

to possibly 20° below zero. Occasional days when the temperature exceeds 90° are known to occur in the interior in June and July.

The precipitation of the north averages from 5 to 10 inches of rain annually except for the northern Pacific coast, the Grande Prairie country and the region around the southern end of James bay, where the amount is larger, and the region of the Archipelago, where difficulties in measuring precipitation have left the amount doubtful. The snowfall varies from about 45 to 70 inches for the most part, an additional 5 to 7 inches of water when melted. The total precipitation of the greater part of the North is therefore from 10 to 15 inches or more. Both rain and snow may occur in April in the Mackenzie region, although rain is of rare occurrence in that month. Rain is also rare after the first week in October. Snow may occur in any month but July, but is infrequent in June and August, mostly coming, when it does, early in June or late in August. It does not commence to accumulate upon the ground even as far north as Good Hope and Norman till the end of October. Frequently high winds in early winter drift newly fallen snow away, so that the ground may be mostly bare in some seasons till quite late in the year. At Moose Factory at the southern end of James bay the rainfall is nearly 15 inches and the snowfall 62 inches. It is unusual for snowfall to occur here in June, while none falls in July or August and only a flurry may be expected at the end of September.

At Mistassini Post at the southern limit of Ungava the rainfall is above 20 inches annually, while the snowfall runs from 90 to 130 inches in most years. This region, however, comes to a considerable degree under the same precipitation *régime* as the north shore of the St. Lawrence, which is frequently traversed by the storms originating in the south.

Because of the generally moderate temperatures of summer and the cool soil, it appears that the precipitation of the north, although not heavy, is sufficient to keep the soil sufficiently moist for the natural growth of those regions. The size of the rivers and lakes, however, points to a rather large percentage of run-off.

Mention has been made of a route for aviators across the northeastern portion of Canada and across southern Greenland to northern Europe. The temperatures of that region are no barrier to flying, since this was done at all seasons by the fliers established in the Hudson strait by the Government in recent years. The difficulty lies in the frequent storminess of the northern Atlantic and frequent fogs of the northeast. The cool waves from the north meet the warmer air off the Atlantic in the northeast, which is a condition favouring either fog or storm. In addition the compass is not very reliable on account of the proximity to the north magnetic pole. No doubt these difficulties could be surmounted by the establishment of sufficient direction-finding stations which could direct radio-equipped planes and airships and give weather forecasts of approaching storms. Fogs are most frequent in the vicinity of the strait and the Labrador coast in summer, but low pressure areas drift along the Arctic Circle and the Archipelago at all seasons of the year.

The normal temperature and precipitation at selected stations in Northern Canada are given by months in Table 9. For its interpretation a note on the method used in measuring temperature and precipitation is appended.

TEMPERATURE.—At the stations of the Dominion Meteorological Service the highest and lowest temperature in each 24 hours, termed respectively the maximum and the minimum, are recorded by self-registering thermometers. For any month the sum of the daily maxima, divided by the number of days of the month, is the mean maximum temperature of that month. The mean minimum temperature is obtained in a similar manner. The half sum of the mean maximum and the mean minimum is called the mean temperature. The averages of these results for any particular month over a period of years are the average means for that period and are used as normal means or temperatures of reference. The