

# KANTISHNA GOLD!

---

Gold mining in the American West at the turn of the 20 th century will forever be remembered for its sudden and feverish stampedes. In the 1890s, after thousands rushed to Canada's Klondike goldfields, many miners headed west to try their luck in Alaska. Stampeding became a way of life for many frontier adventurers, and when Alaska's boomtowns became too crowded or the pay-dirt too scarce, these wanderers followed rumors of gold into uncharted and exceedingly rugged territory. The Kantishna Mining District, deep within Denali National Park and Preserve, is one such place where hundreds of miners left the relative security of Dawson, Fairbanks, and Nome to seek their fortunes in the wilderness.

Reports of Kantishna gold appear in some of Alaska's first newspapers. The *Nome Nugget* printed the headline "FOUND HIGH GRADE GOLD" on September 9, 1903, followed by a story about a prospector named J.T. Minuse who had recently arrived with "a good poke of Tanana gold" panned from streams just north of Mt. McKinley. There he and his partner found bright, coarse placer gold averaging 15 cents to the prospecting pan. The newspaper also reported Minuse as saying that the country was full of quartz and placer propositions ideal for hydraulic mining, but that the region needed a railroad. "With good transportation," the article concluded, "he believes that the whole region will boom."

Two weeks later, the *Nugget* trumpeted, "A RICH SECTION, IS THE MOUNT MCKINLEY COUNTRY," again quoting Minuse who said that a number of other prospectors were already camped in the highly mineralized area north of the great mountain. The newspaper reported that Minuse and a partner by the name of Burns had traveled up the Tanana and Kantishna Rivers to the Mt. McKinley region where for a year they hunted and searched for gold, adding that they found gold in every creek which they prospected. Even with this glowing recommendation, distance and rugged terrain could not be ignored. Given its remoteness from supply posts, the article concluded, "there can be little or no development of a confessedly rich section until a railroad penetrates that country from the North Pacific coast."

While Minuse and his fellow prospectors sifted Kantishna's streambeds, plans were taking shape in Fairbanks for an expedition of a much different sort. Alaska's district court judge James Wickersham and four of his fellow Fairbanksans were preparing to conquer the continent's highest summit. When the river ice thawed in Spring 1903, the climbing expedition boarded the steam ship *Tanana Chief* for the voyage down the Tanana to the Kantishna River. Traveling overland from a bend in the river, the men paused to ready their supplies for the final push to the mountain. On June 4, two of the climbers stayed in camp to dry strips of caribou meat while the rest of the party went searching for gold in Chitsia Creek at the northern extreme of the Kantishna Hills. Wickersham later wrote that the men returned "reporting prospects of placer gold and ruby sand." The following day, the climbing party staked a series of ten placer mining claims for themselves and one for Captain Hendricks of the *Tanana Chief*.

Five weeks later, after an unsuccessful attempt to scale Mt. McKinley, the Wickersham party returned north and filed their claims at the Land Recorder's Office in Rampart. After returning to Fairbanks, Wickersham offered glowing reports of the region north of Mt. McKinley, and by

September 19 the *Fairbanks Weekly News* reported details of the expedition, and without providing details, added “one creek was found that gave some promise and it was staked.” More important still to local prospectors was a hand-drawn map of Chitsia Creek and the Kantishna highlands that Wickersham included with the official record of his claims. “It was immediately copied,” Wickersham later wrote, “by numerous prospectors and the next year a horde of these hardy men explored every creek in this height of land for gold.”

Because Wickersham and his party had failed to produce an impressive quantity of Kantishna gold, the number of prospectors searching the region in 1904 was in fact quite small. The Land Recorder’s Office in Fairbanks did file over 100 mining claims based upon Kantishna gold discovered in 1904; however, because prospectors frequently filed multiple claims and staked claims for their friends and family using power of attorney, the true number of men in the area was something less than 50 by rough count. It took time to raise the money for a long-distance trek, and many local miners were reluctant to leave the proven goldfields along the Yukon and Tanana Rivers for the untested potential of “McKinley Country.” Alaska’s newspapers stopped reporting on the subject, and Kantishna’s future lay in the hands of the intrepid few who did the lonely work of prospecting from stream to stream while living off the land. Wickersham’s “horde of hardy men” would not arrive until 1905.

To ease the burden of locating and developing a remote mining claim, many prospectors formed partnerships, and in 1905 two such partnerships made major discoveries as they followed a trail of dust and nuggets from the northern end of the Kantishna Hills into the heart of Kantishna gold country. Joseph Dalton, a long-time Kantishna miner and veteran of the Klondike, later described being one of the men who found encouraging amounts of gold in the Toklat River basin in 1904. Dalton returned the following year with his partner Simon Stiles, and the two men gradually made their way south to Friday Creek and Eureka Creek in what would become richest part of the Kantishna goldfields. There Dalton and Stiles staked claims on both creeks and later filed them in Fairbanks on July 12 and July 20 respectively.

Meanwhile, a prospector named Joseph Quigley and his partner Jack Horn were also moving south from less promising creeks to some of the region’s richest waterways. Quigley and Horn were following a tip from a pair of Kantishna trappers who had seen gold dust in local streambeds. A version of this story appeared in the *Nome Nugget* on September 9, 1905:

Jack Horn and J.B. Quigley were prospecting on Flume Creek, which empties into the Bearpaw just below Moose, this spring. They came across some traps set out and left a note on one of them. This note caused Joe Benson and Gus Benbenick, the trappers, to look them up. The two prospectors did not find anything worth claiming their attention on Flume Creek, and were thinking about going across to the McKinley. They began questioning the trappers about the character of the country farther up the Bearpaw.

‘Not a very good looking country,’ said one of the trappers. ‘There is too much gravel.’

