# **Book Reviews**

ANTARCTICA: EXPLORING THE EXTREME.

Marilyn J. Landis. 2001. Chicago: Chicago Review Press. xx + 396 p, illustrated, hard cover. ISBN 1-55652-428-5. \$US26.95; Can\$40.95.

DOI: 10.1017/S0032247403213048

Many books dealing with specific aspects of the Antarctic have been published recently. This one, Antarctica: exploring the extreme, seems to be the first for many years to give a broad historical survey, and one perhaps has to go back to Frank Debenham's Antarctica: the story of a continent (1959) for something similar. The book is divided into three parts: general exploration, from the concept of Antarctica to the Antarctic Treaty; regional exploration of four Antarctic regions and the sub-Antarctic islands; and the exploration of Antarctica's geography and wildlife. The text is very readable, with the dramatic episodes presented in vivid, but not purple, prose and enlivened, for example, with an account of the ship-wrecked cat that established a ménage à trois with two penguins in an empty cask. I had not previously come across mention of Borchgrevink's use of huskies for deicing sleeping bags. The information is accurate with only the occasional minor slip — for example, James Cook worked as a shop-boy in Staithes, not Strithes, and Whitby is the name of a fishing port, not that of the ship-owner who took him on as an apprentice.

It is not really correct, however, to say that 'Science was not the primary focus for most Antarctic expeditions until the early 1900s' (page 186). Edmund Halley receives no mention, although, in 1700, he took his ship *Paramore* across the Antarctic Convergence into waters strewn with icebergs to make his magnetic observations. He showed that voyages undertaken for specific scientific purposes were worth government support, and founded the science of geophysics, which has many times provided the impetus for Antarctic expeditions. Above all, it was his advocacy for observations of the transit of Venus that led to Cook being dispatched to southern waters. Bellingshausen in 1819 set out to the Antarctic with an overly full scientific programme. In the mid-nineteenth century, the voyage of *Erebus* and *Terror* was planned from the beginning with magnetic survey as its primary objective, and the American and French explorations of Antarctica carried out in the same period sailed with scientific investigation as high priorities. More recent scientific work in the Antarctic surely deserves more attention than it is given. Thus the work of the Discovery Expeditions is not mentioned. True, this was basically marine, but it was exploration of the Antarctic region. The mass of information accumulated by prolonged hard labour in a ferocious ocean between 1924 and 1939 occupies five feet of shelf space and gives a full account of the oceanographic processes, amongst other things, that dominate Antarctic ecology.

The achievements of the International Geophysical Year (IGY) might have also been described a little more fully. The extensive ionospheric and geomagnetic observations, made when there was a maximum in the solar cycle, seemed for a time to be disconnected and baffling, but gradually coalesced in the magnificent concept of geospace. The relations of the Geographic Pole, the Magnetic Pole, and the Geomagnetic Pole in the south had provided a unique environment for separate study of different ionospheric phenomena and their relations with the stream of plasma coming from the Sun. The aurora australis gives the picture some visual reality, but the actualities of geospace are evident in the technologies of space travel, remote sensing, and electrical power transmission. This was indeed exploration of a new facet of the Antarctic. A new development following the IGY was the Soviet-French collaborative work on an icecore, 2200 m in length and obtained by an impressive feat of engineering at the Soviet Vostok station near the Pole of Inaccessibility, which yielded surprisingly detailed information about climatic changes over the past 160,000 years. In the same region, radar soundings have more recently shown the existence of a huge lake held between the bedrock and ice 3000-4000 m thick above it. Obtaining a sample of its water to find out if there is any life is in it is proving an extremely tricky and specialised piece of exploration.

The science that is touched on in the book is contained in the third part. It includes a clear summary of the role of Antarctic studies in the acceptance of the theory of continental drift and the Antarctic's central place in the Gondwana jigsaw. There is also useful information on the larger forms of Antarctic animals — but nothing about the plants, which, after all, persist in far more extreme conditions than the animals do. But the points to be made are that the vast amount of information that has come from the Antarctic is the product of exploration in the broad sense, and that, although it has not usually involved the spectacular horrors endured by explorers in the narrower sense, it has been obtained by many people who, in making observations and tending equipment in the field, have quietly endured and coped with the same extreme conditions as their supremely adventurous colleagues.

Putting aside the petulance of a reviewer who has always thought that the role of science in Antarctic exploration has been undeservedly given second place by the public, this remains a book that will be read with pleasure and found interesting and useful by the general reader. A glossary helps those not familiar with polar terminology, a selected bibliography guides to further reading,

and a list of travel resources may enable some to experience the Antarctic at first hand. The well-written text is enhanced by a judicious selection of monochrome photographs, many of which were taken by the author. (G.E. Fogg, School of Ocean Sciences, University of Wales (Bangor), Marine Science Laboratories, Menai Bridge, Anglesey LL59 5EY.)

### Reference

Debenham, F. 1959. *Antarctica: the story of a continent.* London: Herbert Jenkins.

**FALKLAND ISLANDERS AT WAR.** Graham Bound. 2002. Barnsley: Leo Cooper. xx + 234 p, illustrated, hard cover. ISBN 0-85052-836-4. £19-95.

DOI: 10.1017/S0032247403223044

Jean Elshtain, in her account Women and war, once noted that 'Without war stories there would be fewer stories to tell' (1987: x). This seems an appropriate place to start when considering Graham Bound's new book on the Falkland Islanders and the 1982 South Atlantic conflict. A short but at times traumatic 74-day occupation (depending on your point of view, of course) of the Falklands by Argentine forces transformed island life. This book seeks to narrate rather than critically analyse these experiences. As a native-born Falkland Islander with extensive experience of local and British media, Graham Bound is well placed to carry out this task, even if, curiously, he makes no mention of the fact that another local resident, John Smith, published his diary of events shortly after the ending of hostilities (Smith 1984). Notwithstanding this lacuna, Bound gathers together an impressive collection of stories and recollections of Falkland Islanders (hereafter Islanders), which he intersperses with a chronological account of the occupation and subsequent conflict. Although he does not acknowledge it as such, this collection of stories could even be seen as a catharsis to Islanders, who have had few public opportunities to narrate at length their experiences of the Argentine occupation.

