

provide food for himself and those living at the fort with him. All ideas of making surveys had been forgotten—in fact, it is not likely that any serious intention was ever entertained of employing him as a surveyor in the interior countries. His knowledge of navigation was doubtless merely to enable him to sail one or other of the little sloops which were kept by the Hudson Bay Company at their trading-posts on the shore of the bay.

In the year 1787, when seventeen years old, he was, however, sent inland with a party which was going to establish new trading-posts on the Saskatchewan river, and for the next three years he lived on the banks of that stream and on the adjoining plains to the south of it, learning the habits of the Indians, and inducing them to bring their furs to the stores to exchange for the commodities brought from England by the white people. One whole winter was spent in the tent of a chief of the Peagan Indians, one of the wildest native tribes of the West, and the friendships there formed stood him in good stead in his after-life.

In 1789, when at Cumberland House on the Saskatchewan, he began to use a notebook, and to take and record regular meteorological observations. The following year, while on a journey to York Factory with the brigade of furs, he made his first survey in the country. His notebooks show the courses and distances of all the reaches on the Saskatchewan and Hayes rivers, as well as the north shore of Lake Winnipeg.

After his return to Cumberland House in this year, he had the advantage of the society of one Philip Turner, a surveyor who had been sent out by the Hudson Bay Company to make a survey of Lake Athabasca, and under him he devoted himself heartily to the study of practical astronomy. During that winter he took many observations for the latitude and longitude of Cumberland House, and the position which he determined for it is the same which it now occupies in the latest maps published by the Canadian Government, although the position has varied greatly in the maps which have been published in the intervening one hundred and twenty years.

In 1791 he returned to York Factory, where he remained for more than a year, assisting in the fur trade and filling in all his spare time with taking astronomical observations. In 1792 he again left York Factory, but this time he went into what he calls the "Muskrat Country," which lies west of Nelson river, between Saskatchewan and Churchill rivers, where he spent the following winter. In 1793 he returned to the Saskatchewan, spending the winter at a place called Buckingham House, about halfway between Battleford and Edmonton; and the following summer he made a survey of the river down to Cumberland House, thus adding a considerable stretch to the part of the river he had already surveyed below that point.

The next three years were spent in the Muskrat country, making surveys of all the lakes and streams that he passed through in his