This bit of information interested the prospectors. They asked if there was any indication of bedrock.

‘Yes, lots of rim bedrock shows,’ was the answer.

This proved still more interesting. It resulted in the prospectors accompanying the trappers. They panned on the different bars and had made three trips to town before the news finally leaked out and the stampede followed.

By June, Quigley and Horn were back in Fairbanks spreading news of their discovery and – along with Dalton and Stiles – helping to trigger the rush on Kantishna’s goldfields. Clearly these four prospectors weren’t the first to glimpse Kantishna’s potential, but they do deserve credit for sparking the stampede. By mid-July 1905, gold fever was sweeping through Fairbanks and stamperders had begun arriving in Kantishna ready to stake claims along every creek and hillside for miles around.

To reach the gold, many miners bought passage aboard steamboats like the *Tanana Chief* and *White Seal* to travel south along the Tanana and Kantishna Rivers until water levels grew too shallow for the heavy craft to continue. Passengers then boarded smaller launches driven upstream by pole to take them still closer to the gold-rich tributaries of Bearpaw River just north of Wonder Lake. Passage on a steamer cost \$40 per person. Freight cost \$50 per ton, and depending on the periodic rise and fall of water levels in local streams, miners could expect to haul their supplies up to 20 additional miles overland to reach the goldfields. Travel along the Kantishna River in the early days of the gold rush was made more challenging because, as the *Dawson Daily News* pointed out, “maps showing the river are mostly the result of guess work and most of the streams have not been named.”

Because overland travel in summer was made nearly impossible by bogs and bugs, miners without ready funds waited until winter to drive dog sleds south along frozen rivers and what would soon become established winter trails. The overland journey from Fairbanks to the hub of Kantishna mining activity covered more than 185 miles and took two weeks in the best conditions. To make matters worse, a successful miner needed to bring with him supplies to last a year. Freight haulers were willing to make the trip with large sledges, but the cost was considerable. In spite of these challenges, eager greenhorns and veteran miners were arriving in droves. Soon the Friday, Eureka, Caribou, Glacier, Moose and Eldorado Creeks were not only named but made famous by the coarse, angular gold lying in their stream-beds and gravel banks.

Some of the very first to make the journey to Kantishna were Fairbanks businessmen with plans to establish outposts in anticipation of the stampede. Early newspaper reports describe ambitious locals chartering steamers for the purpose of founding entire towns, all under a cloak of secrecy. A *Fairbanks Evening News* headline on August 12, 1905, announced, “MISSION IS A SECRET: WELL KNOWN OPERATOR TAKES A BLIND CHARTER ON STEAMER *LUELLA*. PURPOSE NOT KNOWN.” Being the first in place to supply the miners with food and equipment could yield a fortune overnight. Over a period of months the newspapers described a fierce rivalry between several boomtowns competing to be the enduring choice of miners. The gold rush outposts of Roosevelt (on the Kantishna River), Diamond (along the

Bearpaw River), and Glacier City (at the terminus of Glacier Creek) proved the most successful by providing temporary lodging, supplies, and even periodic mail delivery en route to the goldfields. In time, the town of Eureka (today's Kantishna) took shape as a summer mining camp on lower Moose Creek near many of the richest mining sites.

To stake a claim, a miner needed to mark his choice with corner stakes, usually topped with a written "location notice" protected from the elements by an upturned coffee can. The legal limit of a placer claim was 20 acres, typically a plot 660 feet wide and 1320 feet long along the banks of a stream. Association claims of up to eight claimants and 160 acres were also popular during the Kantishna stampede, though many miners condemned them as a great evil because much of the richest placer ground could be snatched up by one person acting for the other seven. Mining claims were usually identified numerically in relation to the original claim on a particular stream. For example, the first claim would be known as "Discovery" and the next as "No. 1 Above Discovery" or (across the creek) "Opposite Discovery." Many claims were also given nicknames reflecting the hopes and fears of the claimants like the Why Not Claim or Poverty Pan Claim, and the more optimistic Fool's Luck Claim.

Dozens of women filed mining claims during the height of the stampede, and some business owners brought their wives and children to share in the boomtown atmosphere as steamship schedules became more reliable and accommodations more comfortable. Women working as cooks, laundresses, and ladies of the evening were not far behind. Fannie McKenzie, a veteran of several gold rushes, was one of the first women in Kantishna. She arrived with a portable kitchen and opened shop on the spot to feed hungry stampedeers. The *Fairbanks Weekly News* on August 9, 1905 noted that some seasoned miners objected to these reminders of civilized life:

It don't seem natural [said one old-timer]. It's too tame like. You ride almost to the diggings in upholstered seats on a steamer and find petticoats all along the line. I kept looking for the telegraph line, and it was hard to realize that I was on a real stampede...I suppose electric cars will be soon whirring up the canyon.

The journey into Kantishna may have been easy for some, but life in the goldfields was rarely comfortable.

Experienced miners warned that no one should enter the country without at least a year's provisions because food was scarce near the diggings, and game was not as plentiful as early reports had indicated. Basic resources like wood for cabins and sluice boxes were often in short supply because most of Kantishna's gold-bearing creeks were above the timber line, forcing miners to travel miles north to find sizable. During dry spells, water levels in some creeks could drop suddenly making placer mining impossible. In spite of these challenges, the number of gold discoveries filed at the Recorder's Office in Fairbanks jumped from just over 100 in 1904 to more than one thousand in 1905. And, at the height of the stampede, over 2000 people – miners, shop keepers, speculators, and hangers-on – had arrived in the district.