The opening section of the book sets out the historical, political, and social context leading up to the 1982 Argentine invasion. The usual villains appear, and Bound condemns Peron, the Foreign and Commonwealth Office (FCO), and 'the Machiavellian diplomatic process' for creating the conditions for the eventual 1982 diplomatic and political crisis. More helpfully, the author tries to explain why events such as the 1966 Condor incident shattered the confidence of Islanders. A hijacked Aerolineas Argentinas plane was diverted on an internal flight to the Falklands, where it promptly became embedded in the running track of Stanley race course. After a tense stand-off between the hijackers and local Falkland Islands forces, including a small number of Royal Marines, the Argentine party was eventually released and, with the mud-trapped plane, despatched from the Islands. Psychologically, the Condor incident

was considerable, because it demonstrated that 300 miles of South Atlantic water provided no natural security for the Falklands. Unbeknown to the Islanders, the FCO and their Argentine counterparts began a political process deliberately designed to increase the Falkland Islands' dependency on Argentina. Excluded from much of this secret diplomacy, successive FCO ministers were despatched to the Falkland Islands in an effort to persuade the small community to accept an eventual hand-over to Argentina. In return, Argentina agreed to supply the Islands with services relating to communications, energy supplies, and air transport, which resulted in some Argentine staff becoming permanent social features of the Islands. Throughout the late 1970s and early 1980s, Governor Rex Hunt in Stanley and representatives from the British Embassy in Buenos Aires warned that Argentina might envisage an invasion of the Falklands, if a settlement in their favour was not secured. As we know now, these warnings were not heeded in Whitehall, perhaps because Argentine frustration at the slow pace of diplomatic progress was simply interpreted as harmless or perhaps even typical 'Latin' hyperbole.

Once news of the invasion was released in April 1982, the British government faced an administrative and geographical crisis. Stung by allegations that it had simply surrendered Rhodesia/Zimbabwe in 1980, the Thatcher administration found to its horror that they did not even possess any detailed topographical maps of the Falkland Islands. A small detachment of Royal Marines was about to be overwhelmed by a determined party of Argentine invaders despite their brave initial resistance. Governor Hunt, whose first reaction was to hide under a table in Government House, was forced to surrender to the Argentine forces. Stripped of his office and then his ceremonial uniform, he and other members of the British administration were exiled to Uruguay. The Islanders were left to fend for themselves, and Graham Bound paints a vivid picture of how they reacted with acts of petty resistance and bravery, including the well-documented feats of Terry Peck and Trudi Morrison. One of my favourite recollections recalls Chief Secretary Dick Barker's attempt to make contact with the Argentine forces with the aid an improvised 'white flag' consisting of Hunt's expensive umbrella surrounded by a lace curtain from Government House! Thankfully his improvised paraphernalia prevailed. Other Islanders simply adopted a stoical acceptance of an unpleasant situation.

Three important features emerge from Bound's description of life under occupation. First, the experience of Islanders varied greatly depending on location. Arguably the Islanders locked up in the Goose Green community school/centre bore the brunt of unpleasantness. Mercifully, the treatment of Islanders by the Argentine forces, while hostile and threatening, never descended to the horrifying conditions endured by the people of Bosnia, East Timor, and Rwanda in the 1980s and 1990s. Mass rape was not a feature of the 1982 Falklands campaign. Second, Bound is very careful to stress that the Argentine

force varied from the frightening figure of Irish-Argentine Patricio Dowling to the delightful sounding Anglophile, Bloomer Reeve. Islanders frequently recalled their sense of pity for the Argentine conscripts, many of whom appeared underfed and maltreated by their officers. One of the items preserved in Stanley Museum features the ration packs for Argentine officers and ordinary soldiers. The difference in size and quality is striking. Third, radio played an incredibly important role in cementing a sense of 'imagined community.' Before the era of the video and television, the radio in pre-1982 Falklands was the linchpin of this small isolated community, and the broadcasting endeavours of Patrick Watts were later to be acknowledged by the award of an OBE. By mid-June 1982, this extraordinary, if relatively benign, occupation was over and the radio station could announce that British forces had prevailed.

The final part of the book considers the future and the possibility of another conflict and/or occupation by Argentina. This is the weakest and most disappointing part of the book, because it does not offer the reader a sense of how Anglo-Argentine relations have improved notwithstanding the outstanding territorial dispute. The 1982 Falklands conflict did not settle the ownership dispute. While the author identifies the FCO as a persistent danger to the aspirations of Islanders to resist any transfer or settlement in favour of Argentina (no surprise there), he does not return to consider the importance of these war stories to this small community. Why do these narratives matter? Is it simply because it is important to have them as part of the written record? Or do stories, whether written or not, help bind together communities? Memorials, monuments, and ceremonies play their part in Falkland Islands life by reminding citizens and visitors of the unwanted Argentine occupation. But what about the lingering resentment of people, including native-born residents who were not present at the time of the 1982 occupation? Some Islanders and expatriate residents have complained to me in the past that their absence (whether accidental or voluntary) from the Falklands between April and June 1982 has been held against them whenever they have expressed a conciliatory view towards Argentina. What about the stories told to me in Stanley about the members of the British armed forces who vandalised Islanders' homes and their possessions during the war campaign? The cry of 'Where were you between April and June 1982?' can become as much an act of exclusion as inclusion.

In other words, there are, as Bound himself acknowledges, many other stories to be told about the 1982 Falklands occupation and conflict. It is a pity that he does not say a little more about his sources, given that many readers will not be familiar with the names listed in the book. While this account is undoubtedly a valuable addition to the very small collection of writings by Islanders about their personal experiences, I was left frustrated at the absence of a critical analysis. The challenge for Islanders and Argentines, regardless of

their age, ethnicity, gender, and socio-economic profile, is to assimilate the experiences of the Argentine 'occupation/liberation struggle' in a manner that does not simply reproduce unthinking schisms and hatred towards the other. All interested parties have made important gestures with regards to the long-term conciliation, but perhaps sadly it is the military personnel who served in the South Atlantic theatre who continue to pay the ultimate price. More British servicemen have now been killed as a consequence of post-traumatic stress disorders than in actual combat in May–June 1982. Islanders have the comparative luxury of remembering the past even if living in it is another matter. (Klaus Dodds, Department of Geography, Royal Holloway, University of London, Egham, Surrey TW20 0EX.)

### References

Elshtain, J. 1987. Women and war. New York: Basic Books.

Smith, J. 1984. 74 days: an islander's diary of the Falklands occupation. London: Century Publishing.

# THE SHAPING OF AMERICAN ETHNOGRAPHY: THE WILKES EXPLORING EXPEDITION, 1838–

**1842.** Barry Alan Joyce. 2001. Lincoln and London: University of Nebraska Press. xvi + 196 p, illustrated, hard cover. ISBN: 0-8032-2591-1. US\$40.00

DOI: 10.1017/S0032247403233040

The history of ethnography, widely viewed in the past as instructive entertainment carried out informally by amateurs, is in the midst of a renaissance alongside critical studies of travel writing and publishing. The growing number of monographs and new journals devoted to studies of travel is in effect an acknowledgement that travel writing in its many genres is present in the formation of virtually all scientific disciplines.

