Mineral springs and miracles

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SUMMARY

Development of hot springs in the Canadian Rockies was closely linked to their reputed medicinal value. In 1885, the federal government created a small reserve around the springs at Sulphur Mountain, an area later enlarged to become Banff National Park, in recognition of the "great sanitary and curative advantage to the public."

RÉSUMÉ

L'exploitation des sources thermales dans les Rocheuses canadiennes est étroitement liée à leurs propriétés médicinales remarquables. En 1885, le gouvernement fédéral créait une petite réserve autour des sources du Mont Sulphur, zone agrandie par la suite pour devenir le parc national Banff, en reconnaissance des "grands bienfaits curatifs et sanitaires rendus à la population".

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BANFF IS THE BIRTHPLACE OF Canada's national park system, primarily because of hot mineral waters bubbling out of the northern slopes of Sulphur Mountain. Competing claims by various supposed discoverers brought the springs to the attention of the federal government in 1885. Recognizing the potential medicinal value of the springs, various politicians and Canadian Pacific Railway officials recommended that a public park be established to preserve the waters from private development. In late 1885, the government created the reserve, which became Rocky Mountains Parks of Canada and eventually Banff National Park.

Prime Minister Sir John A. MacDonald expected that "these springs will recuperate the patient and recoup the treasury." Supporters of the initiative hoped the reserve would draw tourists to the Rockies, replenishing the coffers of both the country and the government-subsidized railway. Early developers of the park strived to make Banff a successful spa, a health resort that would draw wealthy tourists. The healing waters were the key to their plans.

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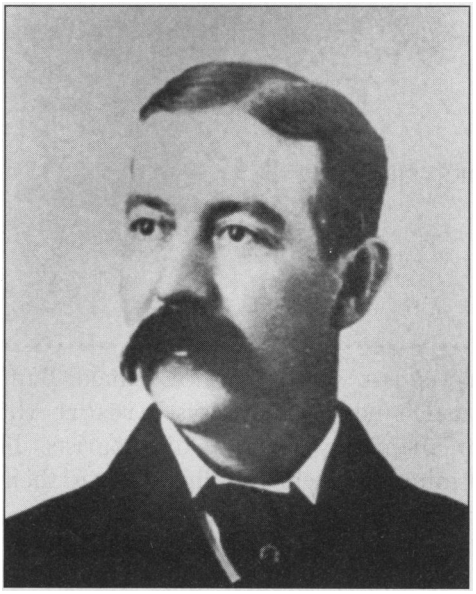
Hot springs in the southern Rockies

Thermal and nonthermal mineral springs are scattered along the western edge of North America in the mountain belt from Alaska to Mexico. All known thermal springs in Canada are in this Cordilleran region, including those that became most well-known in the Southern Rockies: Banff, Miette in Jasper National Park, and Radium in Kootenay National Park.

High relief permits ground water to follow deep circulation paths where it warms up and dissolves large concentrations of mineral salts and gases from the rocks it passes through. Hot springs usually occur in groups, as is the case in Banff where there are five. The springs are similar in containing about 1000 parts per 1 000 000 total dissolved solids, primarily calcium and magnesium sulfates and calcium bicarbonate. The principal gases are nitrogen, carbon dioxide, hydrogen sulfide, and methane.[1] In Banff, the Upper Hot Springs is the hottest spring, with a maximum outflow temperature of 47.3°C; the discharge rate averages 545 L/min.

Legacy of the great spas

The development of the hot springs at Banff, and later at nearby Radium and Miette, is linked with a centuries old tradition of both drinking and bathing in mineral springs because of their healing powers. Supposed medicinal qualities were described as early as 400 BC by Hippocrates, and hot springs were used increasingly for medicinal purposes in the Hellenistic age and under the Roman Empire.[2] Many springs frequented by the Romans are still well-known, such as Bath in England, Baden-Baden in West Germany, and Spa in Belgium. After the 15th century, Spa was in fact the source of the term spa, which came to be known as a place of mineral springs, and commonly a scenic spot and centre of social activity.



