Take a walk into the past and into the heart of Kicking Horse Pass National Historic Site. Discover a story of iron will that forged this nation. Step back in time to 1871 when the fledgling Dominion of Canada had a dream...that the nation would stretch from sea to sea. British Columbia would join, but a railway must be built to link the new province to the rest of Canada.

Stand at the trailhead with your feet rooted in the past. At this very place in 1884, you would have been surrounded by the canvas tents of a busy Canadian Pacific Railway workman's camp. Imagine the smell of fresh baked bread, bean stew and sweat-soaked clothes; the sound of hob-nailed boots and men's voices singing around the campfire...

"For some of us are bums for whom working has no charms, And some of us are farmers a-working for our farms, But all are jolly fellows who come from near and far, To work up in the Rockies on the CPR"

from "The Western Avernus" by Morley Roberts, a rail worker in Kicking Horse Pass, 1884.

Follow in the footsteps of these rail workers. Start your walk in the past from Kicking Horse Camp­ground in Yoho National Park. Watch for where today's narrow trail joins the broader tote (supply) road of 1884. 7 stops along the way are marked with this symbol.

Iron Men bring Iron Horses

In the summer of 1884, the boot steps and voices of a hundred men could be heard on their daily trudge along this tote road and past this very point. Adventure, danger and exhaustion were their companions. Long, hard days were filled with the threat of nitro-glycerin explosions and falling rocks and trees.

CPR workers in this area were mostly immigrants from Europe earning less than $2 a day. They were far from their families, in a remote and wild place, working to fulfill the promise of a railway across this vast land.

As you approach Stop 2, can you locate where today's trail leaves the old tote road? Look around. Imagine the job of an explorer or surveyor in the 1800s. A route for the railway must be found through this daunting mountain landscape.

James Hector of the Palliser Expedition explored this area in 1858 and was convinced it was too steep and rugged for a railway. The river and the pass were named after Hector was kicked in the chest by his horse about 25 km southwest of here.

During the 1870s and early 1880s surveyors Walter Moberly, John Macoun and Major A.B. Rogers searched the mountains for the best railway route. Jasper's Yellowhead Pass was favoured, but Kicking Horse Pass connected more directly to the Pacific coast and reinforced Canadian sovereignty near the American border.

This choice was not without consequences, some of which Canadians still struggle with today! As you continue, you will begin to hear the sound of cars and trucks on the Trans-Canada Highway above.
3 A Vital Link Forged

Many Canadians and the goods they purchase pass by this very point. The decision to build through Kicking Horse Pass has had a great effect on western Canada. Towns like Calgary, Field, Golden and Revelstoke developed along the rail line. Tourism, mining, forestry and prairie farming flourished. Today the pass continues to provide a vital link for the railway and the Trans-Canada Highway (completed in 1962).

Connecting Canadians from coast to coast continues to present challenges despite today's technologies. Steep slopes, rock slides, ice, snow and avalanches in Kicking Horse Pass are still a danger today!

The trail now takes you to the original rail bed of 1884. As you get closer, watch for a layer of soot and cinders in the bank cut along the trail.

A passenger train of the early 1900's on the Big Hill.

4 Uphill Grind

Standing here in 1885 you might have choked on the thick smoke belching from steam locomotives as they toiled up the steep grade. Cinders (gritty deposits of soot and cinders) still lie inches deep here, the legacy of 50 years of wood and coal-fuelled trains.

You might also have been surprised at how slowly the sound of the locomotives passed by. At first it took four engines to push 14 freight cars up to the top of the pass, 400 vertical metres above the town of Field. Nine powerful 2-8-0-Baldwin locomotives were built in 1885 especially for work on the Big Hill (illustrated on title page).

Pushing trains up the steep slope was certainly a challenge, but how safe was the descent?

5 Downhill Headaches

You are standing on the “Big Hill”, one of the most formidable slopes in railway construction history. It may not look steep, but the 4.5% grade is double the usual maximum!

In 1884, under government pressure to finish the railway, CPR knew that carving a gradual descent through the difficult geography here would cost time and money. The Big Hill 4.5% grade was a temporary solution. By June 1885 the railway was completed, uniting Canada from sea to sea, but the Big Hill of Kicking Horse Pass would become a rail-way man’s nightmare. Safety measures included brake inspections, a downhill speed of 6 mph and 3 runaway lanes manned around the clock. It is a tribute to CPR crews that passengers travelled safely on the Big Hill for 25 years.

Look up the forested slope here. Through the clearing you will see one of the solutions to the Big Hill headache - a portal of the Upper Spiral Tunnel. The trail continues down this CPR service road built on the original Big Hill rail bed. As you continue, imagine a train heading downhill and out of control in the year 1886.

Can you find the next runaway spur line?

6 Runaway Rails

An engineer of a runaway train in 1886 knew that safety switches were always set to take descending trains onto the runaway spur lines. There was always a switchman stationed nearby to allow trains to continue on the main line but only if it was safe.

This is the #3 safety spur line. Runaway trains turned left here and slowed on the uphill grade of the spur line, avoiding serious accidents. Follow the trail on this spur line to a mysterious wreckage at the heart of Kicking Horse Pass National Historic Site.

7 End of the Line

If only this abandoned locomotive could tell us the full story of its life....

It’s a narrow gauge locomotive, but why was it abandoned in the Canadian Rockies, where only standard gauge railways have operated?

Historic photos show that narrow gauges were used to construct the Spiral Tunnels (1907-1909).

This Baldwin 2-6-0 steam engine helped excavate two tunnels which solved the problems of the Big Hill. The route was lengthened and the grade reduced to 2.2%. Still in use today, each tunnel gradually climbs and forms a loop before emerging into the mountain air. It took 1,000 men, 75 railway cars of dynamite and $1.5 million to build the engineering marvel called the Spiral Tunnels.

Crews excavated from both ends and met in the middle with an error of only 5 cm (2 inches)!

Two small narrow gauge work engines hauled rock out of the Spiral Tunnels. In bad shape and not needed again, this engine was abandoned here to rest peacefully at the heart of Kicking Horse Pass National Historic Site, a memorial to the iron men and iron horses that forged this nation.

Enrich the Story

Visit • The 1884 bake oven of the rail workers camp (along the campground entrance road).
• The Spiral Tunnels Viewpoint between Field and Lake Louise.
• The Visitor Centre in Field for free factsheets and the Friends of Yoho bookstore.
• Kicking Horse Pass National Historic Site at www.pc.gc.ca/yoho