The shaping of American ethnography participates in this renaissance by taking a fresh look at the ethnographic work of the United States Exploring Expedition. To most readers, the expedition led by Lieutenant Charles Wilkes (who promoted himself to Captain during the voyage) is known mainly for its cartographic and instrument-based work carried out in the course of the four-year circumnavigation. However there is a lesser known side to the voyage: the work of its men of science. Joyce redresses this balance by shifting our gaze from navigation and hydrography to ethnography, philology, and natural history, thereby contributing a new dimension, and a more rounded picture of the expedition as a whole.

Joyce's justification of his study is important. Nineteenth-century ethnography in the United States has been largely excluded by social and cultural anthropologists who look to Franz Boas, the German-Jewish immigrant, as its founder. After visiting the Inuit of Baffin Island in 1882–83, Boas turned his attention to the northwest coast Indians, from which he developed many of his new ideas about cultural relativism and the importance of showing culture from the inside, as

seen by the people being studied. So important is this for the identity of professional anthropology today, that nineteenth-century ethnography is commonly relegated to the status of 'pre-Boasian.'

The payoff for Joyce's study is that he demonstrates the degree to which the ethnological work of the expedition bore the imprint of the Jacksonian era, the aggressive championing of the rural Indian-hunter and the desire for conquest. If ethnology was supposed to contribute to public education, it was steeped in controversy as to whether ethnological evidence should be reconciled with the Scriptures, and, if so, how. Through a close reading 'against the grain' of the narratives of the scientific principals, Joyce teases out the relationships between their religious convictions and their views of progress.

Joyce charts the progress of Wilkes' civilizing mission chronologically in the course of six chapters. The first deals with the preparations for the expedition, including the role of its scientific advisors. The next four chapters follow the track of the ships around Cape Horn, across the Pacific, to the Antipodes, south to the Antarctic, north to California, back across the North Pacific, through the Indian Ocean, around the Cape of Good Hope, and back home. Each of these middle chapters constitutes a case study devoted to a particular ethnographic group or region. The final chapter examines the publication of the voyage narrative and its reception.

The South Pacific is the primary ethnological theatre. The expedition arrived at a time of intense Anglo-American colonial, commercial rivalry. The officers observed the widely divergent consequences of missionary work, often comparing them with the missions at home. Just as the members of the expedition witnessed a turning point in the colonial transformation of Pacific peoples, they nevertheless could find grounds for optimism in contrast to the more deeply embedded social hierarchies occupied by slaves and Indians in the United States.

Readers of *Polar Record* may be surprised to discover that the book tells more about the genesis of American attitudes to Arctic exploration than to the Antarctic, which, for the absence of ethnographic material, is passed over. This was no accident. Wilkes, convinced that Antarctica was barren, left his scientific party in New Zealand, the colonial frontier, while he sailed on southward. Far from wasting their time, the men of science watched the events surrounding the signing of the Treaty of Waitangi and the British annexation of New Zealand. Inspired by national rivalry, and taking umbrage at British criticisms of American slavery, the officers interviewed King Pomare, recording his understanding of the treaty, which famously differed from the British version.

Ethnographic and philological work was socially and politically contentious and even paradoxical. The only serious qualification for being an observer of the customs and languages of other societies was to be an officer or man of science, capable of keeping a proper journal. However, if this licence to observe was granted 'gratis' to ethnologists, naturalists, and officers alike, the

publication and reception of their works was fraught with difficulties.

Joyce shows how the observers' religious backgrounds and beliefs about the possibilities of human improvement shaped their attitudes towards their work. James Dwight Dana, a recent convert and evangelical, felt forced to recognise the humanity of the Yahgan of Cape Horn, and to couch their harsh way of life in the language of degeneracy, whereas others shrunk back from acknowledging any common bond with them. Upon the return of the expedition, Charles Pickering, naturalist and collector of human remains for Samuel Morton, was directly challenged by a congressional committee to demonstrate that his Races of man did not subvert the account of the Biblical Mosaic Law. Horatio Hale, a man of prodigious linguistic talent, was able to sidestep controversy by publishing a comparative philological study of Pacific languages, a relatively safe or neutral ground for speculating about the historical migrations and origins of humanity.

Joyce is at his best when showing how stereotypes born of American colonialism and conquest at home are mapped on to the colonial contexts encountered by the expedition. The key images of this ethnographic vocabulary, he shows, were drawn from those most exploited at home: Afro-American slaves and indigenous Amerindians. The two sets of images play off each other as polar archetypes, the slave being portrayed as 'sedate and docile' and the Indian being cast mainly as 'wild and savage.' These moralising images, perhaps because of their malleability, enabled the American observers to modulate their ambivalence at precisely the moment when some of the Pacific peoples, having been converted by Protestant missionaries earlier in the century, are showing signs of what today is recognised as social dislocation and cultural breakdown.

Where Joyce's argument requires more development is in his claim that the expedition's ethnography constituted a national science. While recognising that ethnography was amateur rather than professional, and humanist rather more than explicitly evangelical, Joyce could do more to demonstrate that a subject, so institutionally insecure and professionally undefined, could count as a national science. He reasonably suggests that ethnography was intended to serve a doctrine of national improvement, but he never fully tackles the question as to how ethnography, if so diverse and contentious, could make claims on behalf of the nation, or about the nation.

That said, Joyce deserves credit for delving into the reviews outside the United States as a measure of the range of responses to the expedition. Nevertheless these do not add up to a study of the contexts of the voyage's reception. If Joyce's claim that ethnography was becoming a distinctly American national science is accurate, we should be told how it differed from its counterparts elsewhere, such as Britain, France, or Germany, where similar debates about disciplinary credentials and the recognition of the academies were taking place. Where comparisons are made, they are not argued sufficiently to be convincing. For instance, in citing favourable British

reviews of Wilkes' five-volume narrative, Joyce concludes without elaboration that 'such an ambitious expedition seemed to dwarf other recent scientific voyages, including that of HMS <code>Beagle</code>.' Even granting that the purpose of Fitzroy's <code>Beagle</code> expedition was to carry out an extended hydrographical survey and that the fame of <code>Beagle</code>, like that of Darwin, was granted retrospectively, Joyce's claim requires more evidence and argument to be taken seriously.

