

The expedition derives its uniqueness from its status as a naval expedition that seldom saw the sea (for much of its duration it was anything up to 1000 km inland). It was unique, too, as the first serious attempt to explore the Arctic coastline of the American continent, and unique in placing the logistical support of a naval expedition representing the British government almost entirely in the hands of the staff of trading posts (many of whom knew nothing about the expedition or its objectives until it turned up — quite literally — on their doorsteps, demanding help). Finally, it was uniquely unfortunate in finding Canada's two main fur companies at the climax of a bitter trade-war that left the trading posts isolated and desperately in need of the very same logistical support that they were supposed to offer Franklin. Franklin's party did ultimately make its way, despite many hardships, along established trading routes from Hudson Bay to the unexplored country north of Great Slave Lake, and in 1821 it did explore a stretch of coast from Coppermine River to Bathurst Inlet; but, returning overland to its base, Franklin lost more than half his men to starvation, exposure, murder, and cannibalism.

Stuart Houston, professor emeritus of medical imaging at Saskatoon, began his long, painstaking researches into the expedition fully a quarter of a century ago, with the journals and paintings of Robert Hood. That book was published in 1974 by McGill–Queen's and the Arctic Institute of North America as *To the Arctic by canoe 1819–1821*. The two remaining parts of the trilogy have followed at intervals of exactly 10 years. Richardson's journal was published by McGill–Queen's in 1984 as *Arctic ordeal*. Now, finally, the reader is treated to Back. As the work has progressed, each volume has proved to be rather more detailed, more complex, than its predecessor, although that reflects the growing complexity of the task rather than any fluctuation in the exemplary standard of scholarship. Hood's records probably presented the most straightforward task, for his journals are the shortest, ending in September 1820, just a year into the expedition and a year before his death. The main demands on the editor were to add some commentary on the background and the text, and on Hood's fine paintings, some of which were reproduced in the book. Richardson presented more of a challenge, for he was the expedition's naturalist, and for an editor as thorough as Houston, his observations on birds, mammals, fish, plants, and geology each demanded a separate commentary, in addition to a lengthy introduction and a careful commentary on the journal. (Richardson's journal, incidentally, conveniently takes up the story where Hood left off; his journal starts in August 1820 and ends in December 1821.)

Back's journals must surely have presented much the greatest challenge of the three. They are more detailed, and cover almost the entire expedition, from its departure from Britain in June 1819 to the point of sailing for home in August 1822. To this reader they are much the most rewarding of the three for several reasons. Back was by far the expedition's best writer, a fact that prompted Houston

— ever alert to the prospect of different editorial lines of approach — to invite Dr I.S. McLaren to add some commentary on the aesthetics of Back's writing. (McLaren, a leading expert on the history of polar exploration literature and art, also provides commentary on Back's paintings and on a poem written by Back about the expedition.) Back is also rewarding because he spent more time away from the main body of the expedition than any other of its officers, so he has much to say that is new. Even when he was with Franklin, he recorded much in his journals that the others did not. Houston, in an astounding display of editorial attention to detail, has made a careful comparison between Franklin's *Narrative* and Back's journals, and has highlighted in darker print those many passages in Back's journals that tell the reader something that Franklin omitted or overlooked.

One could say much more about the outstanding quality of Houston's editorial vision, his painstaking quest for new insights. Every last detail that might help the reader's understanding of the expedition as a whole, of Back and other personalities, is recorded, be it in the introduction or postscript, a footnote, or an appendix. I shall offer just two more examples. First, straying somewhat from Back but remaining pertinent, he has added an appendix on 'The Franklin expedition as recorded in Hudson's Bay Company post journals,' which sometimes offer insights as fascinating as Back's own. Second, he has added a feature that turns a remarkable work of scholarship into something more: a truly beautiful book. The book includes, among other illustrations, about 40 of Back's watercolour sketches drawn during the expedition, reproduced in colour. To make that possible, Houston won the support of more than 60 benefactors, listed in the acknowledgements. Their confidence in him is entirely justified; the paintings are more than just the icing on the cake — they are an integral part of a superbly crafted, memorable book. (Clive Holland, 3 Lilac End, Haslingfield, Cambridge CB3 7LG.)

POLAR TOURISM: TOURISM IN THE ARCTIC AND ANTARCTIC REGIONS. Colin Michael Hall and Margaret E. Johnston (Editors). 1995. New York and Chichester: John Wiley and Sons. xvi + 329 p, illustrated, hard cover. ISBN 0-471-94921-3. £37.50.

This compilation of tourism-related articles has much to commend it. The editors' excellent, introductory overview of substantive and particular tourism issues fairly elaborates and compares differences and similarities of focus that exist between the Arctic and Antarctic. It also notes the fundamental importance of sovereignty and jurisdiction in this realm; to the north, a host of individual governments have the ability singularly to affect the regulation of tourists; to the south, however, the Antarctic Treaty sidesteps claims and jurisdictional questions, and establishes a continent that is unowned and unmanaged by any single government (although collectively the Treaty Parties do render management decisions via consensus recommendations, measures, decisions, and resolutions).