Those men and women who staked the first Kantishna claims on the best land found wealth literally at their feet. The so-called sunburnt gold, resting on the surface of gravel streambeds, could be collected with an inexpensive gold pan. At a time when most miners were content to

pan \$5 in a day, some prospectors were finding \$10 or even \$25 in a single pan of Kantishna gravel. Soon miners built automatic “boomer dams” that collected creek water and then released it in a flood that washed away surface soil revealing the rich gravels beneath. The gravel was then shoveled by hand into sluice boxes that separated the heavy bits of gold from lighter rocky material. In the first weeks of the stampede, the *Fairbanks Evening News* reported that a man arrived in town with an 8 oz. baking powder tin filled to the brim with gold. Reluctant to provide details of his discovery, the man bought provisions and left town in a hurry. Stories like these fueled wild speculation about the wealth of Kantishna’s streams and inspired even more gold-seekers to travel south.

Being slow to arrive in the goldfields carried serious risks. On August 12, the *Fairbanks Evening News* quoted a miner who said that late arrivals could be seen “running over the creeks like scared sheep, trying to find a claim to stake.” For those who failed to stake a profitable claim, the options were few: work for other miners for daily wages or pack up and head out of the country before winter. During the busiest time of the season, men worked in shifts day and night for \$1.25 per hour, paid in gold dust valued at \$16 per ounce. This was a fine wage for its day, but not when the expense of travel and food were taken into account. Even so, a hard worker could hope to save enough to buy half-interest in an established claim or to stake a “fraction,” a fragment of land left between larger claims after the haphazard land grab had slowed.

As the first wave of stamperders returned to Fairbanks to buy supplies (and cash in their gold), they were met at the wharf by locals demanding to know about the exciting prospects to the south. One Fairbanks report, repeated in the *Nome Nugget* on September 9, 1905, described the scene:

A bunch of nearly 20 people from the Kantishna arrived on the steamer *Tanana* this morning. All of them speak well of the new diggings. The news quickly spread about town that miners from the new gold section were aboard the *Tanana*, and before the boat landed many business men and others interested in reports from there were at the wharf to get the latest news. Each miner or trader from there was instantly button-holed the minute he stepped ashore, and waylaid at every turn of the street.

‘Kantishna is all right,’ the most of them shouted to those who greeted them, as the quickest way of telling the story in the fewest words.

Newspapers from Dawson to Nome and from Rampart to Seward were reporting similar frenzied scenes as miners flowed to and from Kantishna. News trickled back of nuggets worth hundreds of dollars and of miners taking \$1000 a day at the mouth of Eureka Creek. One miner sold half-interest in a Eureka claim for \$10,000 cash and was projected to take at least \$100,000 from a second claim on the same creek. On September 2, 1905, the *Seward Gateway* even suggested that “the discoveries already made exceed the richest ever made in the Klondike.”

And then, just like that, the stampede that began so feverishly in July began to dwindle. Miners returning to Fairbanks late in the summer offered discouraging stories about Kantishna’s prospects, and by mid-September it was becoming clear that the easy pickings were limited to a

handful of creeks. The *Dawson Daily News* reported that provisions in Kantishna were being sold for less than they were worth in Fairbanks by miners disgusted with their luck, and by October 28 the *Nome Nugget* ran a headline that read in part, "A Great Many Disappointed Men Encountered in That Section – Nothing Has Been Found to Warrant a Stampede." The story included the observations of sawmill operator Fred Noyes, who said, "I wish to emphasize the point that no man should go in there unless he is able to take a gambler's chance.... It is a likely looking country: that's all."

Despite these warnings, between 1,200 and 1,500 miners remained in the region during the coldest months of 1905. Three sawmills in the forested north were offering lumber for cabins and sluice boxes at \$100 per 1000 board feet, and several steam boilers were on their way to help miners thaw frozen ground for sluicing. Kantishna residents were organizing to cut year-round horse trails into the wilderness, and at the town of Roosevelt could boast two general merchandise stores, nearly 50 cabins, and 150 residents. Diamond was also becoming a wilderness metropolis with over 170 cabins and its own dry goods shop, saloon, hotel and restaurant. Glacier City too was gaining importance as the nearest navigable point to the goldfields. All of this activity was fueled by faith that Kantishna gold would draw ever larger numbers of miners, transforming the wilderness district into a second Dawson or another Fairbanks. But, instead of booming, Kantishna promptly went bust.

Alaska's newspapers chronicled this sudden reversal in fortune. On January 16, 1906, the *Nome Nugget* announced "KANTISHNA TOWNS ARE ABANDONED, and on February 21, the *Fairbanks Evening News* declared "MANY ARE NOW LEAVING: Are Out of Grub and Have Gone Broke Without Striking Anything." By April the *Nugget* warned "NO NEW FINDS SINCE LAST FALL: New Camp Does Not Show Up Very Promising," and later, "QUIT THE KANTISHNA: Five Hundred Men Leave the Place." By the time the ice began to thaw in Kantishna, the population of miners in the region had plunged to only 50, and by autumn to 20. By December the once-thriving boomtowns were all but empty. Glacier City had the largest population with 12, Diamond had only 4 residents, and Roosevelt 1. Even the land commissioner, Lee Van Slyke, who had followed the shifting population from town to town to register mining claims, returned to Fairbanks for lack of work.

As frustrated miners and boomtown business owners fled the country, Kantishna's more nefarious characters seized the opportunity for ill-gotten gain. On September 26, 1906, the marshal's office in Fairbanks received a telegram from Tolovana announcing that a man had been shot twice by robbers near the mouth of the Kantishna River. The *Fairbanks Weekly Times* promptly announced "ATTEMPTED ROBBERY IN THE KANTISHNA." According to the report, a shopkeeper named Mickey Fleming had recently sold his business in the goldfields and was on his way to Fairbanks when he was ambushed. As luck would have it, George Vantier, the deputy marshal from Ft. Gibbon, arrived at Tolovana within hours of the event; furthermore, the deputy marshal had in his custody one Dr. Joseph Weyerhorst (arrested for wife-beating and jumping bail) who was promptly ordered to treat the gunshot wounds to Fleming's hip and shoulder. Evidently, the good doctor attempted to charge \$500 for his services but was only allowed \$300.