What Joyce's book does achieve is to show that the Wilkes' expedition was widely read and discussed internationally in the context of profound debates about the relationship between imperial power, colonisation, and religious conversion. The extensive range of ethnographic observations, inflected by colonial American stereotypes, provided a large amount of evidence for a range of audiences hungry to read first-hand reports about the spread of missionary influence and its impact upon its converts and their neighbours.

Joyce is one of a number of historians (including George Stocking Jr) who have recognised that nineteenthcentury ethnographic studies have much to tell about the creation of national identities as well as scientific disciplines. His commitment is to a social history of the American school of anthropology in the 1830s and 1840s, in contrast to the still common disconnected history of ideas. As such, the book has a very fitting conclusion. After the Wilkes expedition, Horatio Hale, still a young man, studied law and moved to Canada, where he carried out very extensive philological research, inviting Indian visitors to his house, where he had erected a large wigwam. Hale, having grown much less dogmatic in his views of what counted as human progress, and increasingly infirm in his old age, found in Franz Boas a young and able protégé to whom he could hand over his plans to revisit the northwest coast Indians. In this way Joyce reminds his readers that Boas and twentieth-century cultural anthropology had roots in nineteenth-century ethnography. So too it may be that the evangelical dimensions and civilizing impulses of the Wilkes expedition can help to inform us about the exploration and colonisation of the Arctic in the later decades of the nineteenth century, where recent studies of race, gender, religion, and the press have challenged previous assumptions about the capacity of exploration to function as a nationalist vehicle of imperial expansion. (Michael Bravo, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

THE HORIZONTAL EVEREST: EXTREME JOURNEYS ON ELLESMERE ISLAND. Jerry Kobalenko. 2002. Toronto: Penguin Book Canada. xviii + 277 p, illustrated, hard cover. ISBN 0-670-89434-6. Can\$35.00. DOI: 10.1017/S0032247403243047

Jerry Kobalenko compares his passion for Ellesmere Island to an addiction to heroin: 'You have to subsidize the craving through humiliating pursuits.' He has made 20 trips to this most northerly of Canada's Arctic islands, sometimes on photographic assignments and sometimes by finding cheap ways to reach and move around this austere and forbidding region. The horizontal Everest lacks an 'overarching narrative,' and consists of loosely linked chapters on places and people associated with Ellesmere Island, combined with accounts of Kobalenko's travels (and suffering) there and elsewhere. Like the parson's egg, the book is good in parts and should be sipped rather than swallowed whole. The author writes about Arctic hares and the fate of the Greely expedition on Pim Island during the starvation winter of 1883–84. He is very good at capturing the air of desolation and doom that still hangs around such sites. Kobalenko expresses grudging admiration for Adolphus Greely, the leader of the expedition that lost most of its members there. He pays tribute to George Rice, the only Canadian member of it. One of the survivors said of this unselfish man that he was 'the life of the Greely party, full of hope, buoyancy and energy.' Conversely, Kobalenko is far too harsh in his judgement of George Nares, who led the Royal Navy's expedition to northern Ellesmere Island, which attempted to reach the North Pole in 1875–76.

Kobalenko has dug up interesting information on some obscure episodes in Arctic history. They include the story of the party led by Johan Alfred Björling. He combined amateurism, enthusiasm, ignorance, and charisma, always a dangerous mix in any polar adventure. With four companions he vanished in 1892, somewhere between Greenland and Ellesmere Island. The writer also traces the route of the three-man Krüger expedition of 1930–31, which disappeared near Axel Heiberg Island, and offers some shrewd suggestions on its fate.

Kobalenko writes particularly well about wildlife on Ellesmere, which he has observed closely, and tells some good stories about polar bears. He visited many cairns, hoping to be the first to open them: inevitably, someone had been there before him. Kobalenko admires those who explored Ellesmere in recent years: Geoff Hattersley-Smith, Ray Thorsteinsson, Josef Svoboda, the Inuk Nukapinguaq, and two remarkable Mountie travellers — Henry Stallworthy and Alfred Joy. He longs to do what they did. His own accounts of his travels tend towards hyperbole, and he has a possessive attitude towards Ellesmere: '...in the company of modern adventurers, I felt as if we were all jostling for a piece of the island.' Kobalenko sounds almost masochistic as he describes his hard travel, usually on his own. But he had the most modern equipment and easy access to help should he encounter trouble. He appears to envy one 'wonderful fellow who lost part of his big toe to frostbite,' considering it 'a badge of honour that connects him to the old explorers.' The author admits to having 'Peary's spirit,' despite his dislike for the man.

Through adventuring in extreme environments, and writing about them in exaggerated terms, young men and women hope to garner fame and glory in the way that

the explorers of the Heroic Age did. The book contains a useful list of 13 motives for adventure, derived from the British poet and mountaineer Wilfrid Noyce. Kobalenko compares mountain climbers to polar travellers, claiming that: 'An aloofness separates most polar equals. . .in the Arctic, a solo traveller can do anything a team can. A very few sledging expeditions were held together by more than the glue of convenience.' This nonsensical observation appears to be based on the bad luck that the author had in choosing companions to share his adventures.

The book's black-and-white photographs are muddy, and the maps barely adequate. Kobalenko is a gifted photographer, and some of his colour shots would have greatly improved the book. It contains some minor errors and some major, unsubstantiated claims. Trotsky was murdered with an ice pick, not an ice axe. Greely ended his career as a major-general, not a brigadier. And did Krüger fight with the Boers against the British during the First World War? Kobalenko suggests that Peary was responsible for the death of Ross Marvin, a member of his expedition shot by an Inuk because of his threatening behaviour.

The dust jacket of *The horizontal Everest* shows the author leaping across melt pools. Whether readers consider such risk-taking daft or daring will determine their response to this interesting, discursive, but uneven book. (Jim Lotz, 5680 Inglis Street, Halifax, Nova Scotia B3H 1K3, Canada.)

# UV RADIATION AND ARCTIC ECOSYSTEMS.

D.O. Hessen (Editor). 2002. Berlin, Heidelberg, New York: Springer-Verlag. xx + 321 p, illustrated, hard cover. ISBN 3-540-42106-8. £63.00; US\$99.00; EUR89.95.

DOI: 10.1017/S0032247403253043

Much has been written about ozone depletion and the Antarctic, but little is known about the role of ultraviolet radiation in determining the nature of Arctic ecosystems. This is a conspicuous omission because the Arctic is much more biologically diverse than the Antarctic. Not least, it is home to a much greater species richness and cover of vascular plants compared to the Antarctic continent. Like the Antarctic, the Arctic is now being subjected to ozone depletion. However, the scientific interest in UV radiation does not just focus on ozone depletion. Natural changes in UV radiation (caused by, among other factors, cloud cover and aerosols) are also of great interest as we try to understand how organisms and ecosystems respond to UV radiation, past and present.

