Douglas Beckstead

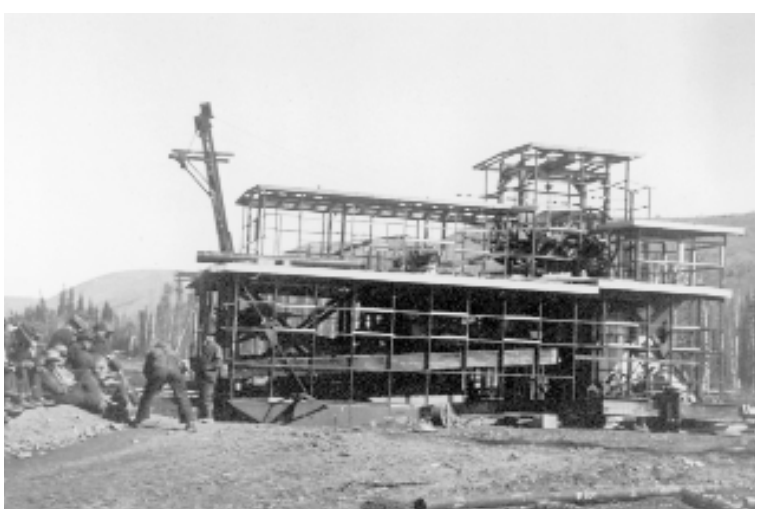
Gold Ship on the Yukon River

The Coal Creek dredge lies dormant approximately one mile south of the Yukon River between Eagle and Circle, Alaska in Yukon-Charley Rivers National Preserve. It is like a dinosaur that once devoured the earth searching for gold. The dredge and its sister dredge on Woodchopper Creek, five miles to the east, are the only gold dredges under NPSs jurisdiction and protection.

Dredges represent the end of a long chain of technological developments in man's never-ending quest for gold. Gathering gold fortuitously caught in riffles and cracks of bedrock in a streambed eventually gave way to the pick, shove, and gold pan; then to sluice boxes and rockers; and from there to hydraulic methods of washing large quantities of material into sluices to separate the gold. Finally, everything was combined into the equivalent of a large, floating factory capable of digging two to nine (or more) cubic feet of material with each bite, then processing it through a revolving screen, washing the fine materials over sluices where the gold was captured in man-made riffles. Today open-pit mines in Alaska, Canada, Australia and South Africa use techniques involving giant earthmoving equipment and chemical processing that were not only unknown to, but most likely beyond the wildest dreams of early prospectors.

History of the Coal Creek Dredge

Miners staked the first placer mining claims along Coal Creek in 1901. Like most prospectors, early miners in the area were content with simply working their claims to supply themselves with enough money to continue into the next season.



The superstructure and interior mechanisms of a stacker-type dredge. The digging ladder attaches to the bow (right) and the stacker at the stern (left).

The real value of claims was found when mining companies bought out the small "pick and shovel" miners and brought in big equipment to work the claims.

Realizing the value of the placer deposits in Coal Creek, General Alexander Duncan McRae, along with Ernest Patty (later president of the University of Alaska), Ira Joralemon, and Charles Janin, began actively investigating and purchasing interests in the Coal Creek claims in 1934-35. Charles Janin, one of the foremost dredge experts of the day, figured the best way to develop the claims would be with a small to medium sized dredge.

After forming Gold Placers Incorporated, a dredge was ordered from the Walter W. Johnson Co. of Oakland, California, to be delivered to Coal Creek, assembled and ready for production during the 1936 season. The Coal Creek dredge represents a departure from traditional design. While most had wooden hulls, this one was designed to float on compartmentalized steel pontoons. This allowed it to better withstand the forces of ice during the long winter months.

After the dredge was constructed in Oakland, it was disassembled, crated, and loaded aboard a steamship headed for Skagway, Alaska, where it was then loaded onto the White Pass & Yukon Route Railway for transport to Whitehorse, Yukon Territory, Canada. From there, the dredge was loaded onto a steamboat and carried down the Yukon River to the riverboat landing at Coal Creek. Although transportation may not seem to have been much of a problem, before the dredge could be crated, it was necessary to measure each and every tunnel along the WP&YR to make sure the cargo would fit.

