Promontory Summit.

As the assault on Promontory begins, you and your fellow workers face tough "blacklime" limestone rock, through which several large cuts have to be blasted. You also encounter deep ravines that have to be filled, and you must surmount some of the steepest grade on the Transcontinental route. Even with the cuts, fills, and steep grade, conquering Promontory will require making extremely sharp curves.

Hiking the following 1 1/2 mile loop trail will allow you to further appreciate some of Railroading's most difficult hand hewn achievements, including Central Pacific's Big Fill and Union Pacific's Big Trestle.

BEFORE YOU START:

We at Golden Spike National Historic Site want you to enjoy your visit. A few precautions will help toward having a safe and pleasant experience.

Promontory's weather varies. During summer, you can expect sun, wind, and temperatures well into the 90°F range with little or no shade on the trail. During fall and spring, you can expect wind and quite chilly temperatures. It is advisable to wear a hat and carry adequate drinking water. Insects such as ticks, ants, and mosquitoes are also common.

One, or both railroad grades may be hiked, but please watch your step at all times. Uneven surfaces are common, especially on the well eroded Union Pacific grade which is rough and rocky. The crossover between the grades at the Big Fill/Big Trestle is steep with loose rock and dirt. The Central Pacific grade is an easy walk.

Be thoughtful of nature. Stay on the grades or marked trails at all times. Leaving the trail increases the threat of erosion and encroaches upon plant and wildlife habitat.

While hiking, remember, rattlesnakes have the right-of-way. Snake sightings along the grades are rare; however, should a snake, or any wildlife be encountered, do not disturb, harm or kill the animal.

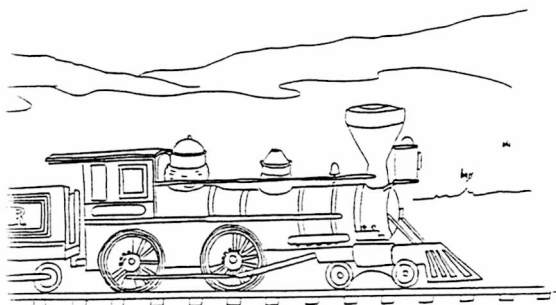
In addition, metal detectors, firearms, and open fires are strictly prohibited. Collecting or disturbing artifacts, plants, signs, or markers is also illegal.

Now, proceed through the gate, past the box containing the Big Fill Walk Register (please, sign the register as you return), and onto the actual 1869 Central Pacific Railroad grade. Markers along the correspond to the following explanations. Markers are the same on both grades.

ON THE TRAIL:

#1 - Directly across from where you step onto the grade is a plaque commemorating the "Orange Special" wreck. This wreck was due, in large part, to the steep 1.6% grade (85 feet of rise per mile) that continues across the paved road. On the entire Transcontinental route, only a short section of track near the summit of the Sierra Nevada Mountains was steeper. All freight trains and many long passenger trains required at least one helper, or "hog" locomotive to assist them both up and down Promontory.

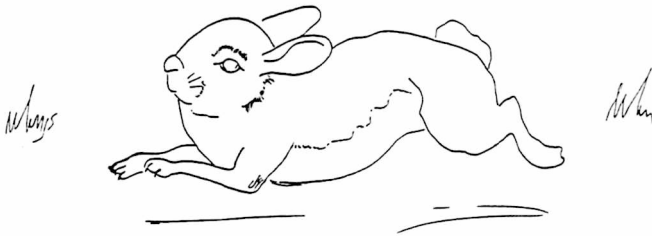
Continuing along the grade, approximately 1/8 mile from the wreck site, is a short crossover trail to the Union Pacific Railroad grade. From this point, you may take either grade.



#2 - Close to the crossover is a single large juniper tree, one of very few trees of any kind at Golden Spike. Original settlers to Utah mistakenly referred to this type of tree as a cedar. Although there are not many trees, other plant and animal life abound in the Park.