Hessen's multi-author volume is an important work as it provides a logical series of chapters that address the role of UV radiation in the Arctic. It starts with a chapter by Dahlback that describes changes in UV radiation over the high Arctic, and that begins with a nice summary of ozone depletion and the chemistry behind it. This is useful for the newcomer to the field, but is also a good review for old photobiological dogs who forget the chemistry now

and then. The second chapter, by Aas and others, takes us to marine waters. Compared to the Antarctic continent, the Arctic is the opposite geographical configuration — essentially an ocean nestled in a circle of land — and so understanding the penetration of UV into marine habitats is particularly important for high-latitude sites such as these. The chapter tells us about sea ice and the instruments that can be used to measure UV radiation though this substrate.

In the third chapter, Ørbaek and others tell us about fresh-water systems, describing the optical properties of Arctic lakes and the role of dissolved organic carbon in regulating the penetration of UV radiation into these systems. But fresh-water lakes and marine ecosystems are not always fully exposed to UV radiation. Being polar, they are frequently covered in ice and snow, and in chapter 4 Perovich provides more depth of discussion into the optical properties of snow and ice, and we hold our breath for a nice mathematical diversion into some of the theory.

Chapter 5 sets us off into Part II of the book, the biological effects of UV radiation. Björn provides an overview of the effects of UV radiation on a diversity of organisms from micro-organisms to vertebrates and some discussion on plants. In chapter 6 Leinaas treats us to some in-depth discussion on springtails, but there the section ends and we are left with the impression that there is plenty of work to be done on terrestrial ecosystems.

There is then a return to the aquatic realm. Chapter 7, by Vincent and Belzile, and chapters 8 and 9, by Hessen, tell us about penetration of UV radiation into fresh-water lakes and the potential effects on aquatic food webs. Excellent discussions are provided on the factors that regulate exposure to UV radiation, and we are given a particularly good look at zooplankton and the effects of UV radiation on grazing and quality of prey.

Part IV of the book returns to marine systems. Chapter 10, by Helbling, examines the effects of UV radiation on primary productivity in marine ecosystems, which may be a useful comparison for those interested in the role of UV radiation as a stressor in any marine ecosystems, including those of the Southern Ocean. In Chapter 11 Bischof and others focus on marine macroalgae, looking at effects on growth and how UV-screening compounds might be used by these organisms to protect themselves.

In Chapter 12 Herndl and Obernosterer examine pelagic bacteria, providing an insight into how the alteration of organic materials by UV radiation (and thus food for bacteria) can impact marine ecosystems. Browman and Vetter then launch into a hearty and long chapter on case studies from the sub-Arctic marine ecosystems, with particular focus on the effects of UV radiation on Atlantic cod.

Last, humans themselves are examined by De Fabo and Noonan. Potential effects of UV radiation on human viral infections and immune suppression are described, and the chapter asks whether UV-B radiation in the Arctic is a health risk.

The book is a nice balance in many respects. Spatially, many of the chapters cover different areas of the Arctic. Phylogenetically, we are treated to an examination of organisms from bacteria to humans and most groups in between. Temporally, some of the chapters provide an insight into seasonal and annual variations in UV effects. There isn't a great deal on evolution. It would be interesting to know how the UV flux relates to the fact that the Arctic was subject to an ice age only 8000 years ago and how important or unimportant the UV flux may have been over recent history. However, the book is an excellent insight into Arctic ecosystems as well as the effects of UV radiation on them. In Chapter 10 Helbling makes a comparison with the Antarctic, and we are drawn into thoughts about how the polar extremities of the Earth compare, ecologically and also in their potential response to physical stressors.

The book is likely to be an important addition to libraries and bookshelves of ecologists, photobiologists, limnologists, and marine biologists, and probably many more besides. (Charles Cockell, British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET.)

**LADY SPY, GENTLEMAN EXPLORER: THE LIFE OF HERBERT DYCE MURPHY.** Heather Rossiter. 2001. Milsons Point, NSW: Random House Australia. xiv + 401 p, illustrated, soft cover. ISBN 1-74051-024-0. DOI: 10.1017/S003224740326304X

This book has a further sub-title: 'the most extraordinary Australian you've never heard of,' and this, in itself, serves to warn the reader concerning the style of what is to follow. The subject of the book, Herbert Dyce Murphy, was one of the members of the Australasian Antarctic Expedition of 1911–14, under the command of Douglas Mawson, and seems to have been the only one, apart from Mawson and Frank Wild, who had any terrestrial polar experience. His prominence in the expedition is adequately indicated by the fact that in recent biographies of Mawson and of Wild (who commanded the western base on the expedition) he merits one entry in the former and is seldom noted in the latter (Ayres 1999: 69; Mills 1999). He is similarly inconspicuous in the journals of the ship's captain, John King Davis, where he is mentioned once (Crossley 1997: 51). However, if the original plan of the expedition had been carried through, he would occupy a far more prominent place in its historiography since there were to be three separate bases and Murphy was to command one of them. In the event, according to Mills (1999), Mawson substituted Charles Harrisson for Murphy on the voyage south and, due to exigencies of time, was forced to inform Harrisson that the third base would not be attempted (Mills 1999: 137). Murphy became one of the members of the expedition to be based at Cape Denison. In this book, however, Harrisson is not mentioned in this context and there is a section that contains a 'conversation' in which Mawson informed Murphy of the decision with regard to the third base. Very curious!

Murphy was born into circumstances of considerable wealth in 1879, in Melbourne. The family travelled frequently to Britain, and Murphy was enrolled at Tonbridge. He appears to have had an unhappy time at the school, possibly due to his slight appearance. In 1894 he was taken by his uncle, William Waller, on an extended trip to the Arctic in the yacht Gladiator. This was during the late-nineteenth-century vogue for northern travel. The vessel sailed to Spitsbergen (throughout the book this is incorrectly written Spitzbergen) and Murphy acquired a love of the sea, of Norway, and of the Arctic that remained with him until the end. He determined on adopting the nautical profession and undertook a number of voyages as apprentice, and as ordinary and able seaman, in cargo ships and on board whalers. He then became a student at Brasenose College, Oxford, although he never graduated. In the early 1900s, he adopted the unlikely profession of spy, being recruited by British Military Intelligence to make clandestine observations on railway facilities in Belgium and northern France. The first part of the title of this book arises from the fact that this was done in disguise as a young lady.