After arriving at Coal Creek, the dredge presented a new challenge to the company—moving 400 tons of steel off the riverboat without the use of heavy lifting equipment. Using a series of pulleys, rollers, ramps and Caterpillar tractors from the camp, the crew was able to off-load the dredge parts. Then they moved the pieces approximately seven miles upstream to the waiting dredge pond where they assembled the pieces.

National Register Status

The Coal Creek Historic Mining District was listed on the National Register of Historic Places in 1995. The district encompasses the lower eight miles of Coal Creek, ending at Slaven's Roadhouse

This 1936 photo shows the Coal Creek dredge just before completing construction with the major components in place. The digging ladder and bucket line (left) are in place and the framework for the stacker (right) is beginning to take shape.

on the Yukon River. The buildings, dredge, water system, tailings piles, and other mine engineering sites and objects together represent Alaska placer mining operations of the 1930s. Joining the Coal Creek Historic Mining District on the Register is the James McGregor Cabin (built by an early prospector on Woodchopper Creek) and Slaven's Roadhouse, built between 1928 and 1930 by Frank Slaven, an early claimant on Coal Creek. These two sites are part of the Yukon River Lifeways Thematic Nomination (1987). The roadhouse has been the focus of NPS rehabilitation and stabilization projects for the last five years. It is a readily seen landmark on the banks of the Yukon. People floating the river frequently use it as a stopping place, whether to enjoy the historic mining district upstream or to simply dry out and get warm. Yukon-Charley staff provide an unofficial checkpoint at the roadhouse during the 1,200-mile Yukon Quest International Sled Dog Race each February.

Maintenance and Preservation

For the most part, mining companies viewed dredges and other heavy equipment as "disposable." Once the gold ran out, they simply left them where they stopped and walked away. As a result, many derelict hulls are scattered throughout Alaska and the Klondike. Buckets scavenged from abandoned dredges, some weighing half a ton or more, are popular landscaping features for businesses and homes in Nome, Fairbanks, Anchorage, and Dawson. In the case of the Coal Creek dredge, which originally cost $156,000 and in its 26-year life recovered nearly three million dollars in gold, the dredge paid for itself many times over.

The Coal Creek dredge last operated during the mid-1970s. Following that, it was left to the elements and an occasional visitor or vandal who happened to come across it. Fortunately for the dredge and the National Park Service, its location, well over 50 air miles from any population center, made it an unlikely target for looters. To date, the only serious vandalism has been the theft of a single pressure gauge from the Atlas locomotive engine that powered the dredge and several brass handles from the winchroom.

As with most historic structures, the most important aspect of it is the roof. Once the roof fails, the rest rapidly follows. In 1989 and 1990 the National Park Service replaced the roof decking, applying new rolled aggregate asphalt roofing to protect the dredge. In addition, NPS replaced the corrugated, galvanized metal over the stacker and added new railings around the deck. In a number of places, the galvanized metal siding had pulled loose. This was re-attached. Future work includes repairs to windows and doors, clearing vegetation from around the dredge and inventorying the tools and artifacts scattered throughout.

Interpretation

Because Yukon-Charley has, on paper, one of the lowest visitation rates in the national park system, it should not be assumed that interpretation is not a high priority. Interpreting a dredge is both exciting and challenging, particularly when it is not readily accessible. The preserve visitor center, located 10 river miles east of the preserve and 110 river miles from the dredge, acquaints visitors with the rich variety of resources, both cultural and natural. On-site interpretation includes a wayside exhibit and photographs in Slaven's Roadhouse. A major research and writing project underway on the mining companies that operated the Coal Creek dredge and its sister dredge on Woodchopper Creek. In addition, NPS is considering producing a video tape using historic footage of the dredge in operation. Since the last gold dredge operating in Alaska closed down several years ago, such a video will provide visitors an opportunity to see what it was like to work a placer gold deposit using "state-of-the-art" technology.

Partnerships

Because of the unique nature of the Coal Creek dredge, NPS has considered rehabilitating the machinery and equipment to the point that the dredge could operate again. This would enable raising the digging ladder and rotating the bucket chain. By maintaining the machinery in running condition, its life can be extended considerably. Potential partners for rehabilitation and preservation work include the Alaska Miners Association and the Alaska Railroad (the dredge is powered by an Atlas locomotive engine).

Douglas Beckstead is a historian at Yukon-Charley Rivers National Preserve and Gates of the Arctic National Park and Preserve.

Photos courtesy Bill Lemm Collection, Yukon-Charley Rivers National Preserve, Alaska.