head of the Chilean IGY committee written in May 1957, the Commander in Chief of the Navy presented a detailed list of the debts incurred by IGY personnel on board his ships. Three months later the Naval Commander had to write again to complain that these debts were still unpaid. The naval communications provide valuable insight into the practicalities of sending expeditions to Antarctica, and future volumes might usefully include a greater number of such documents.

Coming on the eve of the fiftieth anniversary of the IGY (as well as the 2007–08 Polar Year), *La Antártica y El Año Geofísico Internacional* is a timely contribution to the understanding of the history of international science in Antarctica. Above all, it shows that the IGY can be viewed from multiple perspectives, and ought not to be seen as a simple narrative of triumphant science. It is to be hoped that this book will provide a stimulus for further studies of South American participation in the IGY and in the Antarctic Treaty negotiations that followed. (Adrian Howkins, History Department, The University of Texas at Austin, Austin, TX 78712-0220, USA.)

THE BEST JOURNEY IN THE WORLD: ADVENTURES IN CANADA'S HIGH ARCTIC. Jim Lotz. 2006. East Lawrencetown, Nova Scotia: Pottersfield Press. 224 p, illustrated, soft cover. ISBN 1-895900-76-X. \$Can19.95.

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Jim Lotz was a member of the Operation Hazen expeditions that did so much to study northern Ellesmere Island in the late 1950s under the leadership of Geoffrey Hattersley-Smith. They were part of Canada's contribution to the International Geophysical Year of 1957–58. As the list of dedicatees set out at the start of the book indicates, many members of the expeditions have sadly passed away, and Lotz is one of a dwindling band of Arctic veterans that remain from that heroic period of exploration. This volume is, therefore, very welcome as an autobiography of his life up to the date of the first expedition, together with an in-depth, but highly anecdotal and discursive, account of the expeditions themselves.

As well as the Hazen expeditions, he also participated in the Canada–United States Ellesmere Island Ice Shelf Expedition in 1959, a 'miserable experience' according to Lotz, during which he resided for four months in a trailer 'several kilometers north of Ward Hunt Island.' He returned to the Gilman Glacier, close to Lake Hazen, with Hattersley-Smith in 1960 for a final visit.

The author is a Liverpudlian and his extensive travels have not erased the legendary bluntness of natives of that fair city, which he apparently 'hated.' This is reflected in the prose of the book, making it always entertaining and easy to read if, one suspects, deliberately provocative at times. It starts with an account of Lotz's youth in Liverpool and of his appointment, after securing a Geography degree at Manchester University, to the United Africa Company as a graduate trainee. He worked in

Nigeria, largely engaged in the peanut trade, that staple which was, and is, an important export of the northern part of the country. He appreciated that he was part of a 'dying social order' and so resigned and decided on emigration to Canada. After a variety of short-term jobs, he became a weather observer at Schefferville, in the Ungava Peninsula, and this led to an invitation to join Operation Hazen. This was done in 'typical British fashion.... someone asked me if I wanted to serve on it.'

Lotz introduces Ellesmere Island with an account of the early explorations in the area, including those of Nares, Greely, and Peary, and then touches on the Oxford University expedition of 1934–35. He concludes with the observation that Operation Hazen, 'would be the first major intrusion into this harsh, austere land.'

Those were the days! Not only did the members of the party have no psychological tests to determine their suitability for work in the north but also, apparently, no medical examination. This section develops into a discussion of leadership, with the almost obligatory 'dig' at Scott as a conspicuous part of it, and the conclusion that Hattersley-Smith was 'superb.'

The author presents detailed information of the 'flying-in' of the expedition to its area of study and of air operations generally in the north, and devotes long sections to a discussion of the various members of the expedition, who appear to have formed a singularly harmonious group. In the words of Hattersley-Smith: 'I could not have wished for better balanced or more congenial teams during the two summers.' Lotz then passes to a description of 'Companions – canine,' a long account of the important position of dogs on the expedition, and then on to 'Life on the ice' and 'Discoveries and mysteries' an account of the achievements of the expedition, especially its work on the Gilman Glacier, which was surveyed both topographically and geophysically, in great detail.

The end of the expedition is described with some modest pathos, and there is an epilogue describing what happened to the various members in later life.

The writer's style is congenial and the book is suitable for reading through in one session. This is not to imply that the account is trivial or that it does not contain a large number of thought provoking points. It is simply that the lightness of touch of the prose enables one to skim rapidly from page to page. Moreover the candour of the writer is attractive. There are few books of this nature in which the writer openly admits to having had murderous thoughts about the colleague with whom he was living in enforced and cramped surroundings, but such is the case here, with regard to his companion in the trailer on the Ice Shelf expedition.