After leaving the intelligence service, due it seems to the influence of his mother, Murphy became involved in the whaling business in Norway and, following a disaster in a village in the north, adopted two young girls, aged 4 and 6, who had been orphaned there. This seems an unusual transaction for a 25-year-old, and single, man. The family spent some years in the Mediterranean on board Murphy's yacht, while he was acting as agent for whaling concerns there. On return to Australia, the girls were placed in a boarding school when he travelled south.

Then followed the Antarctic and, as noted above, Murphy was one of the least conspicuous members of Mawson's expedition. Most of the book is occupied by an account of this, written in a semi-fictional style. Murphy participated in one sledge journey, acting in support of a team led by R. Bage, making a direct exploration southwards from Cape Denison. At the base, his main duty appears to have been taking responsibility for the stores of the expedition. He left the Cape on board *Aurora*, when Davis decided to go to the relief of Wild's party rather than wait for conditions to ameliorate sufficiently for Mawson and the shore party to be embarked. On return, Murphy settled down to live the life of a gentleman, in Melbourne and its environs. He joined the army in World War I but was discharged due to poor eyesight.

He made one more voyage south, in 1952 when he was in his 70s, on board *Tottan*, a vessel that was sent to relieve the base at Heard Island. Murphy came to participate in this because the captain had a good man who could act as mate but who had no 'ticket.' Murphy had a 'ticket' and, once the ship had left port, who would know what was done by whom?

Murphy died in Melbourne in 1971, aged 91. To the end he was a noted raconteur and wit and, as the writer notes, 'as an old man even he no longer knew which was fantasy and which the original truth' (page xiii).

This book purports to be a biography, but the writer faced very considerable difficulties in researching it. Murphy seems to have left very few personal papers and only a few recorded reminiscences, the veracity of which might, as noted above, be doubted. So the only approach that could be adopted was to read around each topic and to attempt to reconstruct the life of the subject by a series of judicious interpretations. Unfortunately, the style adopted by the writer does not reflect this. She has conducted thorough reading in the records of the Mawson expedition but has attempted, with regard to that section of the book, to insert a great deal of direct quotation, much of which must be simple invention, even though we are informed on the rear cover that 'it's all true.' To that extent the book is not written as a biography at all. She stresses almost ad nauseam the unpopularity of Mawson, and reserves special, and continuous, spleen for Scott. This becomes tiresome and is exacerbated by the continuous use of the expression 'expeditioners.'

The rest of the book is even more subjective since the records are so few. According to the writer, 'Only stories where I was sure I had revealed the heart have been included' (page xiii). But she mentions one that would be a real nugget for polar historians if details had been provided. This was Murphy's apparent engagement in the von Toll expedition of 1900-03. It seems that Murphy was involved in 'reprovisioning the ship when it put into the Lena River before heading north to eternal obscurity' (page xiv). Incidentally, the writer indulges her wayward spelling here also, as von Toll becomes von Troll on each occasion that he is mentioned. It seems clear that Murphy did visit Russia on several occasions, and he refers to his experience in dog driving in northern Siberia in his letter of application for the Mawson expedition (page 128). Suffice it to say, however, that there is no mention of this involvement in William Barr's immensely detailed account of the von Toll expedition (Barr 1980). The writer also refers to an incident in which Murphy had been involved in transporting reindeer across the Barents Sea from Finnmark to Arctic Russia, but again no details are given (page 158).

The fundamental question facing a reviewer of this book is whether the subject merited writing about at such length and in such a way, and this reviewer's opinion is in the negative. No doubt the publishers sought to tap into the public's seemingly insatiable appetite for Antarctic history, and one might expect similar volumes in forthcoming years about equally obscure subjects. In this case, the account of the Mawson expedition is worth reading, just, and the rest of the book is interesting as a picture of an attractive character, but it has no pretensions to be a serious biography. The presentation of the book is mediocre. There are very few illustrations, no map, and no index. The referencing system is poor. There are a list

of the documents consulted and notes of sources for each incident.

To sum up: a racy volume but one that would not be recommended to those with serious interests in polar history. (Ian R. Stone, Laggan Juys, Larivane Close, Andreas, Isle of Man IM7 4HD.)

#### References

Ayres, P. 1999. *Mawson: a life*. Melbourne: Melbourne University Press.

Barr, W. 1980. Baron Eduard von Toll's last expedition: the Russian Polar Expedition, 1900–1903. *Arctic* 34: 201–224.

Crossley, L. (editor). 1997. *Trial by ice: the Antarctic journals of John King Davis*. Bluntisham: Bluntisham Books.

Mills, L. 1999. Frank Wild. Whitby: Caedmon of Whitby.

**DEADLY WINTER: THE LIFE OF SIR JOHN FRANKLIN.** Martyn Beardsley. 2002. London: Chatham Publishing. xiv + 272 p, illustrated, hard cover. ISBN 1-86176-187-2. £20.00.

DOI: 10.1017/S0032247403273046

In his introduction, Martyn Beardsley points out that more than 20 years have elapsed since the last full biography of Sir John Franklin was published — that by Roderic Owen (1978). This appears to be the main rationale behind publishing the present biography. Beardsley stresses that he intends to present a rounded account of all aspects of Franklin's life: his distinguished naval career during which he saw action at Copenhagen and Trafalgar, and in the War of 1812; his diplomatic contributions in the eastern Mediterranean; his term as Lieutenant-Governor of Tasmania; his relationships with both his wives; and, of course, his contribution as an Arctic explorer, particularly on his two overland expeditions, during which he explored and mapped the major part of the Arctic mainland coast of North America. Beardsley specifically states that those interested in the mystery of the fate of his final expedition will find little new in the book, and he almost completely ignores the complex history of the numerous searches for Franklin since, in his words, 'the majority of the seemingly innumerable search vessels found precisely nothing.'

It was on Beardsley's terms, as thus set out, that this reviewer approached this work. What he found was that the book's main strength is that there is no other full biography still in print. It covers Franklin's life fairly competently, but it contributes little that is new to the story of Franklin's naval career, to his role as a diplomat in Greece, or to his term in Tasmania. The coverage of his Arctic expeditions is meagre in the extreme, and the details of where he went are so scanty as to make it extremely difficult for anyone not already familiar with the story to follow his routes. The inclusion of only a single general map of the Canadian Arctic, with very few of the place-names mentioned in the text, does nothing to improve the situation. And Beardsley certainly keeps his

promise about excluding details of most of the expeditions that went in search of Franklin. For example, Belcher's expedition of 1852–54, with its fascinating interplay of personalities and the abandonment of four ships, is dealt with in two sentences. In this reviewer's opinion, the argument that these expeditions were irrelevant to this biography since most of them found no trace of the missing expedition is a weak one. Surely the level of public interest in Franklin's disappearance, of which the scale of the search effort is a direct reflection, is an appropriate part of his biography.

