

From the Blackfoot Crossing to the Cut-off, twenty-eight miles, the river is very crooked, the bottoms are composed of light sandy clay loam which produces good crops at the the Indian farms; there are bunches of cotton wood and willow, gravel shoals and islands. The depth of water in the channel is not less than two feet, the velocity of the current about four miles an hour. Several exposures of coal having a depth of sixteen feet were observed.

Below the Cut-off, as already spoken of, the land is not so good, after we enter the Pleiocene rocks. The soil is now similar to that of the Rainy Hills; the river has reaches of several miles, and the current is more sluggish and, consequently, deeper water. There is no wood except a few straggling trees of cotton wood. Many *coulées* with sandstone banks over one hundred feet high extend back from the river, several loose boulders were seen in the channel.

As we approach Grassy Island, forty-four miles farther down the river, the country is lower, and the banks only sixty feet high. There is a fine exposure of coal at this point, south of the island and about forty feet under the surface of the prairie.

Below Grassy Island there appears to be a big depression extending across the country towards Belly River. The lowest part of this depression is directly north of Big Bend, a few miles west of the 112° meridian.

Fifty-three miles from Grassy Island and we pass a place on the river where the fantastic and comical shaped sandstone banks remind us of Dead Lodge Canon on Red Deer River. The banks at Dead Lodge Canon are said to be six hundred feet high. They are only 200 feet high at this place which is called by the Indians *Aek-pao-takka*, meaning, according to Potts the interpreter, ground over ground.

Seven miles farther and we pass another large island, and at one hundred and fifty six miles from the Blackfoot Crossing we reach the mouth of Bow River.

The last twenty miles is through a sandy country, particularly so on the left side where we see hills of blown sand. A small bottom of cotton-wood was passed seven miles above the mouth, the first we had seen since leaving the Cut-off.

From the latter point to the mouth of Bow River, at this stage of water, the current has an average velocity of about two miles per hour. Several rapids occur where the current runs six or seven miles per hour, but these are short and get drowned in a high or moderate pitch of water. I did not find less than two feet of water in the channel. The river varies in width from five to ten chains.

Below the mouth of Bow River, ten miles, a sand storm was experienced. The wind, which was almost a hurricane from the north, swept the sand in clouds across the river from the sand hills on the north side, affecting our eyes, as we were obliged to push on. There is another patch of sand hills south-west of the fork of Bow and Belly rivers, and adjoining the latter.

From the mouth of Bow River to Medicine Hut, a distance of fifty-six miles, the South Saskatchewan River flows through lofty banks of sandstone with rough broken *coulées*. The river bottoms are small and the herbage scanty. The country on both sides is dry and sandy. There is wood sufficient for camping purposes along the shore. At forty-three miles there is a sandy island with some rough cotton-wood trees. For seventeen miles before reaching this island we passed through a *canon* with a great number of red conical hills. There are several shallow rapids where we found only three feet of water; and two places there were but two feet in the channel. We saw many coal exposures.

From Medicine Hat the river is very crooked as we proceed north. Sandy bottoms with cotton-wood frequently occur. The country is much higher and rougher on the east side of the river. Twenty-four miles brings us to Standing Hill. At thirty-six miles the plains on the west side become high and rolling. These high rolling plains extend across to the Red Deer River. At fifty miles the river turns to the east, and some shallow rapids with sharp boulders occur for the next twenty miles through a deep canon.

When Sand Point is reached—about twenty miles above the Red Deer Forks—no more stones were seen in the river till we came to the mouth of Strong Current Creek.