By October 6, the *Times* reported that the “Kantishna hold-ups” were in custody. Following clues provided by the victim, deputy marshal Vantier had begun his investigation at the scene of the crime where two masked men had opened fire, one with a .30-.30 caliber rifle, the other with a .22. While searching the sandy soil, Vantier noticed something odd about the footprints the shooters left behind. When he finally arrested Jack Tansy and Cal Swift in the town of Hot Springs, Tansy was still wearing two left shoes. Miners emerging from Kantishna all agreed that the men were twice guilty: a month earlier they had stolen \$500 and assorted clothing from Fleming’s shop in Diamond. The two men apparently escaped frontier justice because Swift was soon out on \$5000 bond and returned to Kantishna to gather proof of his own innocence. By November 2, the *Times* reported that Swift had returned to Fairbanks, claiming to have evidence that “the circumstances which now point to his connection with the affair [are] as easily dissipated as they appear at present to be convictive.” The verdict in the case is unknown.

Late in 1906, when the meek and ill-prepared had all gone, Kantishna was became home to a handful of miners who still believed in the land, and with good reason. Most of them were the same pioneers who had discovered Kantishna gold and were still working their original claims. Joseph Dalton and Simon Stiles (in partnership with their brothers) continued to work their Eureka and Friday Creek claims. In 1906, this partnership pulled a nugget worth \$668 from the earth and produced \$86,000 in all from the season’s clean-up. The nugget became known as the “Queen of Eureka” and was soon on display at Schuman’s Jewelry in Fairbanks. The same year, the former trappers Gus Benbenick and Joseph Benson brought to Fairbanks \$10,000 in gold dust and a selection of nine nuggets ranging in value from \$107 to \$353. Joseph Quigley, Jack Horn, and Quigley’s future wife Fannie McKenzie also continued to profit from their early discoveries. These Kantishna old-timers also had their pick of land abandoned by stampedes who had failed to perform the requisite annual labor needed to maintain their claims.

As early as 1906, hard-rock lode mining began to take the place of placer mining as Joseph Quigley and his fellow Kantishna residents began searching for the original source of Kantishna gold deep in the surrounding hills. There they found not only gold but silver, lead, zinc, copper, and antimony in quantities that showed commercial potential. Even so, the number of new mining claims filed each year dropped precipitously from 1023 (in 1905) to 239 (1906) to 145 (1907) and 69 (1908). The annual gold production in the region would not exceed \$30,000 in the next two decades, and the hardy few who stayed faced the serious challenges of high transportation costs and long winters. Some years as few as a dozen miners worked the shallowest placers with shovels, picks and sluice boxes, while hard-rock miners struggled to excavate narrow tunnels in the hills. Before long Kantishna residents settled into a regular pattern of subsistence mining, supplementing their diets by hunting and gardening and financing their mining operations by selling furs trapped in the winter. Though Kantishna would never see another stampede, the land continued to sustain a small cadre of rugged miners for decades to come.

# KANTISHNA PIONEERS

---

Of the Kantishna pioneers who stayed long after the 1905 stampede, Joseph and Fannie Quigley are the most well known. While most miners who worked Kantishna claims spent their winters in Fairbanks, the Quigleys made Kantishna their year-round home, hunting and trapping, gardening and prospecting, and developing hard-rock mines in some of Alaska's most challenging terrain. For three decades, they braved 60-below temperatures and long bouts of solitude while providing warm frontier hospitality to travelers who happened upon their doorstep. Hunters and trappers, government geologists, park rangers, and mountaineers found "Mother McKenzie" and her husband Joe to be Kantishna's welcoming committee.

Joseph Quigley arrived in the Alaska in 1891 when, on his twenty-second birthday, he climbed the Chilkoot Pass and began searching for Canadian gold a full five years before the Klondike stampede. As an itinerate prospector he crossed into Alaska and searched for gold near Circle City and along the Fortymile River, traveling by foot and encountering other humans infrequently. He later described himself and his fellow prospectors as adventurous men who were "always looking for a million-dollar mine, and never showing disappointment we didn't find it."

It was this combination of vision, persistence and reserve that earned Joe a reputation as a reliable source for mining news, and by 1897 he was initiated into the Yukon Order of Pioneers. Joe joined rush to the Klondike in 1898 but found the paying land had already been staked. Striking out on his own, he mounted several prospecting trips from Dawson into Alaska, including one to the Copper River. In 1904 he joined the rush for Tanana gold and lived for a short time in the Fairbanks gold camp.

In Fairbanks, Quigley became gravely ill with typhoid fever and was nursed to health by a boomtown cook named Fannie McKenzie. Born Fannie Sedlacek in 1871 in the Bohemian community of Wahoo, Nebraska, Fannie had no formal education and did not speak English until she was fully grown. At a young age, Fannie made her way through the American West, cooking for a living and developing skills she would later employ in Alaska's goldfields. In 1898 she followed the Klondike stampede to Dawson City where she worked as a dance hall girl, housekeeper and cook. Using Dawson as a base, Fannie developed a knack for predicting the next stampede and brought along a mobile kitchen to make money wherever miners gathered.