Dr R.G. Brett, a physician who played an important role in the development of Banff as a health resort

Provincial Archives of Alberta, Edmonton (1896).

Taking the waters became increasingly popular at places such as Spa, which were frequented by poets and princes, kings and physicians, statesmen and socialites. Various medical benefits were attributed to particular springs, including the relief or cure of heart disease, gout, rheumatism, varicose veins, sciatica, arthritis, blood diseases, respiratory inflammation, certain skin diseases, and kidney problems. Some of the miracle cures were attributed to bathing in the waters, while others were to be derived from drinking them. Michelangelo consumed spring waters near Rome to relieve the torment from his kidney stones, while Peter the Great of Russia found that drinking 21 glasses each morning of the bubbling waters of Bru in Belgium eased his indigestion.[3]

Luxurious spas flourished in Europe and the United States during the late 19th century, where the wealthy could promenade, gamble, dine, and dance, as well as sip the waters and bathe in the healing mineral springs.[4] With the "discovery" of the springs at Banff, which were soon patronized by invalids camping out in tents, promoters hoped they could develop a great spa in the Canadian wilderness. The health resort in the Rockies would, however, have a distinct frontier flavour.

Banff beginnings

In spring 1886, the first permanent residents settled in what would become Banff Townsite. It was an isolated spot, but the newly completed railway promised access for the visitors who would be attracted to the springs. The government conducted an analysis of the mineral waters using samples collected in two wine bottles, and park authorities concluded there were indeed "remarkable curative properties."[5] Several hotels were constructed, along with bathhouses supplied with hot water from the springs.

Banff soon mushroomed. In 1887, there were about 650 residents, 180 lots leased, and 3000 visitors.[6] Park authorities constructed rustic buildings for visitors bathing in the Cave and Basin springs, and in 1888 the Canadian Pacific Railway opened the luxurious Banff Springs Hotel. By 1905 visitation had climbed to 30000. Park officials credited this rise to the growing popularity of the health resort. The annual report for the park highlighted the medicinal value of the springs:

> The marvellous cures effected here have become known in distant lands, and the result is that invalids from every conceivable place come here for treatment, which in almost every case results in a cure.... In my opinion it will be necessary with the least possible delay to erect a modern hydropathic establishment with a resident physician in charge... the enormous benefits which the government can in this way confer on suffering humanity would entitle the administration to the sincere gratitude of the people of Canada and other countries as well. It is impossible for one who is not on the spot to realize the curative properties of the waters at the Upper Hot Springs. In rheumatism and kindred ailments, some marvellous cures have already been effected, with the results, as stated above, that it has become almost impossible to cope with the increased patronage, or to give relief to many who urgently need it.[7]

