

coastal search from the Mackenzie to Coppermine rivers; and 3) Point Barrow, Alaska to the Mackenzie River in open boats (Pullen Expedition).

The Pullen Expedition is the narrative of Commander W.J.S. Pullen and his small crew's hazardous journey in open boats along the north coast of Alaska to Fort Franklin and Fort Simpson for the winter, and the return in 1850 to search the coasts of Banks Island and Wollaston Peninsula. Anyone who has spent time in the Arctic cannot help but be amazed at the accomplishment. In both trips along the coast, hardships related to poor rations, insufficient clothing, wetness, leaking tents, ice conditions that frequently threatened to crush the small crafts and which resulted in overnighing in the open boats, and frequent encounters with apparently friendly but light-fingered Eskimos cast a constant threat over the expedition. Yet it succeeded in demonstrating, without the loss of a single individual, that Sir John Franklin was not to be found in that area. The narrative shows only dedication to the task at hand without regard for personal safety, comfort or gain, but only a desire to successfully aid "the real heroes" of the Franklin Expedition.

Following the first summer's successful completion, orders to return the second season to search yet another area met with apprehension, but a willingness on the part of all to return to the rigorous coastline for another try.

Their return to England was from Fort Simpson via rivers to York Factory and home. It was only on this leg of the journey that any apprehension for personal safety was shown and that related to moving boats through rapids.

The narrative provides interesting reading and insights into the motivation of the individuals who participated in such an undertaking. The cause justified the personal sacrifice and it was done without any thoughts of personal gain. (How different the motivation of those of today!) The book should be on the shelves of all those interested in the early exploration of the north and those interested in the changing motives of people.

A modern map outlining the route would have been a most welcome addition for those not completely familiar with the area.

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CLIMATIC CHANGE IN CANADA. Edited by C.R. HARINGTON. National Museum of Natural Sciences, Syllogeus No. 26. 1980. 246 p.

This book is the result of joint studies made from 1977 to 1978 by those involved with the Museum's project dealing with climatic change in Canada. The period covered is the past 20 000 years or, in other words, the time since continental glaciers last covered most of Canada.

After a brief introduction by Dale Russell, C.R. Harington describes the impact of the climatic change on people in Canada and the nature of the project itself; A.J.W. Catchpole discusses historical evidence of change in western and northern Canada; Claude Hillaire-Marcel, Serge Occhietti and Gilbert Prichonnet describe historical, hydrological and physical changes in eastern Canada; L.V. Hills and E.V. Sangster review paleobotanical studies relating to the time period in Alaska, Canada and Greenland; and J. Gordon Ogden III outlines late Quaternary paleoenvironments in eastern Canada.

The book does an effective job of bringing together most of the facts and theories that relate to the topic. This is especially true of the comprehensive chapter by Hills and Sangster. The book prepares the way for future research by pointing out what we know and what remains to be done. Much has been learned, but by the same token it is clear that scientists have only begun to scratch the surface.

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