With a Yukon stove, some bacon, beans, coffee and flour she raced to the promising gold strikes and served meals to men who in their haste had failed to bring adequate provisions. "I reckon I've set up my tent and hung my Meals-for-Sale sign at most every strike in the North," she later said. Her ability to cover long distances fast earned her the moniker "Fannie the Hike." In addition to serving meals, Fannie also obtained her Free Miners Certificate from the gold commissioner near Dawson and staked her own remote gold claims. In 1901 she married a miner named Angus MacKenzie and together they operated a roadhouse, but the marriage soon fell apart. Within two years, Fannie heard news of the Tanana gold strike and began a 700-mile trek that eventually delivered her to the Fairbanks gold camp.

It seems likely that Joe and Fannie were already romantically involved when in 1905 when Joe Quigley and his partner Jack Horn discovered gold in Kantishna. Their reports of rich placer gravel helped to spark a stampede that brought two thousand gold-seekers to the region. The following year, Fannie arrived to set up shop on the banks of Glacier Creek at what became known as Mrs. McKenzie's Roadhouse. During this period she also partnered with Joe to stake placer claims on Glacier and Caribou Creeks. Despite their best efforts, the Quigley placer ground never proved rich. "I did pick up a two-ounce nuggets lying near some exposed bedrock, and later I found some more nuggets at the same place," Quigley later commented. "But they were too far apart to make the mining profitable."

Together Joe and Fannie managed a grubstake (enough money to finance the next year's operation), and Joe soon turned his attention to prospecting for quartz and other mineral lodes in the hills. The years following the Kantishna stampede were lonely ones for Fannie. She was the only woman in Kantishna, and seven years passed before she returned to Fairbanks. Even so, Fannie seemed to thrive in the challenging environment. While Joe wandered the Kantishna Hills, digging test pits and bringing home samples for testing, Fannie gardened, hunted, trapped, ran dog sleds, cut fire wood, and whatever else was necessary to make a comfortable home in the wilderness.

Visitors to Kantishna provide us with rare glimpses of what life was like at the Quigley homestead on Glacier Creek and later on the slopes of Quigley Ridge. In 1912 Belmore Browne met the Quigleys on his way back from an attempt on Mt. McKinley and gave this description of the Quigley residence:

Over the door as you entered hung a caribou head, and in the eaves above it were swallows' nests, and as we talked the birds went about their daily lives within a few feet of us and their happy twittering never ceased from morning to night. The cabin door opened into a small vestibule, which in turn gave entrance to the big living room. A fresh-killed moose skin was nailed to the floor, hairside down, and a magnificent sheep head hung on the wall. Through the window you could see a flower garden, while below the cabin a truck garden flourished inside a pole fence.

When visitors dropped in, Fannie delighted them with lavish frontier fare, including porcupine roasts and blueberry pies with crusts made with bear fat. Browne was the first to record the range of Fannie's skills in the kitchen:

That meal was one of the most delicious that I have eaten. First came spiced, corned moose-meat, followed by moose muffle jelly. Several varieties of jelly made from native berries covered the large slices of yeast bread, but what interested me more was rhubarb sauce made from wild rhubarb of that region... These delicacies were washed down with great bowls of potato beer, ice-cold, from the underground cellar.

Fannie's gardening evolved over the years, and visitors found it nothing short of a marvel that at 1,900 feet, with only ten frost-free weeks per season, she could produce so much variety. The U.S.G.S. geologist Stephen Capps visited Kantishna during a regional mineral survey in 1916 and included this description in his field notebook:

This year by August 1, in Fanny McKenzie's garden, cauliflower was matured, cabbages grow well..., lettuce in great heads, radishes over mature, onions mature, new potatoes 2 ½ inches in diameter...Rhubarb, rutabagas, cucumbers grow well, certain varieties of tomato ripen....Gardens of flowers (poppies of varied varieties) bloom in late July, with pansies and many beautiful wild flowers including wild yellow poppies.

Add to this list the blueberries, cranberries and raspberries that grow on Kantishna's hillsides in great profusion and a long list of game foods, and one has some notion of the delicacies preserved in Fannie's underground larder.

Tall and tight-lipped, Joe Quigley too left an impression on Kantishna visitors. He was best known for his skills as a self-taught mineralogist, and he was regularly consulted by visiting government geologists and local prospectors. Even with a rifle and a 30-pound pack, he relied on his long legs to carry him over rough terrain eight miles and more a day. And as a prospector, he discovered gold, silver, lead, zinc, and antimony in and around the lengthy ridge later named in his honor. In 1950, Joe's friend Grant Pearson wrote:

Joe was happy when he was prospecting, and happiest when he had a number of samples to work on in the evenings. He learned to be a scientific prospector. He had his own assaying outfit and any good books on geology, mineralogy and mining and had taken a prospectors' course. He was always eager to learn something new, and he spent many an evening assaying samples for his prospector friends.

Out of necessity Joe became a jack-of-all-trades, capable blacksmith and carpenter and mechanic. He made his own rawhide from moose skins, for repairing dog sleds and snowshoes. He was a crack shot and a tireless hiker. Pearson describes an occasion when, at the age of fifty-eight, Joe traveled thirty-one miles from the Toklat River to Pearson's cabin to deliver a parcel of mail and after dinner, started the eight-mile trek back to the Quigley homestead, all "with about as much fuss as a city man going to the corner for a newspaper!"

On February 2, 1918 Fannie and Joe were officially married at Glacier Creek, and during the same year they moved to a new location on the side of Quigley Ridge above Friday Creek. The site was close to the tunnel of the Quigleys' Red Top Mine, where Joe had discovered a vein of high-grade silver-lead ore. Together the Quigleys build several cabins and storage buildings, collected stones for terraced gardens, and excavated a new cold storage pit for storing food. In order to continue gardening, Fannie hauled rich riverbed soil on her back from the streams far below. Although Joe and Fannie held dozens of potentially viable mining claims, the challenges of labor and transportation made starting a profitable operation very difficult. Instead, Joe located the mineral-rich lodes and later leased the claims to other mining interests. The Quigleys leased the Little Annie Mine, with its veins of silver-lead and gold-quartz ore, along with nineteen other claims to Thomas Aiken in 1919. The Red Top Mine was leased to a Fairbanks miner in 1922, and the vein of gold at Quigley's Banjo Claim was mined by a conglomerate calling themselves the Red Top Mining Company beginning in 1929. Even with this outside investment, the transportation of ore to smelters in the continental United States limited production potential.