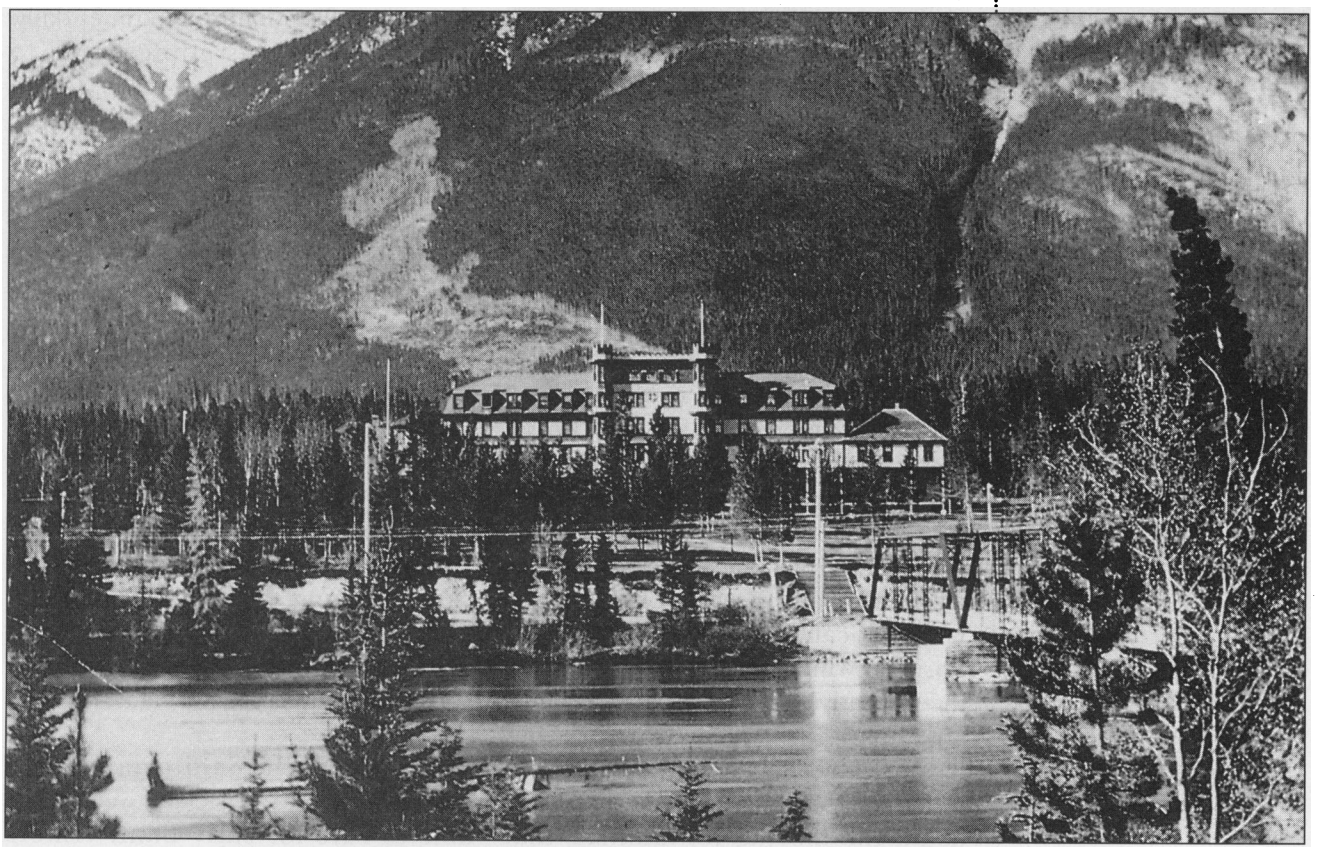
Medical doctors were frequently involved in treating visitors taking the waters at Banff. Dr John A. Rose from Regina noted that he visited the springs not more than twice a year, but sent many patients for treatment and cure. He recommended that the most effective routine was to stay in the area of the Upper Hot Springs, drink from the Kidney Springs waters early in the morning, take breakfast, 1 hour later soak in the hot baths, take lunch, and repeat the process later in the day.[8]

Testimonials

Stories of the miracle cures that resulted from taking the waters in Banff are countless. Patients, physicians, newspaper articles, and early residents all told of the curative power of the springs. For years park staff advertised the Canadian National Park as "A Medicinal Watering Place and Pleasure Resort," and many strongly endorsed this claim well into the 20th century.

The Grand View Hotel, erected near the Upper Hot Springs in 1886, once kept a register in which visitors recorded their experiences and the results of treatment. Many wrote of their cures, and in 1893 about 80 guests described the relief of their sufferings.[9]

