

measuring fresh snowfall, but they cannot be far from the truth. The arctic "deserts" are a proven reality.

Mr. Rae discusses the annual cycle of cloudiness in considerable detail. In commenting on the gloomy, overcast skies of summer, he lays special stress on the double maximum of cloudiness characteristic of central and southern parts of the archipelago. In spring and early summer there is widespread marine status and sea fog that partly dissipates later in the summer, only to reform as temperatures fall below freezing in the autumn. Mr. Rae ascribes this stratiform cloud-deck to the trapping of moist, chilled air below the usual radiative inversion of temperature. He states, however, that the cloudiness of autumn tends to consist of more turbulent stratocumulus layers, probably due to higher wind-speeds; otherwise the process of formation is similar. This may be so in the archipelago; but stratocumulus decks are equally extensive farther south in the same season, and frequently form in deeply unstable polar air that is heated from below by residual open water. Inversions are frequently absent in such instances, and the "layer" habit of the autumnal cloud remains something of a mystery.

There are one or two points in Mr. Rae's treatment at which I must cavil. I wonder how many of the convolutions of the 40°F isotherm on the July temperature map (Fig. 11) are based either on observational material or on topographic probabilities. It is also plain that on the same map Mr. Rae made little use of available statistics from the nearby mainland. Thus the 50°F isotherm pursues an erratic course that bears little relation to reality: it passes on Fig. 11 north of Port Harrison (which has a July mean of only 47°F) and far to the south of Churchill (54°F), Baker Lake (50°F), and Coppermine (50°F). This is an unfortunate lapse in view of the importance attached to this line by biologists. The closed loop of the 60°F isotherm that is obviously supposed to lie over Goose Bay (62°F) misses it by some hundred miles; the 55°F line passes right through the site of the

airbase. It is quite true that these criticisms apply only to the mainland, whereas Mr. Rae was addressing himself to the archipelago. But it is inevitable that these maps, covering as they do a large part of the arctic and subarctic mainland, will be widely copied for this larger purpose, and it is unfortunate that they are by no means of uniform reliability.

In all other respects, however, the new report is a thoroughly useful and well-conceived contribution to arctic science. It is to be hoped that studies of similar scope will soon be forthcoming for other parts of the Northland.

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NORTH OF THE CIRCLE

By FRANK ILLINGWORTH. *New York: Philosophical Library, 1952. 8½ x 5½ inches; 254 pages; illustrations. \$4.75.*

As far as can be determined the objective of 'North of the Circle' is to prove to a lay reader that life in arctic areas may be comfortable rather than harsh. It is questionable whether the series of anecdotes related accomplishes this objective. Otherwise, the book is a more or less pleasant ramble which in total is incomplete, in part inaccurate, mostly undocumented, inadequately illustrated, and quite possibly over-optimistic.

Mistakes in fact are legion. For instance: "up the Yukon towards the Bering Sea" (p. 40); "no [agricultural] ground pests" (p. 68) though severe damage has been caused over the years by root maggots and cutworms in arctic vegetables; every statement but one about the Matanuska Valley on p. 73; "The Russians did not want to sell" Alaska (p. 152) in spite of historians' statements to the contrary; the Alaska purchase "was the largest single deal in real estate in history" (p. 153) ignoring the 40 per cent larger Louisiana Purchase just sixty-four years previously; the Malaspina Glacier "covers fifteen hundred square miles" (p. 153) although shown to be only 900-1,000 on the most recent maps; discussion of the periods of Alaskan development (p. 155) omits the beginning of fishing, Alaska's greatest industry; the Alaska Rail Road suc-

ceeded the Alaska Northern rather than Alaska Central (p. 157); and paper money certainly was in use in Fairbanks prior to the Second World War (p. 160).

Equally misleading is the looseness of writing throughout and the many misspellings of place names which make it appear doubtful whether the author read the proofs of the book. For example: he defines the Arctic as north of the "53rd Isotherm" (p. 4) without stating whether the line is for the year, winter, or month and without staying in this defined area for the rest of the book; inferring the ease of hearing wood chopped in -60°F temperatures (generally considered almost too cold for this pursuit) to the low temperatures (p. 44) rather than the temperature gradient; a declaration that the Bering Straits are strategically analogous to the English Channel (p. 247) which is subject to serious question; and the statement that "there could be no doubt" that Russia would move into eastern Alaska in case of hostilities (p. 247) which omits consideration of the bigger task of holding an area after it has been captured.

Other incorrect statements are those too optimistic. There is doubt that the thousands of soldiers who were in the Arctic during the last war returned with stories of "conditions suitable to a population of millions" (p. 21), and that Alaska and eastern Siberia are what "the

Americans call 'the most strategical areas on earth'" (p. 245).

Finally, the omissions in the text are a cause of concern. The absence of any map is inexplicable. On page 158 the description of Alaskan towns omits Anchorage, Alaska's biggest centre. The gold strike at Fishwheel, Alaska (p. 163) was 'salted', though details are given which do not suggest this. Chapter 10, *The Russian North*, covers 9 pages as compared with 27 on Spitsbergen and without mention of the Northern Sea Route Administration responsible for Siberian development north of 62° latitude or of population distribution or changes¹. Development of the Quebec-Labrador iron ore deposits is unreported as well as the decline of the Icelandic herring fisheries with the northward shifting of ocean currents (p. 239).

It is perhaps too much to expect a book on the Arctic for the lay reader to be complete, scientifically accurate, and easily understandable. However, it is fair to hope for an organized approach which aims at completeness of coverage with the same degree of detail and which includes data in easily accessible statements, photographs, maps, and statistics.

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¹See article by C. J. Webster, "The growth of the Soviet Arctic and Subarctic", *Arctic*, Vol. 4 (1951) pp. 27-45.