FLORA AND FAUNA:

#3 - No matter how hostile Golden Spike's desert environment becomes, some form of living plant can be found in abundance. A recent plant survey identified at least forty-seven different species within the Park. Most common are Sagebrush and Rabbitbrush, several types of grasses, and Russian Thistle (otherwise known as Tumbleweed). Some beautiful seasonal examples of Promontory flora are sunflowers, flowering cacti, white or lavender Morning Glory, and the Sego Lily, Utah's State Flower.

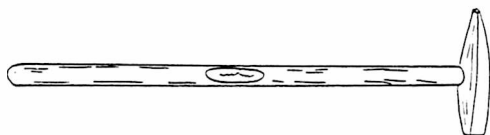


#4 - Sighting wildlife upon the grades is not common; however, tracks, trails, droppings, burrows, and nests may be seen as you hike. Some of the many mammals and birds living in this area are: mice, rabbits, weasels, badgers, deer, antelope, coyotes, bats, vultures, Red Tailed Hawks, Northern Harriers, Golden and Bald Eagles, Kestrel Falcons, Meadowlarks, owls, raven, swallows, grouse, chukkers, pheasants, California Gulls (the Utah State Bird), and numerous migratory waterfowl.

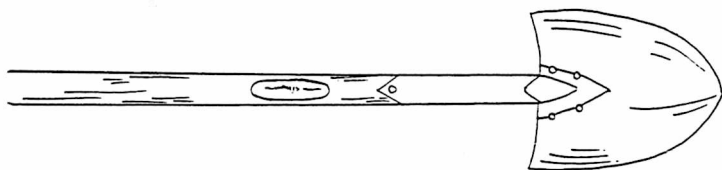
Please, be mindful of the living and historic resources at Golden Spike National Historic Site. As you can see by the evidence of railroad construction, human effects on nature can last generations.

CUTS AND FILLS:

#5 - As you continue on either grade, you do so on one of the many fills that were necessary to bring the route within the required grade. When possible, material for the fills came from cuts like the ones in front of you.



To make the cuts, a two man team called "double jackers" drilled holes in the near solid rock using a long, narrow drill rod which was repeatedly struck with a heavy sledge hammer, or double jack (evidence of this process remains today in long, vertical drill marks along the cut walls). After the hole was drilled, a "powder monkey" would fill it with black powder, carefully tamp and fuse the powder, and set off the charge. A successful blast would reduce the rock to proper size to be shoveled into mule drawn dumpcarts and taken to the fills.



The entire cut procedure was done in a stair step fashion, enabling several crews at different levels to be working on the cut simultaneously. Evidence of stair step construction may be found during your walk and also along the Promontory Trail Auto Tour.

QUARRIES:

#6 - When a fill required more material than was available from the cuts, small quarries were dug from adjacent hillsides. Several quarries are located throughout the Park.

In an alternative to digging a quarry, grading crews of one railroad simply helped themselves to any excess material the other railroad wasn't using at the moment. Look for evidence of this "borrowing" along the walk.

POINT OF VIEW

#7 - Between here and marker #8 is one of Golden Spike's most panoramic viewpoints. The valley before you is where the construction camps of both railroads were scattered. Junction City was located approximately 2 1/2 miles to the northeast where the paved road below you intersects Highway 83 just across from Thiokol Corporation's Solid Rocket Motor plant.

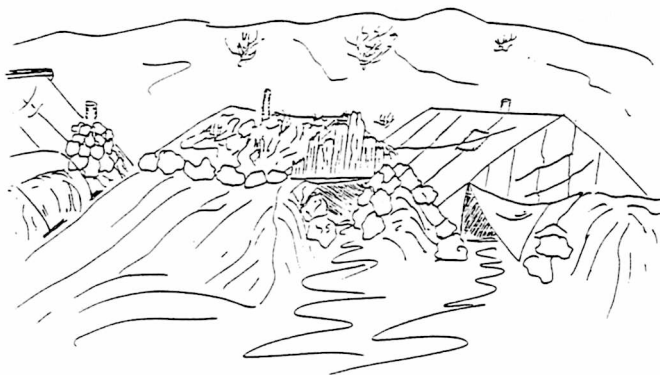


From this vantage point can be seen the Salt Creek Waterfowl Management Area, Bear River National Wildlife Refuge (currently under restoration from flood damage in the early 1980s), Willard Bay Reservoir, and the Great Salt Lake. Across the valley rise the Wasatch Mountains. If you look carefully, you can trace the Central Pacific Railroad grade out across the valley toward Corinne, Utah.