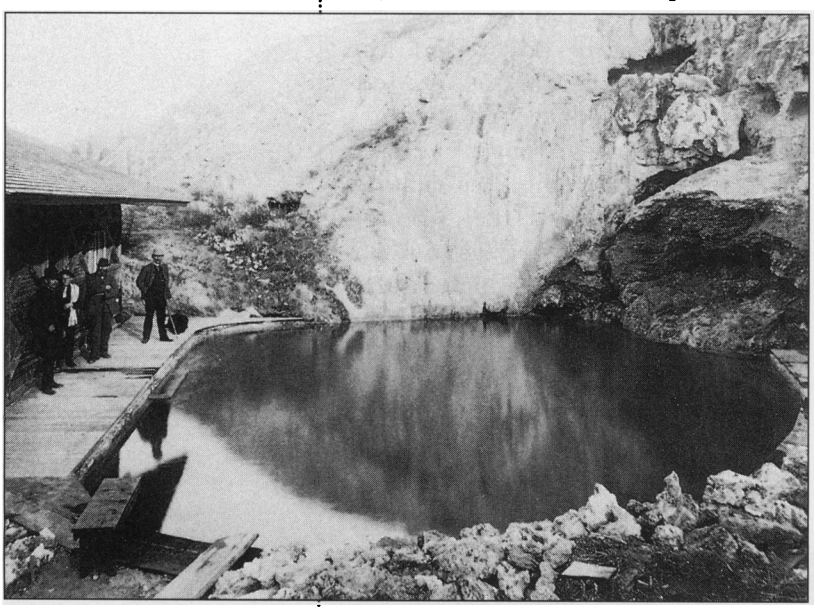
At the turn of the century, Mr A.D. Wright, an early proprietor of the Grand View Hotel which recently



The Sanitarium in Banff, a combination hotel and hospital, complete with hot sulfur baths

Parks Canada, Ottawa (circa 1890).

burned down, was interviewed about the cures he had witnessed.[10] He explained that hundreds of invalids had bathed there since he took possession in 1888, many of them for rheumatism, but also for other ailments, such as sciatica, skin diseases, blood poisoning, and kidney and stomach troubles. Wright stated that hardly any left without some improvement,



Basin pool, one of the places where visitors could bathe in mineral springs water in Banff: *The pool's curative properties were believed to be less than those of the Upper Hot Springs. Parks Canada, Ottawa (circa 1890).*

and nearly all were completely cured. The reporter read for himself the hundreds of testimonials in the register book, describing many who had been carried from the railway station to the baths on stretchers and were cured within 2 or 3 weeks.

Others wrote of a stairway that once led to the baths near the Hot Springs Hotel, located near the Upper Hot Springs (which were most valued for their curative properties). The bannister apparently consisted of crutches discarded by the cured.[11]

A park publication[12] described in detail the moving testimonials that were scattered by the healed on a hillside near the Upper Hot Springs. Written on old boards, fence rails, and door jambs from the burned hotel, they "would constitute one of the most interesting and unique collections of absolutely trustworthy medical testimony extant." Former invalids had stuck their testimonials of healing in crevices between the rocks. Some even recited their benefits in verse.

One wrote of being carried to the springs, as he or she could not tolerate the motion of a carriage. The patient had not walked for 2 years. "In three weeks after coming here I walked down to Banff, and in five, I ran a foot race. Praise God." Many told of throwing away their crutches after taking the waters.

A lengthy testimonial was written by a 37-year-old engineer who became crippled after catching a chill 6 years earlier. His savings disappeared and he had given up hope of living a productive life. A friend had had his sciatica cured at Banff, and lent the engineer $150 to go there. After 11 weeks at the springs, he could walk from Banff to the springs for a bath three times daily. The engineer was going home to Peoria, Ill, "... perfectly cured – I, who never thought to take another step again. This is certainly the greatest cure in the world."[12]

In 1901, Dr White, a physician who had practised in Banff for 5 years, noted that he was quite familiar with the famous watering places of Great Britain and Germany. He found that none were superior to the Banff springs for the cure of certain ailments, most notably rheumatic and gouty afflictions, certain skin diseases, and blood disorders. Dr White indicated he had witnessed some marvelous cures, and that in most cases drinking the water, apparently similar to that of the famed Harrogate in England and Aix-La-Chapelle in Germany, was very beneficial.[10]