In 1930, Joe was working at one of his mines when a tunnel caved in, breaking his leg and shoulder and knocking him unconscious. When he awoke, he managed to drag himself out of the tunnel and to his nearby cabin, where Fannie discovered him twenty-four hours later. Fannie made him as comfortable as possible and hiked out for help. A local miner made the 90-mile trip to the Mt. McKinley railroad station to request a plane and a doctor. Another carried Joe to the Kantishna landing field. By the time a plane arrived a week had passed. Joe was flown to St. Joseph's Hospital in Fairbanks where he spent three months recovering, though the injuries left him with a limp and a partially paralyzed arm. Joe never returned to mining, and by 1937 he had sold Red Top Mine and moved to Seattle to retire.

When Joe left Kantishna Fannie refused to abandon her home, and the couple was divorced. Fannie continued to live by herself at the homestead on the side of Quigley Ridge until 1940 when Fannie and her closest neighbor, another Kantishna pioneer named Johnnie Busia, built a frame house on flat land near Moose Creek. Fannie and Johnnie lived a mile from one another, friends but at a respectful distance, until a day in 1944 when Johnnie noticed that no smoke was rising from Fannie's smokestack. Fannie Quigley died in her bed at the age of seventy-four.

Today in Kantishna reminders of the Quigleys' decades of activity are strewn across the land. The remains of the Little Annie Mine and Red Top Mine can still be seen. The Quigley homestead above Friday Creek is hidden by a stand of alder, but traces remain of cabin foundations and Fannie's garden terraces. Fannie's last home, located next to the Kantishna airfield, has been maintained by the National Park Service and is available for visits.

# MINING TECHNOLOGY

---

Perhaps the most common image of the Alaskan gold miner is that of a man hunched over a stream, gold pan in hand. The earliest gold-seekers in Kantishna did carry gold pans, though the pan was used more for locating gold (or prospecting) than for the mining process itself. Gold panning involves alternately swirling a mixture of gravel and water in the pan, tapping the edge of the pan, and spilling both gravel and water over the pan's lip until only sand and some heavy particles of gold remain. In expert hands the pan might only process a cubic yard of gravel in a day, and crouching over a stream for hours at a time was back-breaking. Even so, in the first months of the 1905 Kantishna stampede miners reported finding between \$5 and \$25 in a single pan. For a time, panning seemed well worth the effort. When these pockets of concentrated placer gold were gone, prospectors went back to locating gold-rich land with the pan and then building more elaborate labor-saving devices.

One of the most common of these was the rocker, also known as a cradle or dolly. From the outside the rocker looked like a wooden box, open at the top and fixed to rockers not unlike like a baby's cradle. Inside was a perforated hopper to separate the gravel and a canvas or burlap apron which caught fragments of gold while the rocky material tumbled past. Usually two men operated a rocker, one shoveling gravel in the top and emptying the hopper of washed material and a second who kept the box rocking and poured water over the gravel using a long-handled dipper. The advantage of a rocker is that it processed 3 to 4 cubic yards of gravel in a day and required a relatively small amount of water. During the Kantishna stampede, veteran miner William Lloyd penned a popular miner's ditty called "Are You Rocking Every Day?"

The most important tool of the pick-and-shovel placer miner was the sluice box which, like the pan and rocker, harnessed the motion of water to separate gold from gravel. By constructing an open-ended wooden trough to divert stream water and setting riffles in the bed of the trough, miners could shovel gravel into one end and allow the flowing water to do most of the work. As the lighter rocks and sand tumbled over the riffles, the heavy gold was trapped to be retrieved later during the clean-up stage. Sluice boxes were typically 12 to 14 feet long, but they could be fitted end to end to create a sluice several hundred feet long. On average, a man working ten hours could sluice 7 to 8 cubic yards of gravel. To collect the gold, each riffle was removed in turn until the concentrated gold and sand mixture could be swept and shoveled out of the low end of the sluice. On occasion miners also seeded the riffles with liquid mercury which bonded with passing fragments of gold to form an amalgam. This amalgam was then collected and heated in a metal retort to separate the two metals.

To get at deeper deposits of gold-rich gravel, Kantishna miners used both ground sluicing techniques and "boomer dams" to wash away surface soil and barren gravel layers. The first technique involved the use of ditches or flumes to divert the flow of a stream before delivering the force of the diverted water against a stream bank to undermine it and expose richer ground. This technique could only be used in ideal situations because it demanded about six times more water than simply shoveling into a sluice box. The second technique employed automatic boomer dams which blocked the flow of a stream to create a reservoir. When the water reached a certain level, a gate in the dam would open, allowing the water to rush or "boom" through the

placer cut. As with ground sluicing, the rushing water carried away surface soil exposing richer gravels beneath. This paydirt was then shoveled into sluice boxes.

