

Vermilion -78° ; Edmonton -57° ; Prince Albert -70° ; Winnipeg -53° ; White River, Ontario, -60° ; Toronto -26° ; Ottawa -32° ; Montreal -28° ; Quebec -34° ; Halifax -17° .

The record of 50 years at Winnipeg presents some very interesting facts. In the first 25 years there were but seven winters with a mean temperature higher than the mean of the whole period, while in the last 25 years there were but five winters with a mean below that of the whole period. This seems to indicate that the winter climate of the West is becoming milder, but it is a significant fact that the much longer record at St. Paul, Minn., indicates that the thirties and forties of the last century were comparatively mild in the West, hence there is suspicion of a long period weather cycle.

In Ontario, as represented by Toronto, the temperature curve of 51 years shows somewhat the same characteristics as that of Winnipeg, with more winters below average in the first half than in the second. In the Toronto record going back to 1831, there is, however, confirmation of the fact indicated by St. Paul that a long period beginning in the fifties and ending about 1888, during which the majority of the winters were abnormally cold, had been preceded by a period of about 20 years during which, while some few winters were very cold, most were comparatively mild. The decade 1841-1850 had, on the average, the mildest winters in the whole period 1831-1921.

It is obvious, therefore, that it would be unwise to form any definite conclusions regarding climatic changes on a record of even fifty years, as there are manifest evidences of pulsations of a longer period.

Since the Toronto record is much the longest, it is the most instructive we possess, and the following are some of the most noticeable features regarding the winters in Ontario. In the 1840-1850 period there were eight winters above normal temperature. The next twenty years contained more winters below than above but no very wide extremes. Then followed from 1873 to 1883 a period during which the winters alternated between cold and mild, while the six consecutive winters 1883-88 were all cold. The next four winters were mild and then from 1894 to 1903 there were ten successive winters of almost average temperature. The winters of 1904 and 1905 were very cold and then followed eleven years above average, with but two exceptions. The winter of 1918 was extremely cold, 1919 very mild, 1920 very cold, and the past two winters exceptionally mild.

The general form of the temperature curves of Montreal and Halifax are very similar to those of western stations, but they do not give evidence of quite as marked a tendency towards a preponderance of milder winters in the last quarter century. At Montreal the mean temperature of the last decade was 1° below the mean of the whole period, while the mean of the first decade was 1° above. At Halifax the mean of the last decade was a fraction of a degree higher than that of the first decade.