Dr Brett and the Sanitarium

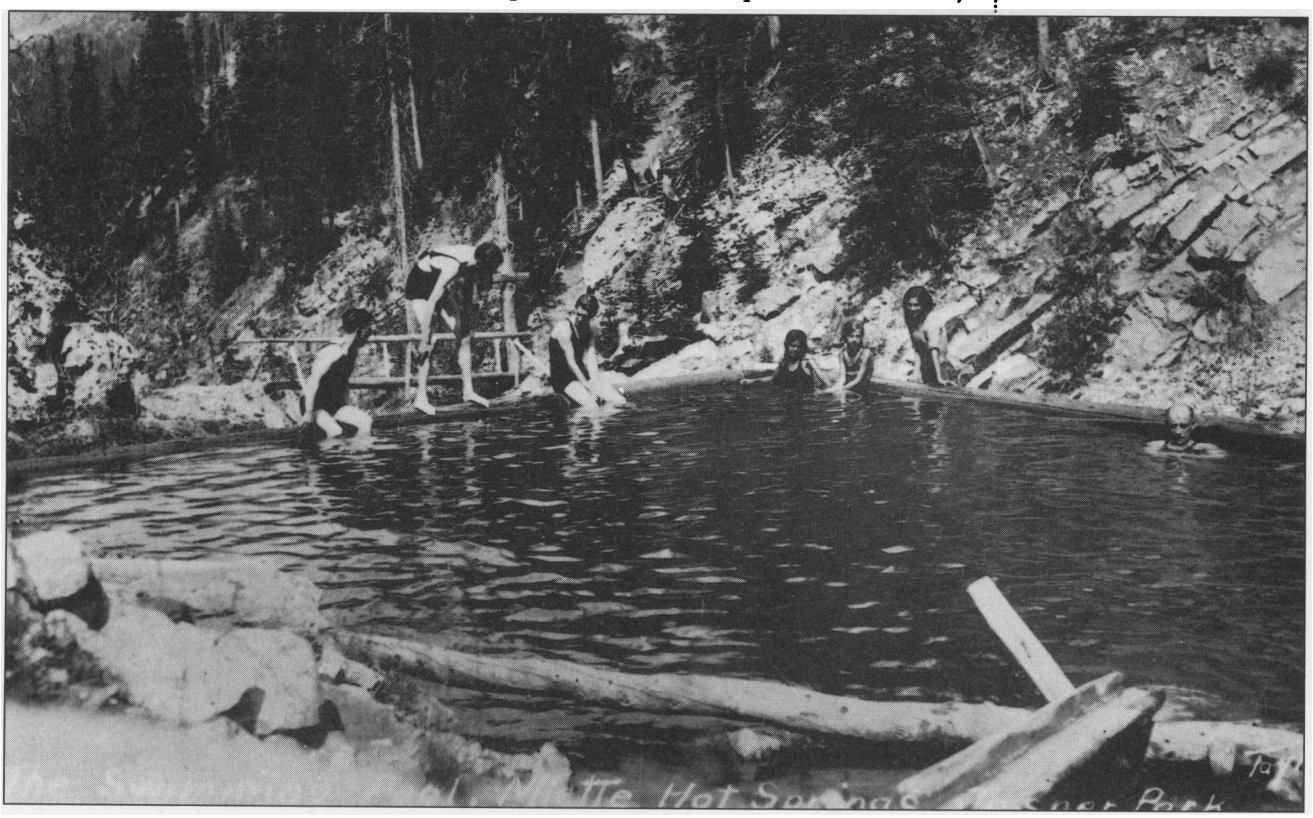
Several resident physicians were available to care for early Banff visitors seeking miracle cures. The most notable was Dr Robert George Brett, who built the Grand View Villa in

1886 and completed a combined hotel and hospital the following year. (This was known under various names, including the Sanitorium, The Sanitarium Hotel, Bretton Hall Hotel, and Brett's Sanitarium.)

An Ontario physician, Dr Brett came to the mountains as company doctor for the Canadian Pacific Railway in 1883. Before the park was established, the entrepreneur applied to lease land for a "first class summer resort for invalids."[13] Dr Brett was both proprietor and medical director of the Sanitarium, which by 1902 was a large three-storey brick building. Two additional floors were added in 1905. He built a pavilion nearby to provide theatre, dancing, and other entertainment for his guests. They could also try fishing excursions, rides and drives with horses, canoe trips, and so on.

With a splendid location overlooking the Bow River and more moderate prices than the Banff Springs Hotel, the Sanitarium was a popular accommodation for visitors, particularly those seeking improved health. The bathhouse there provided water piped from the hot sulphur springs and every facility "for the most successful treatment to health seekers." They could choose from a variety of baths: Turkish, Russian, hot and cold douches, plunge, tub, and electric.[14] Massages were also available.

