

CHAPTER XIV

FROM CANAL FLAT TO THE FERRY

The Valley, Forests, Climate, Rainfall, Farms, Geology

As there will be three days now with nothing to do but wait on the weather, I will now describe, in a general way, the valley of the Columbia River as far as I have progressed.

We already know that the Columbia River after passing the upper Columbia Lakes enters a comparatively wide valley, with much bottom land, diversified with many lagoons. This condition extends to Donald, just above the railroad crossing. Here the lagoons cease and the River narrows, only to expand again until the head of Redgrave Cañon is reached. It then contracts to a general width of 300 to 400 feet to Beavermouth, except for the narrow place in the cañon. Below Beavermouth it widens again until just before reaching Surprise Rapids it doubles the width above. From the head of Surprise Rapids it runs in a deep mountain confined trough to just above the Ferry, and except for Kinbasket Lake, is rarely over 200 feet wide. The Selkirks terminate in a rather low, flat point opposite the mouth of Canoe River; and five miles south of the Ferry the country expands and becomes a valley eight miles wide, taking in both sides of the River, and extending ten miles north of the mouth of Wood River. This last section is known as the

warm belt, and although it is 100 miles north of Revelstoke it is five degrees warmer, and has two feet less snow.

This condition is accounted for by the fact that warm air continually comes up the Columbia from the Pacific Ocean, and, at the sudden turn the River makes, is boxed up against the high mountains of the Rockies that block its further direct progress, and there tempers the mountain atmosphere.

For practically the whole distance I had come from Canal Flat the mountains and valley are heavily forested. The prevailing forest growth consists of white pine, spruce, red fir, Douglas fir, hemlock, cedar, and some tamarack and white birch. On the moist ground cottonwood, aspen, alder, willow, and black ash grow. The surface of the ground, among the trees, is covered by thick, almost impenetrable, brush, among which devil-clubs and blueberry bushes predominate—the latter bearing a fruit that is a favorite food of the bears, and on which they get rolling fat. Many dead trees stand in the forest, and on the ground lie numerous decaying logs, what remain of fallen trees, called "wind-falls." The timber growth is especially luxuriant in the warm belt where the trees attain great size, especially the cedar and Douglas fir, many of which are ten feet in diameter. Logging and lumbering operations have been extensively carried on, and are still active between the upper Columbia lakes and Beavermouth. Here they cease and below the forest is virgin, knowing nothing of the axe except in the hands of the hunter, trapper, and fire warden, and the occasional visitor from outside.

The average annual precipitation in the vicinity of the upper Columbian lakes is 13 inches. This increases as the River is followed, and at Surprise Rapids, where a rain gauge is kept, it is 30 inches. No record was obtainable at the Ferry but the rainfall there must be at least 40 to 45 inches. At Revelstoke it is 42 inches, and in the mountains at the head of the Illecillewaet River it is 100 inches. Below Revelstoke the precipitation decreases until at the Boundary it is but 30 inches.

Farming is not very extensively carried on, owing partly to limited cultivable space and partly to a limited market, and it was only above Golden, at Golden, near Moberly, and at Beavermouth that there was evidence of any marked attempt at tilling the soil. There is ample water everywhere for irrigation and hay, grain, fruits, and vegetables suitable to the climate are successfully raised.

As I traveled the River I endeavored to take note of the geological nature of the country bordering it. I was able to do so at camping places; at places where bold bluffs stood out conspicuously; on several side trips I made, such as from Moberly to Golden; from Moberly to a few miles up Blaeberly River; on the two trips I made to investigate Redgrave Cañon, and Kitchen Rapids; a trip of several miles up Beaver River; the two trips to Blackwater Lake, one of them across the mountains; and the trip to Bush Lakes. As I sped by in my boat much of the mountain sides were hidden by the timber and only an occasional outcrop could be seen. But taking it all in all I obtained a quite comprehensive idea of the general character of the rock

formations, and as there has been no geological survey made and no report published of the geology of the Upper Columbia River, and as the Lower Columbia runs almost entirely through basalt, my recorded observations are the most complete and authentic general description that has been made. At least I have been unable to obtain anything satisfactory from the geological departments of either British Columbia or the State of Washington.

At the upper Columbian Lakes the benches already referred to, where eroded by the weather or exposed in railway cuts, are of yellow clay; the flat of the valley being glacial drift and silt. Below the benches, as far down as Redgrave Cañon, the formations are largely silicious shales and glacial drift. Auriferous gravels exist in and along tributary streams, and in some places in the River. In Redgrave Cañon the River cuts through limestones, calcareous shale, and quartzite to just above Beaver-mouth, where quartzite predominates. From Beaver-mouth to the head of Surprise Rapids the mountains are largely composed of limestone, mica schist, and quartzite; the considerable valley between the mountains being alluvial deposition from Quartz Creek, Beaver and Bush Rivers. From the head of Surprise Rapids to Canoe River on the left and just above the Ferry on the right the formations consist of alternate beds of mica schist and gravel, with an occasional showing of quartzite, clay, and limestone. From above the Ferry, on the right, the valley is alluvial until the bend is turned, and also for a considerable distance to the north and east. Granite and kindred rocks, so common to other mountain

ranges, seem to be largely absent in the Canadian Rockies and the Selkirks. Their structure is mainly sedimentary, and they have apparently reached their present form by upthrust and erosion without the aid of volcanic action. Along the Upper Columbia intrusive igneous rocks first become noticeable at Revelstoke.