The Kantishna district was often celebrated for its swiftly flowing rivers and creeks, and water power was used to full effect in hydraulic mining. Commonly known as “hydraulicking,” this technique combined flumes and ditches with dams, steel pipe, and large nozzles called “giants.” By channeling a large amount of water through a series of increasingly smaller passageways, miners created a water cannon to blast away the sides of stream beds to get at “bench deposits” to either side of a stream. With the power of a fire hose, the giants made the shovel and pick obsolete, particularly when the gravel slurry could be channeled directly into sluice boxes. One of the most ambitious hydraulicking operations in Kantishna began in 1920 when the Kantishna Hydraulic Mining Company began constructing a 13,000 foot water diversion drawing water from the north end of Wonder Lake for use along Moose Creek. Traces of an elaborate system ditches, “header dams” (for building water pressure or head), and steel pipe can still be seen near the Denali Park Road leading to the community of Kantishna.

Mechanized mining came to Kantishna in 1939-41 when three draglines (also called dry-land dredges) were transported, with great effort, to Caribou and Glacier Creeks. Draglines are self-contained digging machines fueled by diesel engines. The superstructure is equipped with caterpillar traction and a toothed bucket that is lowered into the cut, pulled forward by a haulage cable and hoisted from the end of a boom arm. The machine then dumps the bucket-load into its sorting screens and sluice tables for gold recovery. After the gravel is processed, the waste rock is deposited by a conveyor belt in symmetrical mounds called “tailings piles.” The Kantishna draglines proved to be the most productive placer mining operation in the history of the district. During just three seasons of operation, an average of 75 cubic yards of gravel was processed per hour by the ten-man crews working day and night. However, the careers of Kantishna’s draglines came to a halt in 1942 when President Roosevelt signed Federal Order L-208 which declared gold a non-essential metal and diverted much of the nation’s mining potential to the war effort. Two of these industrial behemoths were dismantled and removed, and today one remains as a reminder of Kantishna’s brief industrial heyday.

For much of Kantishna’s history, Kantishna’s placer miners remained pick-and-shovel men, limited mainly by the high cost of importing mechanized equipment. Great distances and high costs also impeded the district’s hard-rock miners despite sometimes Herculean efforts. Beginning in the early days of the Kantishna gold rush, miners found pieces of stibnite, sometimes a large as boulders, in their placer cuts. Joseph Quigley was one of the first to recognize that stibnite (antimony ore) might be mined for a profit. Because antimony is used in the manufacture of munitions, Quigley took advantage of rising demand during the 1904-05 Russo-Japanese War and shipped 12 tons of stibnite ore from the Last Chance Mine on Caribou Creek. Early miners also found chunks of galena in their sluice boxes, and before long Quigley and others were searching for deposits of this lead-silver ore. In the hills surrounding Kantishna’s placer goldfields prospectors also found promising amounts of zinc, copper, and quartz gold.

To find embedded veins of these valuable minerals, Kantishna’s hard-rock miners climbed a thousand feet or more to the rocky slopes of the Kantishna Hills, often far above treeline. There

they set about digging test pits, searching for fragments of the telltale ores. After locating a likely site, a miner would often build a rough shelter and spend weeks at a time digging an adit, or tunnel, straight into the earth. Because the hills offered only lichen-covered rocks, wood beams and planks for reinforcing the tunnel had to be carried by hand from miles away. Once in place, the beams kept the roof of the tunnel from collapsing and perhaps killing an unlucky miner. Because much of the earth was frozen year-round, the threat of thawing earth and a collapsing tunnel increased in the spring and summer. To minimize this threat, miners built insulated wooden bulkheads at tunnel entrances to maintain freezing temperatures inside. The challenges of mining all alone on an exposed hillside, in inclement weather or bent double in a cramped and chilly tunnel, are considerable, but then so was transporting the ore to market.

Kantishna's hard-rock miners could not afford to ship large quantities of ore to smelters in Oregon and Washington. Instead they "high-graded" the ore, separating by hand the highest quality pieces and packing them in burlap or moose-hide sacks. During the winter, the sacks of ore were then sent sliding downhill to the creeks and dog sled trails in a process called "rawhiding." Galena ore in the 1920s, for example, traveled from Eureka (today's Kantishna) by dog sled to Glacier City before being transferred to horse-drawn sleds which took the ore over a twenty-two mile corduroy wagon road to Roosevelt, where the sacks awaited spring. After break-up, steamships carried the ore down the Kantishna to the Tanana River, eventually reaching St. Michael at the mouth of the Yukon River. Ocean steamers then transported the ore through Bristol Bay and the North Pacific to a smelter in Tacoma, Washington. Because the shipping cost from mine to smelter was \$75 per ton, the ore needed to contain at least 100 ounces of silver per ton to pay for itself, and with silver at \$1 per ounce in 1920, this colossal effort was often a losing proposition.

In the early 1930s, a dirt road was completed connecting the community of Eureka to the Alaska Railroad, but the 90-mile journey still made large scale mining exports difficult. In 1935-36 a group calling itself the Red Top Mining Company began mining quartz gold deposits at Banjo Claim, one of Joe Quigley's lode discoveries, and by 1938 they were operating a ball mill that processed 24 tons of rock per day. By crushing and sifting the gold-bearing quartz on site, the Banjo Mill largely eliminated the need to transport raw ore. During the 1940s, the owner of Stampede Mine attempted to solve the problem of transportation by flying his antimony ore to processors using Norseman aircraft and C-46 cargo planes. The system was costly, but the Stampede Mine soon became the largest producer of antimony ore in Alaska and accounted for a large percentage of U.S. production at the time. Together with dragline activity on Caribou and Glacier Creeks, these hard-rock operations ushered in a brief era of highly profitable and increasingly industrialized mineral production.

Despite its proven potential, Kantishna's mineral wealth would not be won easily. After World War II, gold mining in Kantishna never fully recovered, and the district's remote setting continued to present major obstacles to other plans for mineral extraction. Today the town of Kantishna functions mainly as a seasonal lodge community, offering visitors the opportunity for wilderness adventure and glimpses of the district's rich mining past.