As one doctor pointed out decades later, the history of the hospital in Banff is the history of Dr Brett.[15] Brett himself once claimed that he had "the most complete and comfortable private hospital in the Dominion,"[16] and by 1915 it was considered to be a highly efficient facility with a continent-wide reputation.[17] The hospital component of Brett's Sanitarium accepted patients suffering with any ailment except tuberculosis.[18] Because of the curative mineral waters, it was reported to be especially well equipped to treat sciatica, neuritis, kidney and bladder troubles, torpidity of the liver, functional digestive disorders, skin diseases, neurasthenia, and alcoholism. The same account suggested, however, that "A great many of the guests at the hospital have really



Bathers in an early log pool at Miette Hotsprings
Provincial Archives of Alberta, Edmonton (circa 1920).

nothing wrong with them but come here for a rest and change and while here avail themselves of the opportunity to take a course of baths."[18]

In 1910, Dr Brett constructed a new hospital, the Mineral Springs, and the main building of the Sanitarium henceforth served only as a hotel. When Dr Brett became lieutenant-governor of Alberta in 1915, he transferred responsibility for the hospital to his physician son, Harry. The facility was a three-storey building with accommodations for 60 patients, mainly in private wards. There was an electrical room with various apparatus for treatments, and an x-ray plant. The fairly large staff included physicians, nurses, and a trained dietitian. In 1923 a training facility for nurses was added.

Dr Brett's involvement with the hospital ended only with his death in September 1929, after which he was lauded as "One of the Finest and Most respected doctors in the west."[19] The Sisters of Saint Martha acquired the hospital, which became the Banff Mineral Springs Hospital. While miracle cures perhaps no longer topped Banff's list of attractions, the Sisters still considered their supply of sulfur water essential to the hospital for its curative qualities.[20]

Lithia water

Another venture of Dr Brett's was bottling lithia water. One of the springs at Banff was sometimes called the Lithia Spring or Kidney Spring, due to its reputed curative properties for kidney troubles. Analyst Professor McGill had reported that the quantity of lithium in the spring was at least 100 times greater than in bottled water from Lithia Springs, Virginia.[12] Some Banff residents apparently bottled the local source for their own use, and local physician Dr White advised that

Photo credit: George Paris.

Dispenser John Lawrenson and Nurse Mowatt in the pharmacy operated by Dr R.G. Brett in conjunction with Brett's Sanitarium.
Whyte Museum of the Canadian Rockies (circa 1895).

drinking freely of mineral water was in most cases very beneficial.[10]

Dr Brett obtained park permission to bottle hot sulphur water from the Lithia Spring, and by 1912 reported that he had been bottling "Banff Lithia Water" for the past 4 years. He claimed good success in introducing the product throughout Alberta, Saskatchewan, and British Columbia. In addition, the Canadian Pacific Railway carried the bottled water on all their dining cars.[21] Brett had a bottling plant in Banff, which also produced ginger ale, ginger beer, lemon sour, claret, and lemonade.[22] These were no doubt sold at the Banff Pharmacy that Dr Brett had also established.

Some consumers of the Banff Lithia Water apparently could not decide whether it had best results when taken straight or with whisky.

Radioactive waters

In nearby British Columbia, an English country squire was scheming to bottle spring water from what came to be known as Radium Hot Springs. Just 5 years after the federal government had established a reserve around the springs at Banff, entrepreneur Roland Stuart paid $160 for a crown grant of 160 acres around the Radium Hot Springs.[23] There was little possibility of developing a successful health resort at the time, given that access was limited to a pack trail. However, Stuart planned to sell bottled spring water around the globe.

An analysis of the odourless spring water by the British medical journal *Lancet* in 1911 suggested radioactivity in the water,[24] a fact that was confirmed by tests at McGill University several years later. The studies showed more radium than at famed Bath in England. The springs are actually the most radioactive in Canada and one of the most radioactive in North America.[25]

Stuart was greatly encouraged by what was considered proof of the amazing curative qualities of the spring water, and by the beginning of construction of a road that would run right beside Radium Hot Springs. In search of financial backers to develop his property, Stuart promoted his project around the world before grabbing the attention of a multimillionaire called St John Harmsworth.