Fifteen useful chapters describe both general and specific aspects of polar tourism, eight relating to the north, seven to the south.

The Arctic chapters include: 'Patterns and issues in Arctic and sub-Arctic tourism'; 'The tourism space penetration processes in northern Canada and Scandinavia: a comparison'; 'Cruise tourism in the Canadian Arctic and its implications'; 'Tourism experiences in the Arctic – the Svalbard case'; 'Waste disposal and the wilderness in the Yukon Territory, Canada'; 'Tourism in northwest Russia'; 'Aboriginal people in the tourism economy of Canada's Northwest Territories'; and 'Access to the north – but to what and for whom? Public access in the Swedish countryside and the case of a proposed national park in the Kiruna Mountains.'

The Antarctic and sub-Antarctic chapters include: 'Issues in Antarctic tourism'; 'The precursors of tourism in the Antarctic'; 'The regulation of Antarctic tourism'; 'Tourism impacts and management in the Antarctic Peninsula area'; 'The management of tourism at historic sites and monuments'; 'Managing tourism in the sub-Antarctic islands'; and 'Tourism and New Zealand's sub-Antarctic islands.'

Since this arena is continually in flux, the editors have done an excellent job keeping relatively up-to-speed with some emerging trends and erupting issues. To cite one instance, the book is a useful compilation of *ad hoc* guidelines and formed recommendations that have been developed through the years to manage the conduct of visitors and tour operators in Antarctica. The contemporary feel, however, obscures some palpable and unfortunate gaps in coverage.

There is no detailed analysis of national decision-making under the National Environmental Policy Act (NEPA), the mother of all environmental laws in the United States. Perhaps it is unfair to expect a book of this sort to be absolutely comprehensive, but this omission surprises, because NEPA was, and still remains, the progenitor of the environmental impact assessment process in the US, and the prototype for similar regimes in other countries and under the emerging Protocol on Environmental Protection to the Antarctic Treaty. With renewed interest in resuming oil exploration and logging in Alaska, and in opening some areas for profitable human activities, presumably including tourism, I would have valued some discussion of how useful NEPA or NEPA-like processes have been — or how they have failed — in providing managers a database for assessing the impacts of tourists and visitors. There is little doubt that individual tourism activities, whether in the Arctic or the Antarctic, potentially generate impacts in the specific areas where such activities are taking place. But policing tourism activities in the short run is a much different concern from whether such activities, in the medium- or long-term scheme of things, are negatively affecting the environment, and how managers might take all of these matters into account. Both short- and long-term considerations, for example,

have been particularly relevant to the regulation of ship-board whale-watching activities in Alaskan waters.

The question of assessing environmental impacts is absolutely crucial to decision-making under the Protocol on Environmental Protection to the Antarctic Treaty. But none of the articles in *Polar tourism* addresses the Protocol's assessment procedures and requirements in sufficient depth. This cursory treatment is perhaps typified by the editors' wrap-up article, which notes the existence of the Protocol, but skirts or neglects critical definitions and mandates of Annex I of the Protocol, the implications such assessments might have for protected area management under Annex V of the Protocol, and recent discussions and debates at Antarctic Treaty meetings about these Annexes.

The gist is that, under this new, continent-wide environmental regime, all human activity — including tourism — will require the *a priori* preparation (by proponents of tourism ventures) and evaluation (by individual governments) of environmental assessments regarding the activity in question. Because the Committee for Environmental Protection established by the Protocol has no decision-making authority, each government will be required to evaluate (before permits or permission are granted) whether its nationals' proposed activity is being planned and conducted to minimize possible adverse impacts on the Antarctic environment and on its dependent and associated ecosystems. Such impacts may be immediate, obvious, and cumulative, or they possibly may be masked by natural variation. The Protocol also requires that monitoring be done, as necessary, to facilitate early detection of the possible adverse effects.

In this context, therefore, the issue of Antarctic tourism becomes exceedingly more complicated. Annex I of the Protocol requires a focus on changes to the 'initial environmental reference state' at various tourist locations, which necessarily entails more than a consideration of the many potential, short-term tourist impacts described in *Polar tourism* — for example, whether seals or penguins are disturbed by a visitor getting within a specific number of feet from such animals, or whether more or fewer tourists are visiting the continent (or a specific location) annually. The Protocol raises serious questions about which variables are relevant to the mandated assessments, the kinds of monitoring activities that might assist the Treaty Parties, and how to differentiate the effects of human activities from natural ebbs and flows. All of which suggests, of course, that a more comprehensive database is needed, one that will take years to compile. Some of these concerns are expected to be addressed at future workshops sponsored by the Scientific Committee on Antarctic Research. Apart from decisions by individual governments to allow particular tourism activities to proceed, based on an evaluation of the required assessment procedures, it is likely that collective management decisions by the Treaty Parties — in designations of Antarctic Specially Protected Areas (ASPAs) or Antarctic Specially Managed Areas (ASMAs), or the approval of management plans for ASMAs — will

be based on long-term environmental trends or changes indicated by the comprehensive database the Treaty Parties should be striving to assemble.