One is, however, brought up short by a few curious and simplistic judgements and minor errors of fact that the book contains. These relate to the background material, that on exploration at large, and not to the specifics of the volume. For example, we have William Wellman, not Walter (page 65), and Peary reaching the North Pole (page 53) but also failing to do so (page 100). Also, as

noted, nothing good can be said about Scott. The writer accepts uncritically the view expressed by Nigel Tangye (page 15) that Scott's second expedition was marred 'by poor leadership, bad planning and inefficient operation.' Even the great journey in search of the eggs of the emperor penguin was in pursuit of a 'crackpot' (page 14) theory. More generally, 'upper class twits' (page 16) were recruited onto British polar expeditions, and so forth. This reviewer has thought deeply concerning who these 'upper class twits' might have been. The list appears short. Sir Philip Brocklehurst of Shackleton's Nimrod expedition was in the party that accomplished the first ascent of Mount Erebus, Apsley Cherry-Garrard and Lawrence Oates of Scott's last expedition, whose achievements do not require listing, and, stretching the definition of 'upper class' a little, Benjamin Leigh-Smith whose expeditions in Svalbard and Franz Josef Land were successful and who brought his men out from the latter after the destruction of his vessel in a very Shackletonian open-boat voyage. 'Twits' never, and one concludes that as the writer mentions his own working-class origins, he retains the 'chip on the shoulder' said to be characteristic of Liverpudlians.

The book is attractively presented and the illustrations are interesting. Many of these are of the personnel of the expeditions and evoke an era that has now passed. Perhaps the most attractive is that of the author himself resolutely striding along a damp Liverpool street wearing his African shorts. There is also a set of useful maps indicating the travels of the field parties during the two summers of the Hazen expedition.

To conclude, this book is a racy account of the early part of the author's life full of interesting insights into life on a northern expedition. It is in no sense, and does not set out to be, a definitive account of Operation Hazen, but should be read by all with interests in that era of the history of the Canadian north. (Ian R. Stone, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

**LAST GREAT WILDERNESS: THE CAMPAIGN TO ESTABLISH THE ARCTIC NATIONAL WILD-LIFE REFUGE.** Roger Kaye. 2006. Fairbanks: University of Alaska Press. xx + 283 p, illustrated, hard cover. ISBN 1-889963-83-6. \$US29.95.

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The Arctic National Wildlife Refuge (ANWR) is the United States' first ecosystem-scale conservation unit, encompassing an unbroken continuum of five sub-Arctic and Arctic ecological zones. The area, which covers nearly 80,000 square kilometers, is 300 km from the closest city (Fairbanks), and is free from roads or human-made trails. Its remoteness, size, and virtually pristine condition mean that large-scale ecological and evolutionary processes continue essentially as they have done since times immemorial. As such it typifies the US' statutory definition of wilderness—'An area where

the earth and its community of life are untrammeled by man'—hence the denomination of 'Last Great Wilderness' that gives the book its title.

As its subtitle indicates, the book is about the campaign to protect the natural area in the northeastern corner of Alaska that was to become the Arctic National Wildlife Refuge. The Refuge (the original name of which was 'Arctic Wildlife Range') was created by executive order in the last hours of President Dwight Eisenhower's administration in November 1960. It was expanded when President Jimmy Carter signed the 1980 Alaska National Interest Lands Conservation Act (ANILCA), which doubled its size. This book is important because it reminds us that wilderness protection requires timely and visionary action before it becomes a political and material impossibility.

As were some of the earlier proponents of the Refuge, Roger Kaye is an employee of the US Fish and Wildlife Service, with a strong interest in the Arctic and in wilderness protection—although this book is an independent work based on his PhD research. He tries, largely successfully, to provide an objective overview of both sides of the campaign, although—by his own admission—his sympathies are with those promoting protection.

The proposal built from the United States' philosophical tradition of wilderness protection and the pioneering establishment of natural protected areas, particularly the creation of the Yellowstone National Park, which was much larger than earlier protected areas. A product of its time, it emerged in the post-World War II years in the context of growing awareness of a global population explosion, the risks of nuclear proliferation, and the encroachment upon natural areas by the effect of 'progress.' In this context, wilderness was seen both as a place that was best left alone for its own sake, and also as a place of solace for those who ventured there or who simply were comforted by knowing it existed.

The concept of frontier was of importance to both sides of the debate, albeit each emphasised different aspects of that frontier. Those that opposed protection invoked the pioneering spirit that had made the US what it was—a land of opportunity where freedom, rugged individualism, and self-reliance had enabled the taming of wilderness and the development of the national character. Those supporting wilderness protection recognised that the advancing frontier could last only as long as there was wilderness land left somewhere—and judging from what had happened in the then 48 other states of the US, those times were ending. This gave the campaign a sense of urgency—if large tracts of virgin land were not set aside for protection at that time, then they would never be. The parallel between the near-extinct buffalo and the migratory caribou best exemplified the risks of maintaining the old model—a parallel that was extensively used during the campaign.

The book is based on extensive research into archival material such as letters, memoranda, press clippings,