Harmsworth's holdings included a mineral water business at Nimes, France. In addition to his financial interests in Radium Hot Springs, Harmsworth, a newspaperman, wanted to test the waters in the wilderness of British Columbia. He was paralyzed from the waist down as a result of breaking his neck in a car crash.

Following a difficult journey to the mountains, the crippled man was suspended in the spring water on a hammock. After 4 months of frequent bathing, Harmsworth moved a toe. Stuart was apparently surprised, but glad to pocket a $20 000 investment in his venture.

Stuart had perhaps initiated his enterprise too late to ride the wave of enthusiasm for the great spas and their miracle cures. He went back to England at the beginning of World War I and did not return until 1920. That year the government created Kootenay Dominion Park in the area of the springs, which they sought to purchase from Stuart; the park expropriated the property in 1922. After workers completed the Banff-Windermere Road the following year, hundreds of people began visiting the Radium Hot Springs.

Miracles at Miette

Farther north, another hot springs in the mountains was gaining a reputation for its healing powers. When Jasper National Park was created in 1907, the Miette Hotsprings were included within its boundaries. Completion of the Grand Trunk Pacific Railway in 1911 provided greater access to the mountain park, but Miette remained isolated. Until a road was completed in 1935, the springs could be reached only by horseback, a journey of 17 km from the Athabasca Valley.

Miette consequently missed the heyday of the mineral springs meccas growing up across North America, though praise of miracle cures was certainly no less. Outfitter Ralph James, who transported numerous invalids to Miette, told of many healings: a blind child who regained his sight after 3 weeks, a fellow who lost the blood clots in his lungs after a month, a cripple who rode up with his "boots reversed upon his knees" and could walk with a stick after 10 weeks' treatment.[26]

Among the earliest users of the Miette Hotsprings were miners from nearby operations. Park warden Davies reported in 1918 that more than 50 sufferers of rheumatism from Brule mines alone had been bathing there that year. He had been told by various users that the water relieved all cases of rheumatism, lumbago, and chest troubles, though the springs area looked to Davies like an ill-kept gypsy camp.[27]

Park authorities received numerous proposals for development of facilities at Miette: for a Swiss Village, a grandiose Chateau Miette Hotel, a hospital, and sanitarium.[28] For various reasons none of the projects came to fruition. By the early 1930s Miette Hotsprings was a popular visitor attraction for health seekers, considering its isolation. In July of 1933, 100 to 120 people camped there, and another 50 to 60 would visit during weekends.[29]

That same year Dr Thomas O'Hagan of Jasper applied to erect a small hospital or sanitarium at Miette. Park authorities, however, decided that the springs should remain under government control, given their exceptional nature in terms of temperature, mineral content, and therapeutic qualities. Some people were concerned that high fees charged by private enterprises would be prohibitive for many people needing cures.[28]

Upper hot springs pool in Banff National Park
Parks Canada, Ottawa

Conclusion

By the 1930s the scenic wonders and wildlife of the Rocky Mountain parks eclipsed the healing hot springs as the primary visitor attraction. The exclusivity of Banff as a health resort disappeared when the introduction of the automobile provided easy access to tourists of modest means, and wealthy patrons found social life at the springs less fashionable. The more isolated hot springs at Radium and Miette never became the glamorous spas imagined by some of their early promoters, though their waters apparently provided similar benefits.

In 1930, the townsites at both Banff and Jasper had well equipped hospitals operated by the same order of nuns, the Sisters of Charity. Institutionalized health care systems, modern medical procedures, and patent drugs offered promising new cures for the sick. In contrast to their early beliefs and promotions about the remarkable curative properties of the springs, park administrators in the 1930s now cautioned potential visitors that they could not guarantee beneficial results from mineral water treatment to any patients.[30] But half a century after the Banff reserve was established, some still believed in what one had termed the "most wonderful waters in the world."[11] ■

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