This is a very complex slate of future concerns, and it would have been useful if *Polar tourism* had begun to ponder this brave new world. And this reviewer hopes that the authors and their publisher would see fit to ensure that there are supplements to this useful, initial step down a long and difficult road. (Ron Naveen, The Oceanites Foundation, 2378 Route 97, Cooksville, MD 21723, USA.)

GREENLAND'S ICY FURY. Wallace Hansen. 1994. College Station: Texas A&M University Press (Military History Series 32). xii + 276 p, Illustrated, hard cover. ISBN 0-89096-579-X. \$34.50.

This is a book about a little-known and little-appreciated, but significant, contribution to the Allied war effort in the Second World War: the setting up and running of both an Arctic weather and rescue station at Comanche Bay (Igtip Kangertiva) on the East Greenland coast and a small outpost on the Greenland ice cap.

There were several reasons for weather and rescue stations in the Arctic, among the most important being the air supply routes between the United States and Great Britain. These supply routes for heavy bombers and, later in the war, long-range fighters leap-frogged up the north-east coast of Canada before crossing to Greenland to refuel. They then headed to Iceland and on to Prestwick, Scotland. The loss in good weather in 1942 of two B-17 Flying Fortresses and six P-38 Lightnings, along with several other aircraft incidents, encouraged the High Command to establish the combined weather and rescue station. The other main reason for the development of the station was to have a centre to fill in some of the vast gaps in the North Atlantic weather reporting network. In the pre-satellite era, the only way to track weather systems was by having the densest possible weather reporting network, and Greenland had long been recognised as a source of some of the weather systems that reached Europe. Ultimately it became essential for the Allied bomber offensive to set up weather stations in Greenland. Some of the larger air and weather stations in Greenland, such as Blue West-1 (BW-1) and Blue West-8 (BW-8), had up to 3000 men stationed on them. The camps also ranged in size to Blue East-2 (BE-2), which had 300 men, and down to the smallest, the Base Ice Cap Detachment (BICD), which had just 19 men and was established close to where Nansen began his crossing of the Greenland ice cap in 1888.

This book is one man's memory of the BICD and covers the time from the building of the camp, in the summer of 1943, to the time when the author, Wallace Hansen, left the detachment, in the autumn of 1944. The BICD had top military priority, superseding most other things in the supply chain, and the crew at the advanced station on the ice cap would record the weather conditions every hour and fill in various forms encoding the information for radio transmission. This information was then

relayed to the base camp, where it was enciphered and sent to the Greenland Base Command, who then broadcast the information to the Allied High Command for operational use.

Hansen describes some of the problems the BICD encountered, such as the burning out of the radio hut. Even weather observations could be difficult, and to launch a meteorological balloon one first had to make the hydrogen for the balloon. Of course, in the wild winter conditions this could be a major problem and on at least one occasion the manufacture of the hydrogen resulted in an explosion. Nevertheless, he obviously generally enjoyed his time in East Greenland.

Hansen was relieved from the BICD in September 1944 by the legendary Captain Robert Bartlett, on the two-masted schooner *Effie M. Morrissey*. Bartlett, who died a year later, was with Robert E. Peary for most of the controversial 1909 North Pole expedition, before being sent back just before Peary's final dash for the Pole. He had been contracted by the US Army to ferry supplies and people from the BICD to one of the larger staging posts (BE-2).

The main interest in the book, however, lies in the point of view from which it is written, that of an enlisted man (albeit a highly educated one) who obviously enjoyed his task. *Greenland's icy fury* has some nice qualitative explanations of the Arctic climate and of various meteorological effects, such as the aurora, the ocean currents in the region, and how katabatic winds develop, but it also describes many personal anecdotes from the era and is a pleasant light read. (Mark Brandon, British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET.)

DERECHO INTERNACIONAL DE LA ANTARTIDA. Francisco Orrego Vicuña. 1994. Santiago de Chile: Dolmen Ediciones. 685 p, illustrated, soft cover. ISBN 956-201-234-4.

Upon scanning the table of contents of Professor Orrego Vicuña's book, one is greeted with an immediate focus on Antarctic cooperation and utilization of resources. This should be no surprise, given the author's previous publications on this subject. One soon discovers that the analytical structure of the work assumes knowledge of the basic components of the 1959 Antarctic Treaty. In this sense it is not a 'statement of the law,' as the work by Sir Arthur Watts (1992) has been described, a fact further evidenced by the absence of an appendix. Instead, it is an insightful discussion of the emergence and meaning of the Antarctic Treaty System (ATS) in the light of contending legal interests among members of the international community. These interests are here focused on the question of resource utilization, whether viewed from an historical perspective, or from the present predicament of environmental preservation, or in an assumed future revival of pressure for commercial exploitation. The mineral resources regime is therefore treated as fully relevant, both