AFFORDABLE HOUSING:

#8 - Many natural caves of varying sizes have formed along Promontory's slopes. Some of these caves were used by railroad workers as temporary housing during the final days of construction. It is likely that this cave made inexpensive quarters for some weary workers, and perhaps others over the years.

Caution! *For your safety, and to prevent severe erosion, please do not attempt to approach the cave from the Central Pacific grade. The cave can be reached safely only from the Union Pacific grade.*

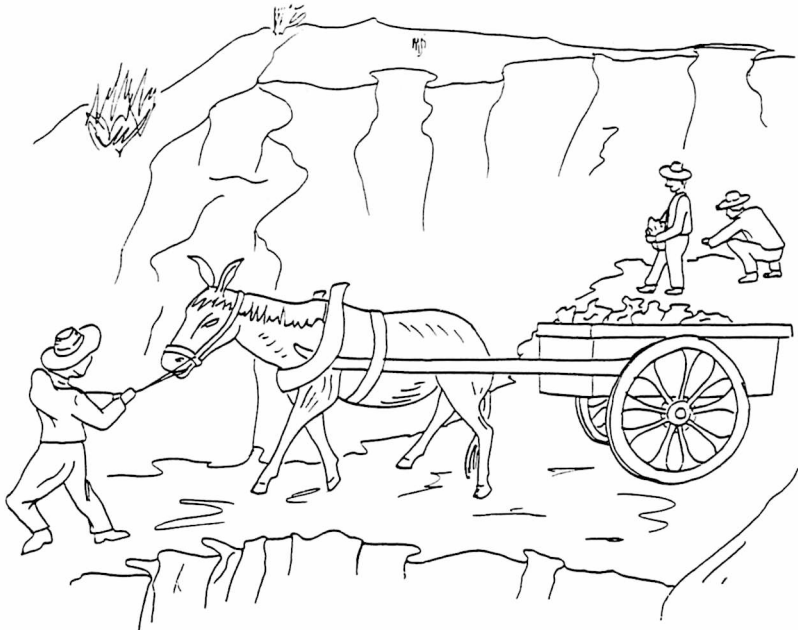


For years it had been rumored that an entire family had taken up housekeeping in one of Promontory's caves during the Railroad's construction. In 1988, Edwin Hancock clarified this rumor. According to his account, Edwin's grandparents, Earl Ewing and Anna Jenkins, had met and were married while working for the Union Pacific Railroad (his grandmother was a cook, his grandfather was a construction engineer). Just before completion of the railroad, with his wife in the final days of pregnancy, Earl found a large Promontory cave and moved Anna to their new "home." Edwin's mother, Ella, was born in the cave on April 13, 1869 and was in her mother's arms during the Golden Spike Ceremony on May 10th.

A FALSE START:

#9 - The approaches to both the Big Fill and Big Trestle required blasting massive cuts; however, as you come to the west end of these structures, you will notice three cuts instead of just two. The left and right cuts are complete, but the center cut is only about a third finished, with stair step construction clearly visible.

When the Union Pacific discovered they would be late getting started on the Big Trestle, crews were sent ahead to begin work on the trestle's cuts. Whether due to poor communications, a surveyor's bad day, or whatever, when workers began the west end cut, they were actually about seventy-five feet closer to the Big Fill than they should have been. After considerable effort had already been expended on the "false cut," the error was recognized and workers shifted to the proper location. You can get a closer view of the worker's efforts on the cut's other side where it intersects the grade crossover from the Big Trestle to the Big Fill sites.