When it comes to details, the greatest strength of this biography lies in Beardsley's assessment of Franklin's relations with his two wives. For example, the potentially disastrous difference in religious views between Franklin and his first wife, Eleanor, is discussed in considerable detail. So too is the stiff and unemotional vocabulary and style of Franklin's letters (as perceived by the modern reader) during a courtship that was conducted largely by mail.

Considering that Beardsley appears to have aimed at producing an update of Owen's biography, there are serious omissions from his bibliography. He makes no reference to Richard Davis' two monumental volumes, Sir John Franklin's journals and correspondence: the First Arctic Land Expedition 1819–1822 and Sir John Franklin's journals and correspondence: the Second Arctic Land Expedition 1825–1827 (Davis 1995, 1998), or to the same author's article in Polar Record on Franklin's private correspondence, mainly with his sisters, during the first overland expedition (Davis 1997). Franklin's manuscript journals and his correspondence commonly contain facts or opinions that differ substantially from those in his published narratives; these are not minor oversights. And while Beardsley does cite John Richardson's journal from Franklin's first overland expedition, edited by Stuart Houston (Houston 1984), he omits any mention of the two companion volumes of Houston's trilogy dealing with that expedition, namely, the journals of midshipmen Hood and Back (Houston 1974, 1994).

Inevitably, since even now it remains a controversial topic that can arouse remarkably strong feelings, Beardsley tackles the question of whether or not members of Franklin's last expedition engaged in cannibalism. He acknowledges the incontrovertible evidence produced in Keenleyside and others (1997): that skeletal remains found on a small islet in Erebus Bay just off the northwest coast of King William Island display cut-marks that could only have been produced by slicing flesh from the bones. But he suggests that this might equally well have been done by Inuit as by surviving members of Franklin's expedition. Clearly Beardsley has overlooked an observation by Francis Leopold McClintock with reference to his search (in collaboration with Lieutenant William Hobson) of the coasts of King William Island in 1859:

...but here it is as well to state his [Hobson's] opinion, as well as my own, that no part of the coast between

Cape Felix and Cape Crozier has been visited by the Esquimaux since the fatal march of the lost crews in April 1848; none of the cairns or numerous articles strewed about — which would be invaluable to the natives...had been touched by them. (McClintock 1859: 306)

The islet on which the skeletal remains analyzed by Keenleyside and collaborators were found lies precisely off the stretch of coast specified by McClintock, and if the Inuit had not been there prior to 1859, they clearly could not be responsible for the evidence of cannibalism.

In short, while Beardsley's book has the merit of making the fascinating story of Franklin's life and death more accessible, in that earlier biographies are out of print, it is a flawed attempt at up-dating that story. There is still room for an up-to-date, complete biography of Sir John Franklin. (William Barr, Arctic Institute of North America, University of Calgary, 2500 University Drive NW, Calgary, AB T2N 1N4, Canada.)

## References

Davis, R. (editor). 1995. Sir John Franklin's journals and correspondence: the First Arctic Land Expedition 1819–1822. Toronto: The Champlain Society; Ottawa: Royal Canadian Geographical Society.

Davis, R. 1997. '...which an affectionate heart would say': John Franklin's personal correspondence, 1819–1824. *Polar Record* 33 (186): 189–212.

Davis, R. (editor). 1998. Sir John Franklin's journals and correspondence: the Second Arctic Land Expedition 1825–1827. Toronto: The Champlain Society.

Houston, C.S. (editor). 1974. To the Arctic by canoe 1819–1821: the journal and paintings of Robert Hood, midshipman with Franklin.Montreal and London: Arctic Institute of North America and Queen's University Press.

Houston, C.S. (editor). 1984. Arctic ordeal: the journal of John Richardson, surgeon-naturalist with Franklin 1820–1822. Kingston and Montreal: McGill-Queen's University Press.

Houston, C.S. (editor). 1994. Arctic artist: the journal and paintings of George Back, midshipman with Franklin 1819–1822. Montreal: McGill-Queen's University Press.

Keenleyside, A., M. Bertulli, and H.C. Fricke. 1997. The final days of the Franklin expedition: new skeletal evidence. *Arctic* 50 (1): 36–46.

McClintock, F.L. 1859. The voyage of the Fox in the Arctic seas: a narrative of the fate of Sir John Franklin and his companions. London: John Murray.

Owen, R. 1978. The fate of Franklin. London: Hutchinson.

**TOURISM IN THE ANTARCTIC: OPPORTUNITIES, CONSTRAINTS, AND FUTURE PROSPECTS.** Thomas G. Bauer. 2001. New York, London, and Oxford: Haworth Press. xiv + 275 p., illustrated, soft cover. ISBN 0-7890-1104-2. US\$39.95.

DOI: 10.1017/S0032247403283042

This book might have been titled: 'Everything anyone and everyone would ever want to know about how

Antarctic tourism developed, what Antarctic visitors do, and what problems Antarctic tourists might cause.' It flowers from Dr Bauer's PhD dissertation and makes a valuable contribution to the literature, combining in one volume a flood of information about the history of Antarctic tourism and how it works.

What this book lacks, however, is a strong, detailed discussion of 'where Antarctic tourists go,' detecting potential disruptions caused by visitors, and, especially, the management implications of linking tourism with negative environmental impacts. Under the Environmental Protocol to the Antarctic Treaty, the future of Antarctic conservation jumps to: what changes have occurred to 'the initial environmental reference state' of tourist sites? And if changes are detected, are they natural variations or, indeed, anthropogenic and, perhaps, attributable to tourists?

It would have been helpful if this book included an extensive discussion of how tourism management might or might not proceed in the brave new world of the Protocol. Will designations as Antarctic Specially Managed Areas (ASMAs), with full-blown management plans, as contemplated by Annex V of the Protocol (and with the full weight of each Treaty nation's laws and regulations) become de rigueur? Or will Treaty Parties opt for the 'guidelines' approach taken in Recommendation XVIII-1, suggesting how tour operators and visitors should behave, which has proved a valuable tool in minimizing, if not avoiding, disruptions? Will Parties be swayed by the overall number of Antarctic visitors to consider annual caps and limits on this growing flock, despite sovereignty issues such restraints would raise? Or will Parties adopt a site-by-site approach — by legally enforceable measures or by guidelines — which focuses on heavily visited locations that are diverse in species composition and sensitive to potential disruptions from visitors?