Sources of Kantishna mining information:

Brown, William. *Denali : Symbol of the Alaskan Wild* . Denali National Park : Alaska Natural History Association, 1993.

Bundtzen, Thomas K. "A History of Mining in the Kantishna Hills." *Alaska Journal* 8 (Spring 1978), 151-161.

Buzzell, Rolfe. "Overview of Mining in the Kantishna District, 1903-1968," MS on file at Alaska Regional Office, National Park Service, 1989.

Hunt, William. *Golden Places: The History of Alaska-Yukon Mining, With Particular Reference to Alaska's National Parks*. Anchorage : National Park Service, 1990.

Saleeby, Becky M. *The Quest for Gold: An Overview of the National Park Service Cultural Resources Mining Inventory and Monitoring Program*. Anchorage: National Park Service, 2000.

# GOLD AND SILVER PRODUCTION: THE EARLY YEARS

---

## GOLD

<u>YEAR</u>	<u>FINE OUNCES</u>	<u>VALUE</u>
1903-1906	8,465	\$175,000
1907	725	\$15,000
1908	725	\$15,000
1909	241	\$5,000
1910	483	\$10,000
1911	1,451	\$30,000
1912	1,451	\$30,000
1913	1,451	\$30,000
1914	967	\$20,000
1915	967	\$20,000
1916	1,451	\$30,000
1917	725	\$15,000
1918	1,451	\$30,000
1919	725	\$15,000
1920	1,209	\$25,000
1921	580	\$12,000
TOTAL	23,067	\$477,000

## SILVER

<u>YEAR</u>	<u>FINE OUNCES</u>	<u>VALUE</u>
1903-1906	1,325	\$795
1907	114	\$75
1908	114	\$60
1909	38	\$20
1910	76	\$41
1911	227	\$120
1912	227	\$140
1913	227	\$137
1914	152	\$84
1915	152	\$77
1916	227	\$149
1917	120	\$99
1918	227	\$227
1919	114	\$128
1920	320	\$349

1921	156	\$156
TOTAL	3675	\$2,657

The total known mineral production of Kantishna Mining District during seven decades of mining includes 55,000 ounces of gold, 265,000 ounces of silver, 5 million pounds of antimony, and approximately 1.5 million combined pounds of lead and zinc.

Production statistics: A.H. Brooks, et al., *Mineral Resources of Alaska : Report on Progress of Investigations in 1921* . Washington : GPO, 1923.

Total known production: T.K. Bundtzen et al., *Progress Report: Geology and Mineral Deposits of the Kantishna Hills*. Alaska Division of Geological and Geophysical Surveys, 1976.

# BIBLIOGRAPHY

---

## BOOKS

Brown, William. *Denali : Symbol of the Alaskan Wild* . Denali National Park : Alaska Natural History Association, 1993.

Cole, Terrence, ed. *The Sourdough Expedition: Stories of the Pioneer Alaskans who Climbed Mount McKinley in 1910* . Anchorage : Alaska Northwest Publishing Company, 1985.

Haigh, Jane. *Denali : Early Photographs of Our National Parks* . Whitehorse , Yukon : Wolf Creek Books, 2000.

Hunt, William. *Golden Places: The History of Alaska-Yukon Mining, With Particular Reference to Alaska's National Parks*. Anchorage : National Park Service, 1990.

Moore, Terris. *Mt. McKinley : The Pioneer Climbs* . Seattle : The Mountaineers, 1981.

Pearson, Grant H. *My Life of High Adventure*. Englewood Cliffs, Prentice-Hall, 1962.

Schneider, William, Dianne Gudgel-Holmes, and John Dalle-Molle. *Land Use in the North Additions of Denali National Park and Preserve: An Historical Perspective* . NPS-Alaska Region. Research/Resources Management Report AR-9, 1984.

Saleeby, Becky M. *The Quest for Gold: An Overview of the National Park Service Cultural Resources Mining Inventory and Monitoring Program*. Anchorage : National Park Service, 2000.

Sheldon, Charles. *The Wilderness of Denali* . New York : Charles Scribners Sons, 1930.

Wickersham, James. *Old Yukon : Tales – Trails – and Trials*. Washington : Washington Law Book Co., 1938.

## ARTICLES

Bundtzen, Thomas K. "A History of Mining in the Kantishna Hills." *Alaska Journal* 8 (Spring 1978): 151-61.

Capps, Steven. "Mineral Resources of the Kantishna Region," in *Mineral Resources of Alaska : Report on Progress of Investigations in 1916* . USGS Bulletin 662. Washington : GPO, 1918.

Carson, Ruth. "Joe and Fannie Quigley." *Alaska* (April 1970), 17+.

Haigh, Jane. "Searching for Fannie Quigley." 5-part series in *Fairbanks Daily News-Miner*, *Heartland Magazine* , beginning May 9, 1999 .

Moffit, Fred. "The Kantishna District" in *Mineral Resources of Alaska : Report on Progress of Investigations in 1930* . USGS Bulletin 836. Washington : GPO, 1933.

Pearson, Grant H. "Joe Quigley, Sourdough." *Alaska Sportsman* (March 1950), 14+.

----- . "Fannie Quigley, Frontierswoman." *Alaska Sportsman* (August 1947), 6+.

----- . "Little Johnnie of Kantishna." *Alaska Sportsman* (July 1948), 6-9.

Prindle, L.M. "The Bonnifield and Kantishna Regions" in *Progress of Investigations of Mineral Resources of Alaska in 1906*. USGS Bulletin 314. Washington : GPO, 1907.

Sherwonit, Bill. "Up Against the Wall: James Wickersham Led the First Attempt on Denali in 1903." *Alaska* (May/June 2003), 32-35.