A description of the geology and general appearance and character of the country traversed by the Columbia River below Canoe River will be taken up in later chapters as the sections are reached.

CHAPTER XV

ALPHONSE EMOND

Alphonse Emond, whom I first met at Surprise Rapids, is a man of dark complexion, of medium size, well built, and upward of fifty years of age. He is of Canadian birth and French descent. He claims to be the lineal descendant of the Bourbon kings of France, and although he has no aspirations that way, also claims to be the legitimate heir to whatever rights the Bourbons have to the French throne.

Emond came to the Columbia River, at Golden, in 1884, and that year ran the rapids of the Columbia to Canoe River. The succeeding year he ran Death Rapids and the others between Canoe River and Revelstoke. He has been down the Columbia to the Little Dalles across the Border. As has already been stated, he claims to have run Surprise Rapids in a specially built boat. He is by profession a trapper, a business at which he has made a success, as he owns a good home in Revelstoke—a two-story, well furnished, frame house set in a large lot. He is now a Fire Warden for the Provincial Government, his district extending on both sides of the Columbia River from Surprise Rapids to Canoe River. Early in the summer of each year he ships his Peterborough canoe over the Canadian Pacific Railway from Revelstoke to Beavermouth, and then descends the River to Surprise Rapids, where he

makes the mile and a half portage. From thence he canoes down to the foot of Kinbasket Lake, and when the water recedes, to the Ferry. Between Kinbasket Lake and the Ferry the old Tete Jaune trail is in good condition.

In the Fall, when his duties as Fire Warden cease because the danger of forest fires is over, he turns his attention to trapping and remains in the woods all winter. He has five cabins that he uses, the one at the foot of Kinbasket Lake being his main supply point. Nine miles below is the small cabin at Cummins Creek, and sixteen miles farther is the Ferry cabin. Four miles from the Ferry, and two miles up Wood River at the base of the mountains, is another small cabin of different design from the rest, being constructed with a steep, sloping roof only, and no side walls. Down the Columbia, on the Selkirk side just below Canoe River, is his last cabin, a small one of logs. Both the cabin at Kinbasket Lake and the Ferry are commodious, while they are all comfortable, clean and orderly. In each of the cabins is kept a supply of provisions, and Emond occupies whichever one is convenient as he makes the rounds of his trap lines.

In the Spring, after the trapping season is over and the River free from ice, Emond loads his winter's catch of furs in his canoe and runs the rapids to Revelstoke. Raymond Allen, a prospector living below Canoe River generally assisting him through Death and Priest Rapids. Sometimes Emond has a line of traps on Canoe River—a turbulent stream with several bad rapids—and then ships his canoe, by rail, from Revelstoke to the head of it, and in

the Spring navigates both Canoe and Columbia rivers to Revelstoke.

In the early days of the Hudson Bay and Northwest companies beaver were the main reliance of the trapper, both for their pelts and for food. On the Wood River bottoms beaver cuttings and dams are numerous, and they are said to be plentiful; but as they are now protected by law, they are no longer trapped. The principal furs now obtained by the trapper are those of the pine marten, mink, muskrat, bear, lynx, and an occasional fox.

In addition to his activities as a Fire Warden and trapper Emond acts as a hunter and guide for anyone seeking big game. There is game in the country if one knows where to look for it.

An occasional deer and black bear roams the woods, and caribou are numerous, but to avoid the onslaughts of the mosquitoes seek the high elevations at timber line. There are grizzly bears to be found in the rocky fastnesses back from the River. A stranger to the country is at loss where to seek this big game. Emond is familiar with their haunts, and his knowledge is invaluable to the hunter from "outside."

I was with Mr. Emond much of the time for three weeks, sleeping in his cabins, using his conveniences, eating at the same table and hiking the trails with him. I found him intelligent, companionable, hospitable, kindly, and reliable. The information he gave me about the various rapids was exceedingly useful, and almost invariably correct—the only variations from his descriptions were natural ones due to the varying conditions of the Columbia itself.

His disposition was not to magnify, or try to "throw a scare" into me, but he told me clearly the best way to tackle each rapid. Mr. Raymond Allen, whom I met later, told me he considered him the best canoe man on the Columbia River.

Emond treated me as a friend and brother. All he did was without reward, and I here record a small measure of my appreciation.

NOTE: Since writing the foregoing, I have learned that Alphonse Emond is dead. Under date of July 10, 1922, Mr. J. F. Nattress wrote me as follows: "Trappers Chas. Hatch and Chas. Duncan were drowned in Kinbasket Lake last November 9, as their last entry in their diaries was November 8. Must have been caught in a squall on the lake. They found Hatch and canoe on beach at Middle River, about a month ago—Duncan not yet found. Mr. Emond died in the hospital at Revelstoke, in May—was found floating down river near Gordon Rapids by another trapper. Ice was still in river and he had to portage canoe and Emond over the ice and run the open water—it took him 18 days to get to Revelstoke. Emond could not speak or write, was paralyzed, but managed to get into boat and start drifting down with the ice when he was found lying in boat. I was glad to hear that you got through safely."

Emond was evidently stricken with paralysis when on the trail or at his cabin, but managed to crawl to his canoe and set her and himself adrift in the vain hope that he would float down the River to Revelstoke.

That he may be as well treated where he has gone as he treated me is the best reward I can wish him.