MINING AND THE MINERS

The Green Valley Hiking Club's club hikes frequently come across abandoned mines and mining sites. Just what activities took place at such locations and what were the miners like? The Mining Camps Speak, by Beth and Bill Sagstetter (GV Joyner Library), offers us useful and fascinating vignettes of life in the late 19th and early 20th Centuries in the western half of the United States.

THE MINERS

Mark Twain, in "Roughing It," described the miners (and others of the western movement) thusly:

> "It was a driving, vigorous, restless population in those days. It was a *curious* population. It was the *only* population of the kind that the world has ever seen gathered together, and it is not likely that the world will ever see its like again. For observe, it was an assemblage of...*young* men...stalwart, muscular, dauntless, young braves, brimful of push and energy...the strangest population... that ever trooped down the startled solitudes of an unpeopled land."

Some miners trooping west sought adventure. Others, perhaps rather sickly, sought good health. But the vast majority were tired of being poor and came west looking for a chance at a better life for themselves and for their families.

They came from all over the world: Chinese, American, Italian, Irish, English, German, Finnish, French, former slaves. They spoke different languages, practiced different customs, worshiped differently, but shared two things in common: they wanted a chance at a better life, and they knew zilch about mining.

Many wound up discouraged and returned home. Some died on the trek west and others died of disease upon arrival. The miner who stayed was called "the honest miner," one who thrived on the independence and camaraderie, even if the life was hard. He helped set the Code of the West, which helped make life bearable. Miners sharing the same goals and facing the same obstacles tended to help each other out and genuinely share the joys and sorrows of the vicissitudes of mining life.

All miners tended to look the same; shaggy hair, a slouch or sombrero-type hat, tall heavy boots, a coarse shirt, corduroy or denim pants (later Levis), vests, bowie knife and gun. And they acted the same: honest, sharing, aiding those less fortunate. A miner would leave his tools by his claim to let others know that the site was taken. He'd leave his supplies out in the open. He'd compare rock specimens for evidence of gold. He'd share his dinner of beans, bacon and flapjacks with other miners.

And they were generous to a fault: giving those who had gone broke a gold piece to help them pay their way back home; or, if striking it rich, the fortunate miner would treat

his buddies in the local saloon and make gifts of money to those who had ever helped him. Of the handful of miners who had ever struck it rich, though, most were dead broke again in no time, having dissipated their good fortune in booze, gambling and giving it away.

And another thing: one never heard complaints from miners. Their very cheerfulness bespoke a positive view toward life and toward their mining efforts. There was, however, racial and ethnic bias in some quarters. Chinese generally were not welcomed (but were hired by mining companies); Indians were shot, and Hispanics experienced a less than enthusiastic welcome.

Finally, contrary to outward appearances, miners were generally lonely. They were obsessed with mail, mail that made irregular, and usually rare, appearances. Early accounts go into great detail about how miners would wait in line for days at the local post office or stagecoach stop, hoping letters or home town newspapers would make an appearance.

THE PROSPECTORS

A prospector was a seeker--always searching for a new mine. He was also a loner and usually a bachelor, with only his burro as a companion. A hard rock miner worked underground for a mining company. There was overlap between the two groups. In the winter, a prospector might work for mining companies underground, but once warmer weather appeared, would work his private claims on the side while still toiling for the mining companies...or else just take off and work full-time on his own.

Of course miners were seeking gold (and later, silver). Gold is chemically inert; it will not rust or tarnish, will not dissolve in salt water or acid over thousands of years, will not shatter, is malleable and easily worked with primitive tools..and it is heavy. Its very weight enables prospectors to find it and retrieve it from nature.

Early prospectors engaged in placer (pronounced *plasser*) mining. That is, prospectors were seeking "loose" gold; gold that was not embedded in rock. This gold had weathered away from rock outcroppings and had gradually rolled downhill and found its way into stream bottoms over thousands of years. This was called free gold or placer gold. And you found the gold using a gold pan.

Using this technique, either by oneself or with another, was the most efficient way to mine placer gold. All it required was a pick, shovel, wheelbarrow, gold pan....and tons of hard work. Ancient Greek legends speak of this 19th Century method of finding gold.

Where to find likely places to find placer gold: prospectors looked for streams where the current slowed or at a sandbar; here heavy gold grains settle out. Prospectors would find gold not only at the bottom of the stream but also, by digging down, all the way down to bedrock, panning all the while. A gold-seeker might have to dig a hole twelve

to fifteen feet deep before approaching the lowest level. If there were any gold there, the deeper the hole the more gold showed up.

Often times in mountainous areas, the panner would be knee-deep in frigid mountain streams, moving the dirt, sand (and gold) about in his pan, sorting the various elements with frozen fingers, trying not to mistakenly toss out the gold with the grit, dirt and sand. At ten hours a day...

An experienced prospector by working steadily might be able to pan fifty panfuls in a ten-hour working day. If someone else was doing the digging, he might be able to do as many as a hundred pans a day. This amounted to moving about a half of a cubic yard of gravel. If the miner(s) didn't come up with at least one ounce of gold dust (gold then was worth 16 dollars an ounce) in those fifty to one hundred panfuls, they weren't meeting expenses, which were outrageously high in booming mining camps. When the gold ran out, the prospector moved on.

Later, prospectors used rockers to do the work of the gold pans. Rockers looked like a baby's cradle, mounted on curved runners. Rock the box and dirt/gravel would be shoveled into the top of the box. Water would be added to wash the material over a metal sheet that was perforated with holes. The smaller, heavier material dropped through the holes and down onto canvas, which captured most of the gold. Finally, the rocker had riffles or slats, which formed irregularities that simulated a rough bedrock stream bottom. Any gold not found on the canvas would be captured by the riffles. With a rocker, one man could wash two cubic yards of gravel and dirt in a ten-hour day.

Prospectors later used an additional laborsaving device: the sluice box. Shaped much like a miniature version of a Roman aqueduct, the sluice box, approximately forty feet long, was comprised of three sections: the first a somewhat steeply descending section, the last at a rather shallow angle, with all three sporting riffles or boards to capture the gold as it was swept down the box by water being poured in the top and coursing through the dirt, gravel and sand in the lower sections. Bristly mats on the bottom section caught the gold flakes missed by the riffles further up the box.

Finally, with the advent of hydraulic mining, as seen in the Kentucky Camp hikes, sophisticated and capital-intensive measures were used to extract huge amounts of gravel and dirt, which were then directed into the sluice boxes and then rockers, and all washed down by high powered hoses fed by extensive dams, run-offs, and lengthy piping down to the mining areas. Dredging in promising river and streambeds was also popular, though this technique was more utilized in states other than Arizona.

(Compiled by Frank Surpless, 03/05)