

## The Copper River Story

High on a remote mountain in Alaska a glacier carves a valley, grinding rock to powder beneath it, melting as it slowly flows over the earth. This melting ice, the Copper Glacier on rugged Mt. Wrangell, gives birth to the 300 mile long Copper River, home to some of the most flavorful, most nutritious salmon on earth. Nature provides these fish with unique and formidable obstacles to negotiate in their instinctive return to their spawning streams; but, luckily for us, these obstacles are what make the Copper River salmon so special.

Squeezing through narrow canyons, forcing its way between walls of rock towering hundreds of feet above the river, the Copper rages downstream, carving a path through some of the most imposing landscape in Alaska. This is the dividing line between the Chugach Mountains to the west, and the Wrangell-St. Elias to the east. The steep drop from 3,600 feet at the river's origin down to sea level creates fast currents and powerful waves. Far upstream from the mouth, resident Alaskan fishermen tie themselves to trees and rocks before approaching the river's edge, showing great respect for the river's power. Perched on rock ledges some fishermen wield long-handled dipnets, waiting for one of the hundreds of thousands of returning salmon to swim into the net's open mouth. Others operate fish wheels, an ancient device which uses the river's current for harvesting salmon. Tens of thousands of salmon are caught annually by these fishermen, fish that will feed Alaskan families through the long winter.

Dipnetters are not alone fishing the banks of the Copper; brown and black bears, too, fish these waters. Shouldering their way through the swiftest currents, the bears feed on salmon all summer to fatten up for hibernation through the long winter. Moose walk the banks, browsing, and often wading in search of aquatic plants to fuel their own winter fire. High on the mountains above the river, Dall sheep graze, looking like tiny patches of snow from the river's surface, while bald eagles swoop on fish, or noisily harass feeding bears. This is the vast Alaskan bush, rugged, remote and bountiful.

With a current speed of up to 10 miles per hour, the Copper River moves tons of silt, rocks, trees and ice downstream every day. The turbulence and turbidity of the river confuses even the salmon at times, buffeting them into rocks and ledges hidden by the heavily silted water. Other dangers besides bears, rocks, fishermen and eagles face the returning fish, for even the glaciers that spawn the river can kill unlucky salmon. Thirty miles upstream from the mouth, the Childs Glacier calves directly into the Copper, almost constantly on warm summer days. The creaking, groaning, and thunderous ice falling from it's sides is clearly audible over the river's roar. Childs Glacier towers 300 feet above the river, toppling chunks of ice the size of houses into the water, pushing waves up to 30 feet high across the 1,000 feet of river to slam against the bank, stranding salmon and sometimes soaking and occasionally injuring sightseers. Opportunistic bears often pounce on the stranded fish.

Numerous other glaciers, some quite small by Alaska standards, some tremendous in size, feed the Copper on its way to the sea. Snow melt pours down the flanks of the mountains every spring and summer, adding more pure water to the flow. Gaining additional water and silt from each tributary, the Copper has the most silt of any river in North America. As much as 70 million tons silt are deposited annually on the Copper River Delta, where the river's current fans out into hundreds of braided channels, slowing the flow enough to drop its load of silt. The delta at the mouth is 60 miles wide, an immense wetland maze of beaver ponds and sloughs, home to thousands and thousands of waterfowl, and large numbers of moose, coyote, wolf and bear, and making it at over 580 square miles the second largest wetland in North America. Shorebirds in their millions stop here to feed each spring on their way north from wintering grounds in Central and South America, giving birders from around the world a unique opportunity, and signaling the end of winter. Habitat, the crucial element for wildlife survival, is abundant the length and breadth of the Copper.

The Delta becomes the Copper River Flats where the river meets the sea. Even in high tide conditions these are very shallow waters; much of the Flats are dry at low tide. With numerous bars lurking just under the water's surface, and a maze of small islands, the Flats are the fishing grounds for the Copper River fleet. It is a dangerous profession, fishing the Flats. In fact, it is the most dangerous fishery in Alaska. Ideally situated for rough seas on the north rim of the Pacific Ocean, the Copper River Flats are infamous in the fishing industry for their danger. Huge swells which have built across thousands of miles of windswept ocean build

into boats swamping breakers as they cross the bars. Salmon migrate close to the beaches and bars, forcing fishermen into dangerous breakers to catch them. Many men and women have died fishing the Flats, victims of the extreme environment. Such a unique environment calls for unique equipment. Small, speedy, shallow draft boats called bowpickers are the craft of choice for commercial fishermen here. The net is set out and picked up over the bow of the boat, with the reel which holds the net amidships, and the cabin set aft. The fishermen operate the boat from the bow, standing out in the elements, facing the sea head on. Most of these fishermen are alone in their boats, self-reliant to the core.

Salmon that face a 300 mile trip to spawning grounds through conditions as tough as these must be strong in order to survive, and Copper River salmon are perfectly adapted for their harsh environment. The long, tortuous climb up the Copper River is the one of the most strenuous spawning journeys a salmon can take. Their flesh is firm with muscle, to force their way against hundreds of miles of relentless current. All that muscle is fueled by Omega-3 oil, an unsaturated fatty acid which studies have shown to help prevent heart disease, and possibly inhibit some cancers. Many doctors and nutrition experts recommend eating foods rich in Omega-3 oils, and wild Copper River salmon are among the richest. Pacific salmon do not feed once they have entered fresh water, so the longer and more difficult their journey upriver, the higher in fat content and Omega-3 the fish are. This unique combination of high fat content and firm texture places Copper River salmon with the best tasting, most nutritious salmon in the world. Only nature can provide optimum growing conditions; only nature can provide Copper River salmon.

Year after year, bountiful runs of salmon return to the Copper to spawn in large numbers. Upriver subsistence users and sport fishermen enjoy historic high catch rates, while escapement to the spawning areas is likewise high, ensuring the continued health of the fishery. These are the first salmon to return to Alaska each year, and their return creates a frenzy in the fish market with buyers competing all-out in an effort to bring home the first fish. Hundreds wait in line at fish markets around the country, hoping to take home a piece of Copper River salmon, a rite of spring for many.

These wonderful fish have been commercially harvested since 1889, proving that harvests are sustainable if properly managed. The wild Copper River, flowing unsullied through some of the most rugged land in Alaska, still provides an ideal habitat for salmon, as it has for eons.