At one point, Bauer quotes undated remarks by an Antarctic scientist who notes that a valid assessment of tourist impacts is difficult and, 'presently,' there are no links between tourist visits and penguin population changes. Yes, this is a difficult question, and one that many researchers, including myself, are investigating. What is said now, or a few years ago, might need revision when sufficient data have been collected and retrospective analyses suggest a different history or another conclusion. Thus, the undated reference unfortunately begs the issue of tourists potentially causing impacts, and whether such impacts may be direct or cumulative.

The full story hasn't been written as yet, but, circa 2002, ice shelves the size of New England states are disintegrating, Adélie and chinstrap penguin populations at some Peninsula locations are wobbling, and blue-eyed shag populations throughout the Peninsula are declining, in some instances significantly. Again, which changes are natural and which may be human-induced?

Bauer mentions Peninsula sites such as Cuverville Island and Turret Point, King George Island, that aren't

likely to be affected by 'well-controlled' tourists. But he doesn't elaborate recent literature (admittedly, including some of my own work, as well as research funded by the German Environment Ministry) identifying potential environmental sensitivities at these two sites, and at other heavily visited sites with a diverse species composition. Given the pace of hand-wringing articles in the world's popular press, it can't be denied that Antarctic tourism is a concern to many and, as said, the missing discussion in this book involves future tourism management under the Protocol

Bauer makes the case that Antarctic tourism is well managed and that, in some respects, fears about impacts are overblown or simply misplaced. To reiterate, he makes a valuable contribution by analyzing Antarctic tourism activities and tourist motivations, comparing Antarctic tourism to tourism in other remote regions, and noting directions Antarctic tourism might take. He concludes that the future success of Antarctic tourism will be measured by the satisfaction and the protection that the Antarctic environment receives.

Unfortunately, the latter is a worry transcending the goodwill and commitment of Antarctic tour operators, and their undoubted commitment to conserving their most important resource — Antarctica. At the end of the day, the environmental future of Antarctica depends, really, on whether changes will be detected and, if so, why they may be occurring — and on data still being collected, which will take years, if not decades, to analyze. (Ron Naveen, Oceanites, PO Box 15259, Chevy Chase, MD 20825, USA.)

**VODKA ON ICE: A YEAR WITH THE RUSSIANS IN ANTARCTICA.** Charles Swithinbank. 2002. Lewes: The Book Guild, ix + 165 p., illustrated, hard cover. ISBN 1-85776-646-6. £19.95.

DOI: 10.1017/S0032247403293049

Charles Swithinbank has neatly prefaced his latest semipopular book — volume 4 in fact — thus saving work for the reviewer. He writes: 'The Cold War was in full swing when I joined the Soviet Antarctic Expedition in 1963. By the time I returned home in 1965, I spoke quite fluent Russian and had learned many things that were hardly known west of the Iron Curtain. As the first, and to this day the only, Briton to have served with the Soviets in Antarctica, I sought to break down the barriers that, for generations, have separated our cultures.'

The Russians are justly proud of Admiral Thaddeus von Bellingshausen of the Imperial Russian Navy, who, in February 1820, sighted Antarctica. He was probably not its discoverer, but was the first to record seeing a coast backed by the inland ice sheet and ice-covered mountains. Russian whaling fleets later operated in Antarctic waters, but it was not until 1956 that a permanent Russian station was established on the continent, in time for the International Geophysical Year, 1957–58.

By 1963, when Swithinbank joined the Soviet Antarctic Expedition as a British exchange scientist, there were three Russian shore stations and one inland station on the continent.

Nothing if not persistent, Swithinbank had compaigned for five years to be allowed to join the Soviet Antarctic Expedition. A desire to learn Russian, in order to assimilate the vast Russian glaciological literature, had driven him. To satisfy this desire, 'the easiest way would be to combine what had become my normal work in the Antarctic with 18 months of living the new language.'

Swithinbank sailed south, surprisingly in an ordinary Russian passenger liner *Estonia* via Fremantle, Australia, and thence south again to the main Russian Antarctic station, Mirny, where relief parties transferred to the icestrengthened cargo-passenger ship Ob in early January 1964. Swithinbank found that Russian Antarctic professionalism was in marked contrast with the practice of other countries, including Britain, the Antarctic expeditions of which were staffed by young men, most of whom would spend the rest of their lives doing something else. Several of his Russian comrades had been through much in the war: one had been a dive-bomber pilot; another had steel ribs as legacies of the battle of Stalingrad and the siege of Leningrad; and the doctor had been severely wounded at Stalingrad. The average age of those with whom he would winter was 35.

Initially some of his Russian comrades thought that Swithinbank might be a spy — an absurd idea, for he is much too transparently honest to be a useful spy. He soon laid to rest this idea, and established excellent working relations with his comrades. It was an advantage that he had been acquainted with Petr Shumsky, the glaciologist, prior to the expedition.

After relieving and resupplying Mirny, *Ob* sailed west to relieve the station Molodezhnaya, where, during a period of 19 days, Swithinbank had time to survey the movement of the nearby Hayes Glacier, and to find that it was moving at the rate of about 800 m per year, which is fast for an Antarctic glacier. *Ob* then sailed farther west again to relieve the station Novalazarevskaya, established in 1961, where Swithinbank was to winter with 13 comrades, until relief late in February 1965.

At this station, Swithinbank found that the research work of all his comrades lay at or close to the station, whereas he needed to move at least 10 km away in order to conduct his measurements of ice-shelf movement. He hiked out to his survey stations, often alone, to pursue his work. He did his full share of chores at the station, and often assisted others in their work. He was treated by his comrades as one of their own, and, in Ob, allowed to attend Communist Party meetings. He enjoyed much good-humoured discussion and banter about the respective merits — or otherwise — of the political regimes in the UK and in the USSR, as it was then, of which he writes amusingly while providing vignettes of his comrades. He succeeded well as an 'ambassador' for his country, while at the same time satisfying his personal ambition of attaining reasonable fluency in the Russian

The book is finely illustrated with the author's own colour photographs, and is provided with adequate maps. Readers may enjoy this book even more than Swithinbank's other three, for it contains less about what men did than about what they were like, which is usually more interesting. It is suspected that the author may have more books up his sleeve; so when may we expect volume 5? (Geoffrey Hattersley-Smith, The Crossways, Cranbrook, Kent TN17 2AG.)