THE BIG FILL:

#10 - As late as December, 1868, Central Pacific surveyors had planned a route that would require an eight hundred foot tunnel to be blasted through the east face of the Promontory Mountains. Upon personal inspection of the proposed site, CP President Leland Stanford overruled the idea as being too costly and time consuming. A new route was surveyed that would avoid tunneling, but could not avoid Spring Creek ravine. In February, 1869, the Mormon construction firm of Benson, Farr, & West, under contract to the Central Pacific, began work on the Big Fill.

Imagine placing the first small, mule drawn dumpcart load of fill material at the bottom of the ravine below you. The work that followed took over two months of intense effort by two hundred and fifty dumpcart teams and over five hundred workers. Day and night, load after load of fill totalling over ten thousand cubic yards would be required to conquer the five hundred foot span at a depth of one hundred seventy feet.

Six months after the completion of the Pacific Railroad, Central Pacific gained control of the line from Promontory Summit to Ogden, Utah. Ogden then replaced Promontory as the terminus for both railroads, and track was removed from the Union Pacific's Big Trestle and placed on the Big Fill.

The Big Fill has been in constant use since becoming part of the main line. It was first a railroad route, then, after removal of all rails in 1942, it became a rancher's access road. Since 1965, it has been a part of Golden Spike National Historic Site. That the Big Fill has remained usable for over 120 years is a lasting tribute to 1860's railroad construction.

THE BIG TRESTLE:

#11 - Just one hundred fifty feet away from the nearly completed Big Fill, Mormon contractors Sharp & Young began building Union Pacific's Big Trestle on March 28, 1869. Since the Union Pacific was already behind the Central in construction at Spring Creek ravine, and completion of the Transcontinental Railroad appeared imminent, it was decided that construction speed, not sturdiness, was the goal. On May 5, just three days before the scheduled Golden Spike Ceremony, and only thirty-six days since building began, the last spike went into the eighty-five foot high, four hundred foot long Big Trestle.

Noted one newspaper reporter after going across the Trestle, "Nothing I could write would convey an idea of the flimsy character of that structure." Another correspondent indicated, "It will shake the nerves of the stoutest hearts of railroad travellers when they see that a few feet of round timbers and seven-inch spikes are expected to uphold a train in motion."

In all fairness to the Union Pacific, the Big Trestle was never intended to be a permanent structure. Had Union Pacific been granted final control of the line from Promontory to Ogden, plans called for replacing the trestle with UP's own Big Fill. When Central Pacific was given control of the line, the trestle was indeed abandoned in favor of CP's already sturdy Big Fill. Within a few short years, nothing remained of the Big Trestle except for Andrew J. Russell's photographs and the abutments you see today.

THANK YOU:

We hope you enjoyed your walk along this historic trail at Golden Spike National Historic Site. Please return soon.

CENTRAL PACIFIC GRADE

UNION PACIFIC GRADE

Big Trestle Abutments
 11
 Big Fill 10
 Crossover: UP to CP
 9 False Cut

8 Cave

7

6

5

4

3

2

Crossover: CP to UP

1

BIG FILL TRAIL LEGEND

1. Plaque: "Orange Special Wreck"
2. Juniper Tree
3. Flora
4. Fauna
5. Cuts and Fills
6. Quarries
7. Viewpoint
8. Cave (access only from UP grade)
9. False Cut
10. The Big Fill
11. The Big Trestle site

CAUTION:

Please stay on the trail. These railroad grades can quickly fall victim to erosion. It is advisable to wear a hat and carry drinking water.

Though it is rare to see a snake on the grades, remember, Rattlesnakes have the right-of-way. Never attempt to kill a snake. Walk wide around it, allow it to flee, or turn back yourself.



Firearms and metal detectors are unlawful in the Park. Camping, open fires, collecting artifacts or plants, or defacing property is also illegal.

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PARKING